

GENERAL NOTES

- (A) ALL SPOT ELEVATIONS REFERENCE TOP OF PAVING UNLESS NOTED OTHERWISE. ADD 0.5' FOR ON-SITE TOP OF CURB (TYPICAL).
- (B) COORDINATE WORK WITH SITE PLAN AND SITE LANDSCAPE PLAN.
- (C) SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION INFORMATION.

KEYNOTES

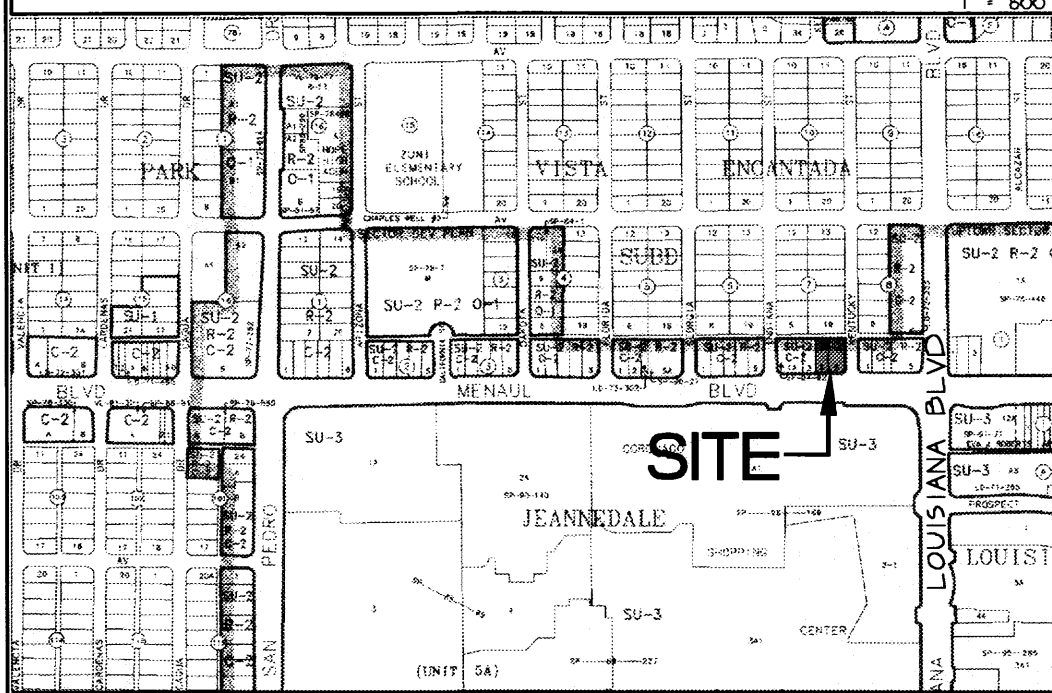
- (1) EXISTING TWO DRIVEPADS THIS AREA TO BE REMOVED TO NEAREST SIDEWALK JOINT AND REPLACED WITH A SINGLE DRIVEPAD WITH NEW CONCRETE WALK / CURB AND GUTTER. SEE ARCHITECTURAL FOR ADDITIONAL INFO.
- (2) CONSTRUCT SITE DRIVEPAD ENTRANCE WITH NEW CONCRETE WALKS BOTH SIDES PER C.O.A. STANDARD DTL 2425. SEE ARCHITECTURAL FOR DIMENSIONS / DETAILS / DEMOLITION OF EXISTING DRIVEPADS. MATCH TOP OF EXISTING WALKS FOR SMOOTH TRANSITION.
- (3) ADDITIVE ALTERNATE #1 - SEE KEYED NOTE 3.
- (4) PROPOSED ASPHALT OVERLAY. REMOVE / GRIND EXISTING ASPHALT AS REQUIRED TO ACHIEVE NEW GRADES SHOWN. NOTE: SOME AREAS MAY REQUIRE ADDITIONAL CUT / FILL TO ACHIEVE NEW GRADES. MINIMUM OVERLAY TO BE 1.5" THICK. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION REGARDING PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
- (5) ROOF FLOWS TO BE RELEASED TO FRONT PARKING AREA THROUGH DOWNSPOUTS IN COLUMNS. SEE ARCHITECTURAL FOR ADD'L INFO.
- (6) CONSTRUCT 2' WIDE (BOTTOM WIDTH) V-SHAPED CONCRETE CHANNEL AT FLOWLINE ELEVATIONS SHOWN TO DIRECT FLOWS TO PROPOSED SIDEWALK CULVERT. SEE DETAIL THIS SHEET.
- (7) CONSTRUCT STANDARD CURB AND GUTTER PER C.O.A. STD DWG 2415 AS NOTED. TOP OF CURB TO BE 0.5' ABOVE TOP OF ASPHALT / WALK ELEVATION (TYP).
- (8) CONSTRUCT CONCRETE WALK THIS AREA WITH 2% CROSS SLOPE. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION. PROVIDE RAMP AS SHOWN.
- (9) CONSTRUCT 2' WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP AT ELEVATIONS SHOWN. CONSTRUCT PER C.O.A. DETAIL 2236.
- (10) MATCH EXISTING GRADES AT PROPERTY LINE FOR SMOOTH TRANSITION. GRIND EXISTING ASPHALT AS REQUIRED TO PROVIDE MIN 1.5" OVERLAY.
- (11) TOP OF NEW ASPHALT TO MATCH TOP OF NEW CONCRETE WALK TYPICAL.
- (12) CONSTRUCT PLANTER THIS AREA TO ACHIEVE PAVING TRANSITION. SHOWN. SEE ARCHITECTURAL FOR ADD'L INFO.
- (13) TAPER EDGE OF CURB OVER 1' THIS AREA FROM 6" HIGH TO FLUSH WITH TOP OF WALK.

Butcher Remodel
6605-6615 Menaul Blvd NE
Albuquerque, New Mexico

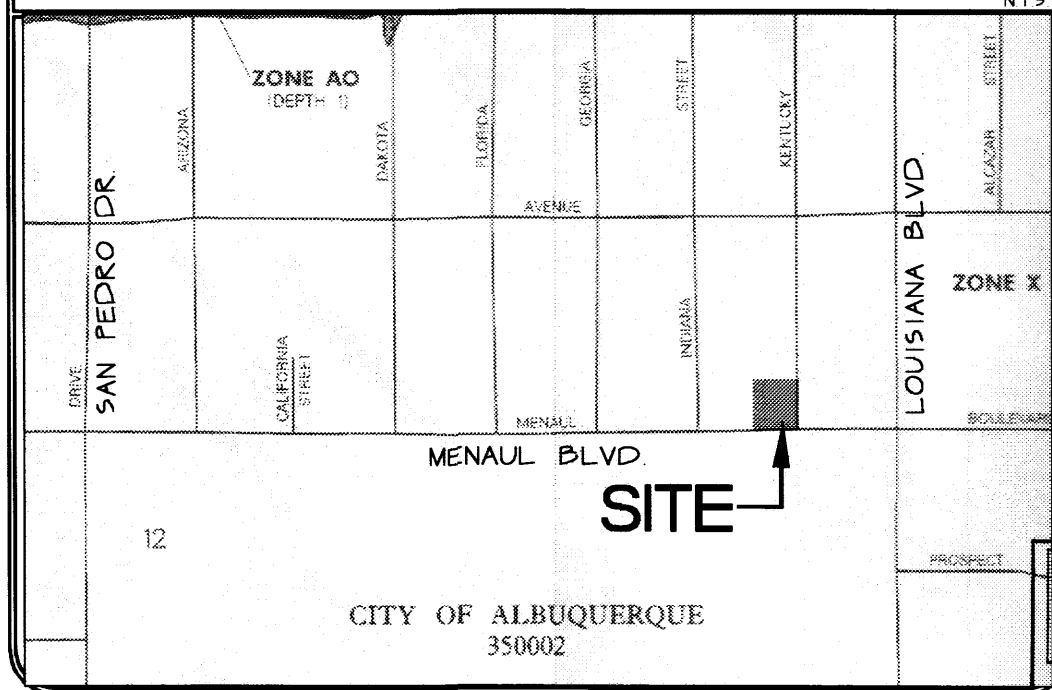


C.L. WEISS ENGINEERING, INC.
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VICINITY MAP #H-18



FIRM MAP #352



Revisions:

Sheet Title:

DRAINAGE AND
GRADING PLAN

Scale: 1" = 20'

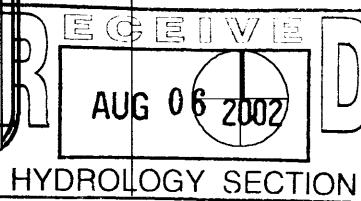
Date: 21 June '02

Drawn: BJB

Checked: CLW

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JOB NUMBER:



C101

SCOPE

THE PROPOSED IMPROVEMENTS INCLUDE A COMMERCIAL BUILDING RENOVATION AND EXISTING PARKING LOT REPAVING / OVERLAY WITH ASSOCIATED SITE IMPROVEMENTS.

THE PRESENT SITE IS A DEVELOPED COMMERCIAL PROPERTY LOCATED AT THE CORNER OF MENAUL BLVD AND KENTUCKY ST. NE. THE SITE SLOPES AT APPROXIMATELY 2% TO THE SOUTHWEST. KENTUCKY STREET BORDERS THE PROPERTY TO THE EAST. THE PROPERTIES TO THE NORTH AND WEST ARE DEVELOPED PROPERTIES. MENAUL BLVD BORDERS THE PROPERTY TO THE SOUTH.

THE INTENT OF THIS PLAN IS TO SHOW

- GRADING RELATIONSHIPS BETWEEN THE EXISTING GROUND ELEVATIONS AND PROPOSED FINISHED ELEVATIONS IN ORDER TO FACILITATE POSITIVE DRAINAGE TO DESIGNATED DISCHARGE POINTS.
- THE EXTENT OF PROPOSED SITE IMPROVEMENTS, INCLUDING BUILDINGS, WALKS AND PAVEMENT.
- THE FLOW RATE/VOLUME OF RAINFALL RUNOFF ACROSS OR AROUND THESE IMPROVEMENTS AND METHODS OF HANDLING THESE FLOWS TO MEET CITY OF ALBUQUERQUE REQUIREMENTS FOR DRAINAGE MANAGEMENT.
- THE RELATIONSHIP OF ON-SITE IMPROVEMENTS WITH EXISTING NEIGHBORING PROPERTY TO INSURE AN ORDERLY TRANSITION BETWEEN PROPOSED AND SURROUNDING GRADES.

DRAINAGE PLAN CONCEPT

THIS PROPERTY IS AN EXISTING COMMERCIAL PROPERTY WHICH FREE DISCHARGES TO MENAUL BLVD NE (THE PARKING AREA AFFECTED BY THIS SUBMITTAL). THE PROPOSED DEVELOPMENT WILL DIRECT ALL STORM RUNOFF (APPROX 2.7 CFS WHICH REPRESENTS A 0.1 CFS REDUCTION FROM THE PREVIOUS DEVELOPMENT RUN-OFF) THROUGH THE REGRADED / REPAVED PARKING AREA TO A NEW SIDEWALK CULVERT TO MENAUL BLVD NE WHERE THE FLOWS WILL CONTINUE ALONG HISTORIC FLOWPATHS.

GENERAL INFORMATION

LEGAL: LOTS 3, 4 AND 5, VISTA ENCANTADA SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

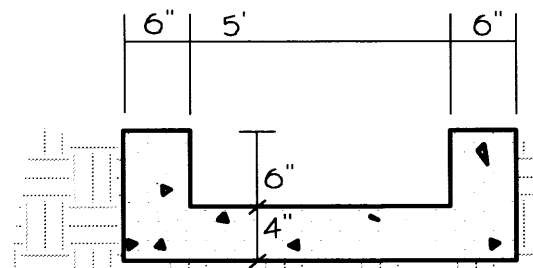
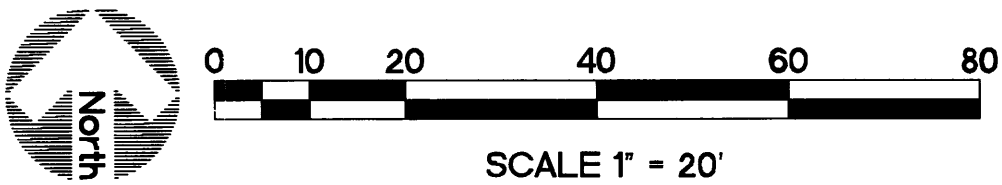
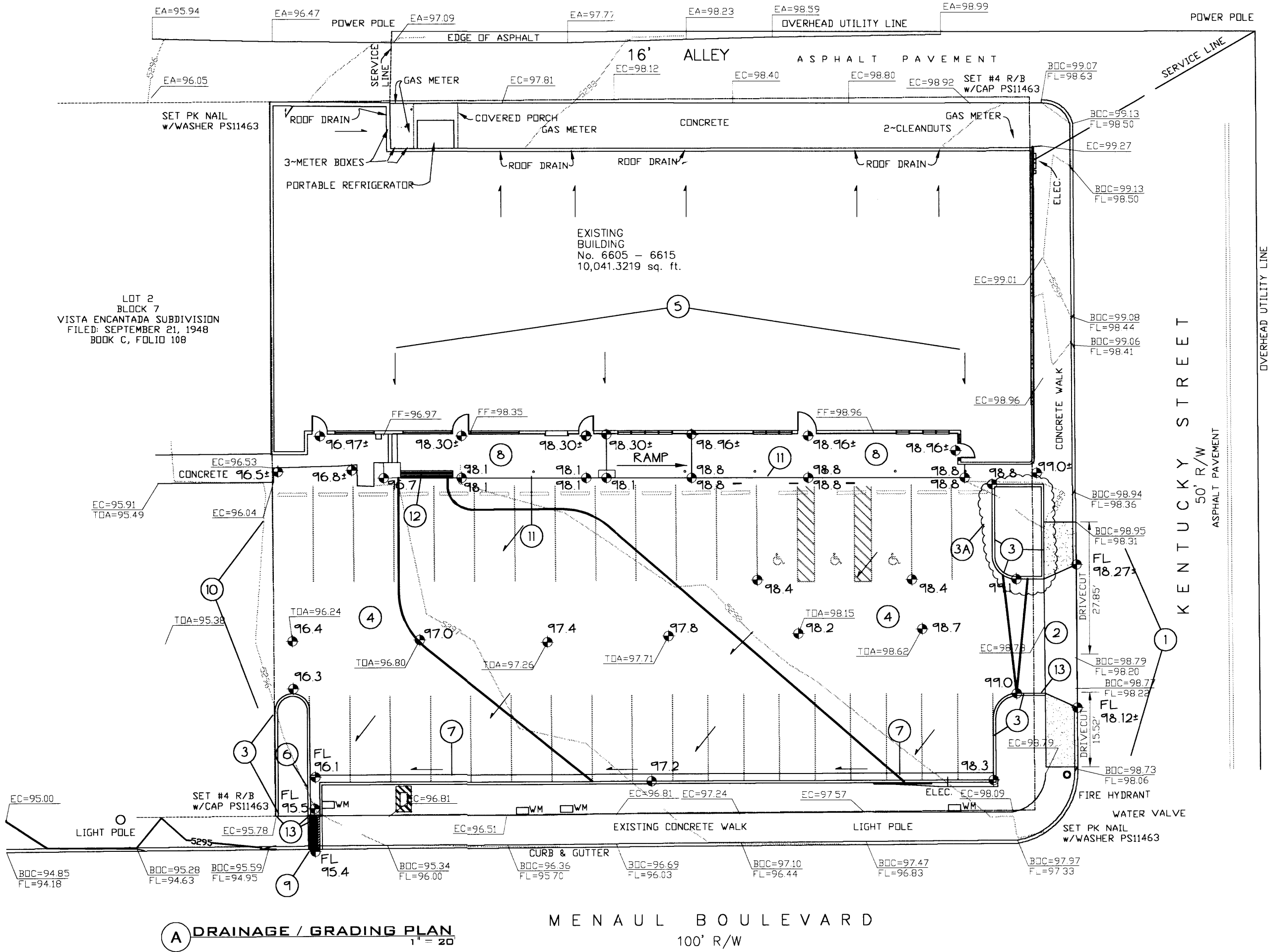
SURVEYOR: ANTHONY L. HARRIS, NMP#11463 HARRIS SURVEYING, INC.

D.M. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION NO. "15-HIS", HAVING AN ELEVATION OF 5300.769 (MSLD).

FLOOD HAZARD: PER FIRM MAP #352 (SEE INSERT ON PLAN), THE SITE IS NOT LOCATED WITHIN A FLOODZONE.

OFF-SITE DRAINAGE: BASED ON SITE ANALYSIS, NO OFF-SITE FLOWS AFFECT THIS PROPERTY.

EROSION CONTROL: THE CONTRACTOR IS RESPONSIBLE FOR RETAINING ON-SITE ALL SEDIMENT GENERATED DURING CONSTRUCTION BY MEANS OF TEMPORARY EARTH BERMS OR SILT FENCES AT THE LOW POINTS ON THE WEST PROPERTY LINE.



'U' SHAPED CONC. CHANNEL

LEGEND

- SIDEWALK, CURB AND GUTTER (EXISTING, PROPOSED)
- BUILDING (EXISTING, PROPOSED)
- PROPERTY LINE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED, ROOF)
- LANDSCAPED AREA
- LA
- FL
- FF
- R.O.W.
- PL
- PF
- ENTRY / EXIT LOCATION

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY
NOTICE TO CONTRACTOR

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- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.
- TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITHIN A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO COLLECTOR STREET USE.
- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXCAVATION PERMIT FOR SIDEWALK CULVERT/DRAIN.
- PROOF OF ACCEPTANCE WILL BE REQUIRED PRIOR TO SIGN OFF FOR CERTIFICATE OF OCCUPANCY (C.O.).

INSPECTION APPROVAL: _____ CONSTRUCTION SECTION DATE: _____

CALCULATIONS: Butcher Remodel - Menaul : May 17, 2002

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993

ON-SITE			
AREA OF SITE:		24000	SF = 0.551 Ac.
EXISTING FLOWS:			
On-Site Existing Land Condition		REVISED FLOWS:	
On-Site Revised Land Condition		EXCESS PRECIPITATION:	
Area a =	0 SF	Area a =	0 SF
Area b =	200 SF	Area b =	1420 SF
Area c =	0 SF	Area c =	0 SF
Area d =	23800 SF	Area d =	22580 SF
Total Area =	24000 SF	Total Area =	24000 SF

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{EaAa - EbAb - EcAc + EdAd}{Aa - Ab + Ac - Ad}$$

Existing E = 2.35 in. Revised E = 2.27 in.

On-Site Volume of Runoff: V360 = $E^*A / 12$

Existing V360 = 4696 CF Revised V360 = 4550 CF

On-Site Peak Discharge Rate: $Qp = QpaAa + QpbAb + QpcAc + QpdAd / 43,560$

For Precipitation Zone 3

Qpa = 1.87 Qpc = 3.45

Qpb = 2.60 a = 5.02

Existing Qp = 2.8 CFS Revised Qp = 2.7 CFS

ORIFACE EQUATION - OPENING TO SIDEWALK CULVERT

$$Q = C^*A^* (2^*g^*h)^{0.5}$$

Where

Q = 3.4 cfs

C = 0.6

A = 1.00 sq.ft.

g = 32.2 ft/sec^2

h = 0.5 ft

(indicating that the opening will function at 60% capacity)

depth of flow at opening from the flowline

All site flow (2.7 cfs) will pass through the proposed sidewalk culvert to Menaul Blvd. NE which has a capacity of 3.4 cfs OK

Checking capacity with the Broadcrested Weir formula ($Q = C^*L^*h^{3/2}$; $Q = 3.8$ cfs - OK

GENERAL NOTES

- ALL SPOT ELEVATIONS REFERENCE TOP OF PAVING OR NOTED OTHERWISE. ADD 0.5' FOR ON-SITE TOP OF CURB (TYPICAL).
- COORDINATE WORK WITH SITE PLAN AND SITE LANDSCAPE PLAN.
- SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION INFORMATION.

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- CONSTRUCT CONCRETE HEADER CURB PER C.O.A. STD DWG. 2415 AS NOTED TOP OF CURB TO BE 0.5' ABOVE TOP OF ASPHALT / WALK ELEVATION (TYP).
- ADDITIVE ALTERNATE #1 - SEE KEYED NOTE 3.
- PROPOSED ASPHALT OVERLAY. REMOVE / GRIND EXISTING ASPHALT AS REQUIRED TO ACHIEVE NEW GRADES SHOWN. NOTE: SOME AREAS MAY REQUIRE ADDITIONAL CUT / FILL TO ACHIEVE NEW GRADES MINIMUM OVERLAY TO BE 15" THICK. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION REGARDING PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
- ROOF FLOWS TO BE RELEASED TO FRONT PARKING AREA THROUGH DOWNSPOUTS IN COLUMNS. SEE ARCHITECTURAL FOR ADDL. INFO.
- CONSTRUCT 2' WIDE (BOTTOM WIDTH) 'U' SHAPED CONCRETE CHANNEL AT FLOWLINE ELEVATIONS SHOWN TO DIRECT FLOWS TO PROPOSED SIDEWALK CULVERT. SEE DETAIL THIS SHEET.
- CONSTRUCT STANDARD CURB AND GUTTER PER C.O.A. STD DWG. 2415 WHERE CONCENTRATED FLOW IS CARRIED AS NOTED TOP OF CURB TO BE 0.5' ABOVE TOP OF ASPHALT / WALK ELEVATION.
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Butcher Remodel

6605-6615 Menaul Blvd NE
Albuquerque, New Mexico



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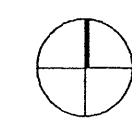
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GENERAL INFORMATION

LEGAL LOTS 3, 4 AND 5, VISTA ENCANTADA SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

SURVEYOR ANTHONY L. HARRIS, NMP5.11463 HARRIS SURVEYING, INC.

B.M. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION NO. "15-H18", HAVING AN ELEVATION OF 5300.769 (M.S.L.D.).

FLOOD HAZARD PER FIRM MAP #352 (SEE INSERT ON PLAN), THE SITE IS NOT LOCATED WITHIN A FLOODZONE.

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EROSION CONTROL THE CONTRACTOR IS RESPONSIBLE FOR RETAINING ON-SITE ALL SEDIMENT GENERATED DURING CONSTRUCTION BY MEANS OF TEMPORARY EARTH BERMS OR SILT FENCES AT THE LOW POINTS ON THE WEST PROPERTY LINE.

I, Christopher L. Weiss, NMPE 6653 of C.L. Weiss Engineering, Inc. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 6-21-02. The record information edited onto the original design document has been obtained by TONY HARRIS, NMP5.11463, of the firm HARRIS SURVEYING, INC. I further certify that I have personally visited the project site on 8-18-03 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for CERTIFICATE OF OCCUPANCY.

AREAS OF MODIFICATION BETWEEN APPROVED DRAINAGE GRADING PLAN AND ACTUAL AS-BUILT

- Header Curb constructed along south edge of parking (not standard curb and gutter).
- Minor site plan revisions to column dimensions this area.

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Christopher L. Weiss, NMPE 6653



CALCULATIONS: Butcher Remodel - Menaul : May 17, 2002

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993.

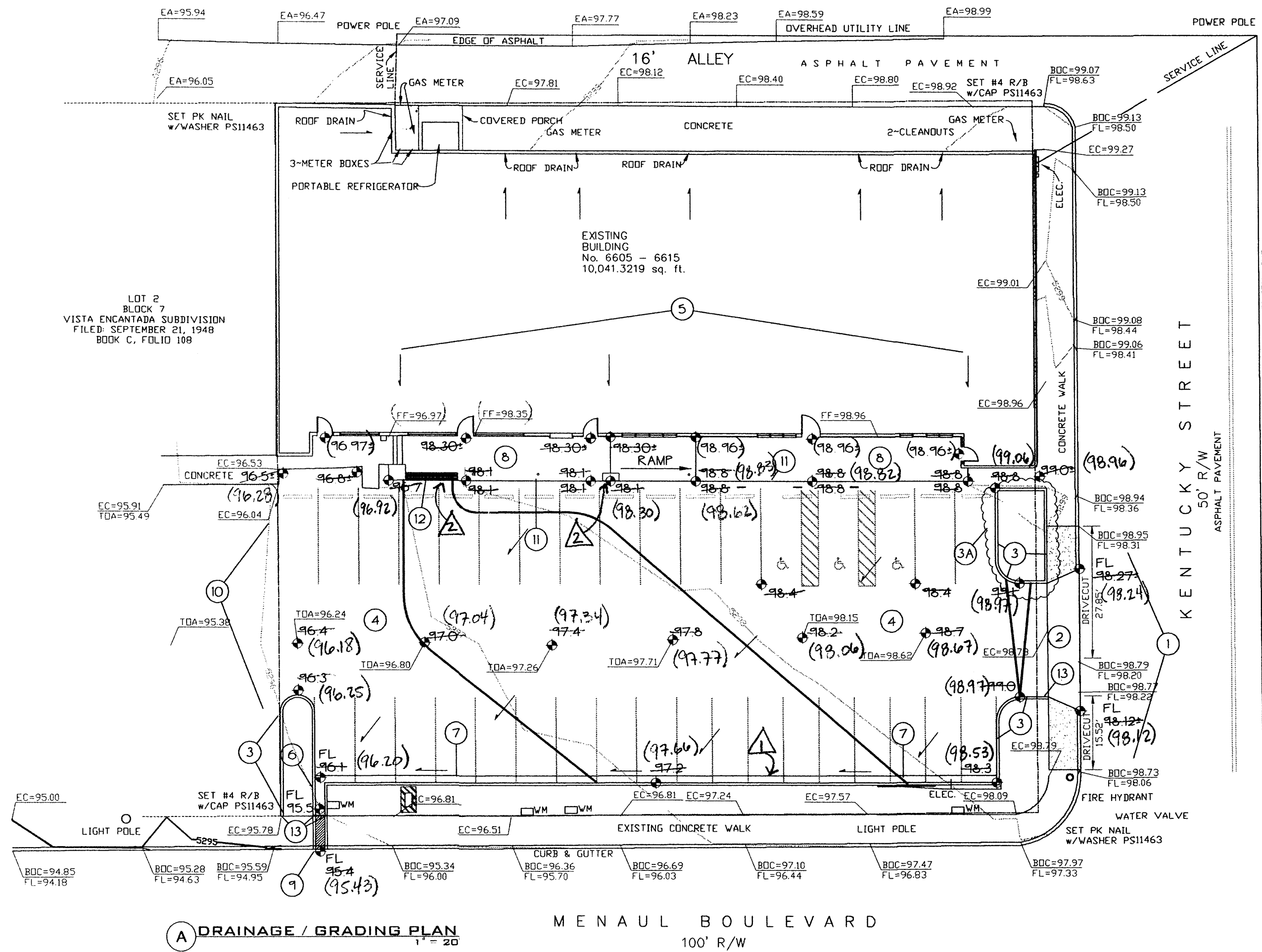
ON-SITE			
AREA OF SITE:	24000	SF	= 0.551 Ac.

EXISTING FLOWS:	REVISED FLOWS:	EXCESS PRECIPITATION:
On-Site Existing Land Condition	On-Site Revised Land Condition	Precip. Zone 3
Area a = 0 SF	Area a = 0 SF	Ea = 0.66
Area b = 200 SF	Area b = 1420 SF	Eb = 0.92
Area c = 0 SF	Area c = 0 SF	Ec = 1.29
Area d = 23800 SF	Area d = 22580 SF	Ed = 2.36
Total Area = 24000 SF	Total Area = 24000 SF	

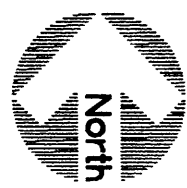
On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)			
Weighted E = $\frac{FaAa - EbAb - EcAc + EdAd}{Aa - Ab + Ac - Ad}$			
Existing E =	2.35 in.	Revised E =	2.27 in.
On-Site Volume of Runoff: $V360 = E^*A / 12$			
Existing V360 =	4696 CF	Revised V360 =	4550 CF
On-Site Peak Discharge Rate: $Qp = QpaAa + QpbAb + QpcAc + QpdAd / 43,560$			
For Precipitation Zone 3			
Qpa =	1.87	Qpc =	3.45
Qpb =	2.60	a =	5.02
Existing Qp =	2.8 CFS	Revised Qp =	2.7 CFS

ORIFACE EQUATION - OPENING TO SIDEWALK CULVERT			
$Q = C^*A^* (2^*g^*h)^{.5}$			
Where	Q	=	3.4 cfs
	C	=	0.6 (indicating that the opening will function at 60% capacity)
	A	=	1.00 sq.ft.
	g	=	32.2 ft/sec^2
	h	=	0.5 ft depth of flow at opening from the flowline

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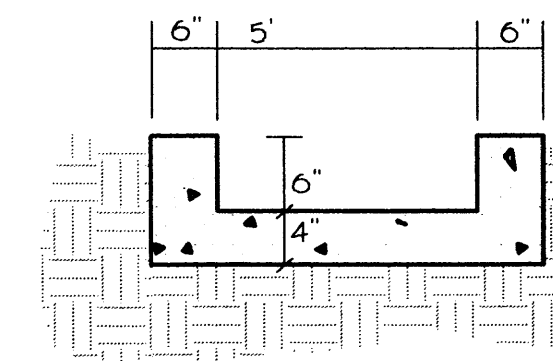


MENAU BOULEVARD
100' R/W



0 10 20 40 60 80
SCALE 1" = 20'

'U' SHAPED CONC. CHANNEL



LEGEND

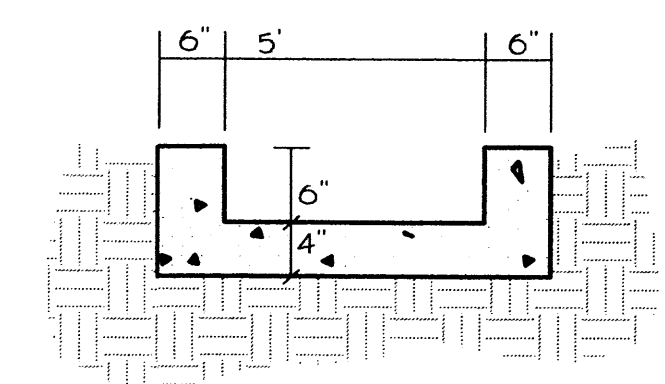
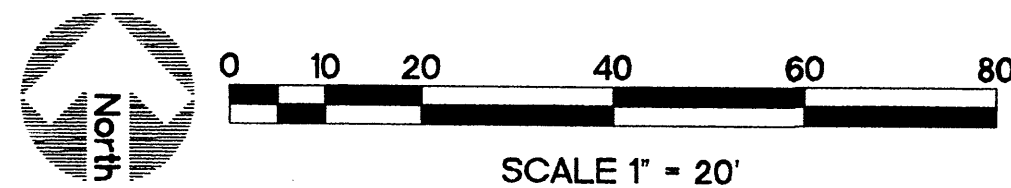
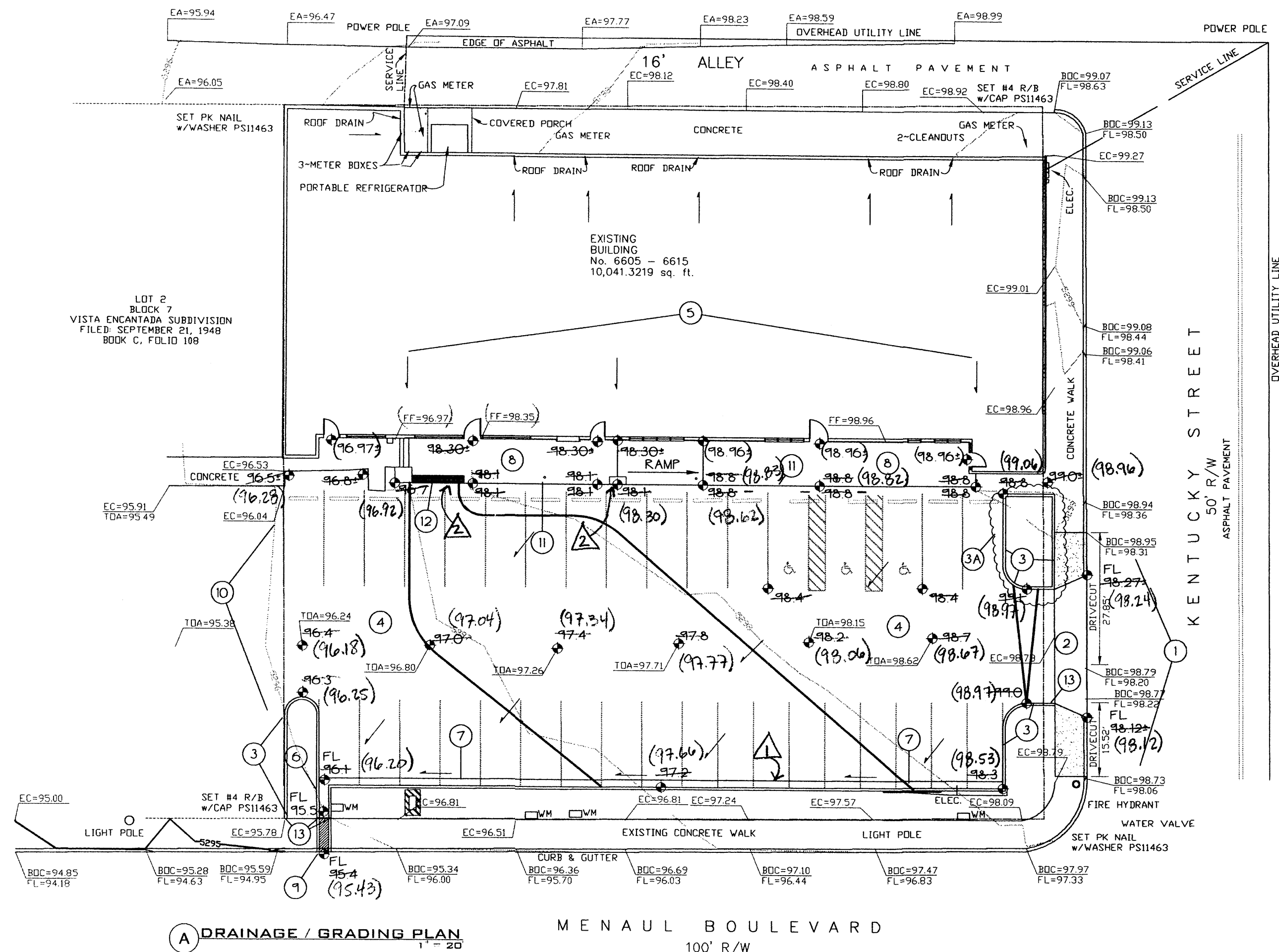
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- EXISTING SPOT ELEVATION
- PROPERTY LINE
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- PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED, ROOF)
- LANDSCAPED AREA
- LA
- FL
- FF
- ROW
- PL
- PP
- ENTRY / EXIT LOCATION
- (75.2) AS-BUILT SPOT ELEVATION

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY NOTICE TO CONTRACTOR

- 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.
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- CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXCAVATION PERMIT FOR SIDEWALK CULVERT/DRAIN.
- PROOF OF ACCEPTANCE WILL BE REQUIRED PRIOR TO SIGN OFF FOR CERTIFICATE OF OCCUPANCY (C.O.).

INSPECTION APPROVAL:

CONSTRUCTION SECTION DATE



LEGEND

- ===== SIDEWALK, CURB AND GUTTER (EXISTING, PROPOSED)
- BUILDING EXISTING, PROPOSED
- PROPERTY LINE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- 75.2 PROPOSED SPOT ELEVATION
- 30 PROPOSED CONTOUR
- SURFACE FLOW DIRECTION (EXISTING, PROPOSED, ROOF)
- LA LANDSCAPED AREA
- FL FLOW LINE
- FF FINISHED FLOOR
- ROW RIGHT OF WAY
- PL PROPERTY LINE
- PP POWER POLE
- ▲ ENTRY / EXIT LOCATION
- (75.2) AS-BUILT SPOT ELEVATION

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- MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING EXCAVATION PERMIT FOR SIDEWALK CULVERT/DRAIN.
- PROOF OF ACCEPTANCE WILL BE REQUIRED PRIOR TO SIGN OFF FOR CERTIFICATE OF OCCUPANCY (CO).

INSPECTION APPROVAL

CONSTRUCTION SECTION

DATE

SCOPE

THE PROPOSED IMPROVEMENTS INCLUDE A COMMERCIAL BUILDING RENOVATION AND EXISTING PARKING LOT REPAVING / OVERLAY WITH ASSOCIATED SITE IMPROVEMENTS.

THE PRESENT SITE IS A DEVELOPED COMMERCIAL PROPERTY LOCATED AT THE CORNER OF MENAUL BLVD AND KENTUCKY ST. NE THE SITE SLOPES AT APPROXIMATELY 2% TO THE SOUTHWEST. KENTUCKY STREET BORDERS THE PROPERTY TO THE EAST. THE PROPERTIES TO THE NORTH, AND WEST ARE DEVELOPED PROPERTIES. MENAUL BLVD BORDERS THE PROPERTY TO THE SOUTH.

THE INTENT OF THIS PLAN IS TO SHOW:

- GRADING RELATIONSHIPS BETWEEN THE EXISTING GROUND ELEVATIONS AND PROPOSED FINISHED ELEVATIONS IN ORDER TO FACILITATE POSITIVE DRAINAGE TO DESIGNATED DISCHARGE POINTS.
- THE EXTENT OF PROPOSED SITE IMPROVEMENTS, INCLUDING BUILDINGS, WALKS AND PAVEMENT.
- THE FLOW RATE/VOLUME OF RAINFALL RUNOFF ACROSS OR AROUND THESE IMPROVEMENTS AND METHODS OF HANDLING THESE FLOWS TO MEET CITY OF ALBUQUERQUE REQUIREMENTS FOR DRAINAGE MANAGEMENT.
- THE RELATIONSHIP OF ON-SITE IMPROVEMENTS WITH EXISTING NEIGHBORING PROPERTY TO INSURE AN ORDERLY TRANSITION BETWEEN PROPOSED AND SURROUNDING GRADES.

DRAINAGE PLAN CONCEPT

THIS PROPERTY IS AN EXISTING COMMERCIAL PROPERTY WHICH FREE DISCHARGES TO MENAUL BLVD NE (THE PARKING AREA AFFECTED BY THIS SUBMITTAL). THE PROPOSED DEVELOPMENT WILL DIRECT ALL STORM RUNOFF (APPROX. 2.7 CFS WHICH REPRESENTS A 0.1 CFS REDUCTION FROM THE PREVIOUS DEVELOPMENT RUN-OFF) THROUGH THE REGRADED / REPAVED PARKING AREA TO A NEW SIDEWALK CULVERT TO MENAUL BLVD NE WHERE THE FLOWS WILL CONTINUE ALONG HISTORIC FLOWPATHS.

GENERAL INFORMATION

LEGAL LOTS 3, 4 AND 5, VISTA ENCANTADA SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

SURVEYOR ANTHONY L. HARRIS, NMPS #11463 HARRIS SURVEYING, INC.

D.M. ELEVATIONS ARE BASED ON CITY OF ALBUQUERQUE STATION NO "15-H18", HAVING AN ELEVATION OF 5300.761 (MSLD).

FLOOD HAZARD PER FIRM MAP #352 (SEE INSERT ON PLAN), THE SITE IS NOT LOCATED WITHIN A FLOODZONE.

OFF-SITE DRAINAGE BASED ON SITE ANALYSIS, NO OFF-SITE FLOWS AFFECT THIS PROPERTY.

EROSION CONTROL THE CONTRACTOR IS RESPONSIBLE FOR RETAINING ON-SITE ALL SEDIMENT GENERATED DURING CONSTRUCTION BY MEANS OF TEMPORARY EARTH BERMS OR SILT FENCES AT THE LOW POINTS ON THE WEST PROPERTY LINE.

I, Christopher L. Weiss, NMPE 6653 of C.L. Weiss Engineering, Inc. hereby certify that this project has been graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 6-21-02. The record information edited onto the original design document has been obtained by TONY HARRIS, NMPS #11463, of the firm HARRIS SURVEYING, INC. I further certify that I have personally visited the project site on 8-18-03 and have determined by visual inspection that the survey data provided is representative of actual site conditions and is true and correct to the best of my knowledge and belief. This certification is submitted in support of a request for CERTIFICATE OF OCCUPANCY.

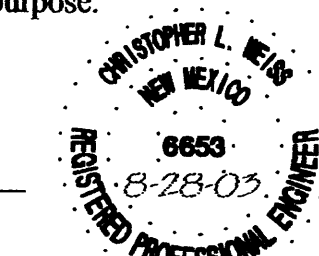
AREAS OF MODIFICATION BETWEEN APPROVED DRAINAGE GRADING PLAN AND ACTUAL AS-BUILT

- Header Curb constructed along south edge of parking (not standard curb and gutter)
- Minor site plan revisions to column dimensions this area

The record information presented hereon is not necessarily complete and intended only to verify substantial compliance of the grading and drainage aspects of this project. Those relying on this record document are advised to obtain independent verification of its accuracy before using it for any other purpose.

Christopher L. Weiss

Christopher L. Weiss, NMPE 6653



CALCULATIONS: Butcher Remodel - Menaul - May 17, 2002

Calculations are based on the Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2 dated Jan., 1993

ON-SITE			
AREA OF SITE:	24000	SF	= 0.551 Ac.
EXISTING FLOWS:			
On-Site Existing Land Condition	Area a = 0	SF	
	Area b = 200	SF	
	Area c = 0	SF	
	Area d = 23800	SF	
Total Area =	24000	SF	
REVISED FLOWS:			
On-Site Revised Land Condition	Area a = 0	SF	
	Area b = 1420	SF	
	Area c = 0	SF	
	Area d = 22580	SF	
Total Area =	24000	SF	
EXCESS PRECIPITATION:			
Precip. Zone 3	Ea = 0.66		
	Eb = 0.92		
	Ec = 1.29		
	Ed = 2.36		

On-Site Weighted Excess Precipitation (100-Year, 6-Hour Storm)

$$\text{Weighted E} = \frac{EaAa + EbAb + EcAc + EdAd}{Aa + Ab + Ac + Ad}$$

$$\text{Existing E} = 2.35 \text{ in.} \quad \text{Revised E} = 2.27 \text{ in.}$$

$$\text{On-Site Volume of Runoff: } V360 = \frac{E^*A}{12} \quad \text{Existing V360} = 4696 \text{ CF} \quad \text{Revised V360} = 4550 \text{ CF}$$

$$\text{On-Site Peak Discharge Rate: } Qp = QpaAa + QpbAb + QpcAc + QpdAd / 43,560$$

$$\text{For Precipitation Zone 3} \quad Qpa = 1.87 \quad Qpb = 2.60 \quad Qpc = 3.45 \quad Qpd = 5.02$$

$$\text{Existing } Qp = 2.8 \text{ CFS} \quad \text{Revised } Qp = 2.7 \text{ CFS}$$

ORIFICE EQUATION - OPENING TO SIDEWALK CULVERT

$$Q = C^*A^* (2^*g^*h)^{.5}$$

Where

Q	=	3.4	cfs
C	=	0.6	
A	=	1.00	sq.ft.
g	=	32.2	ft./sec ²
h	=	0.5	ft.

depth of flow at opening from the flowline

All site flow (2.7 cfs) will pass through the proposed sidewalk culvert to Menaul Blvd. NE which has a capacity of 3.4 cfs OK. Checking capacity with the Broadcrested Weir formula ($Q = C^*L^*.h^{3/2}$), $Q = 3.8 \text{ cfs}$ OK - OK

GENERAL NOTES

- ALL SPOT ELEVATIONS REFERENCE TOP OF PAVING UNLESS NOTED OTHERWISE. ADD 0.5' FOR ON-SITE TOP OF CURB (TYPICAL).
- COORDINATE WORK WITH SITE PLAN AND SITE LANDSCAPE PLAN.
- SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION INFORMATION.

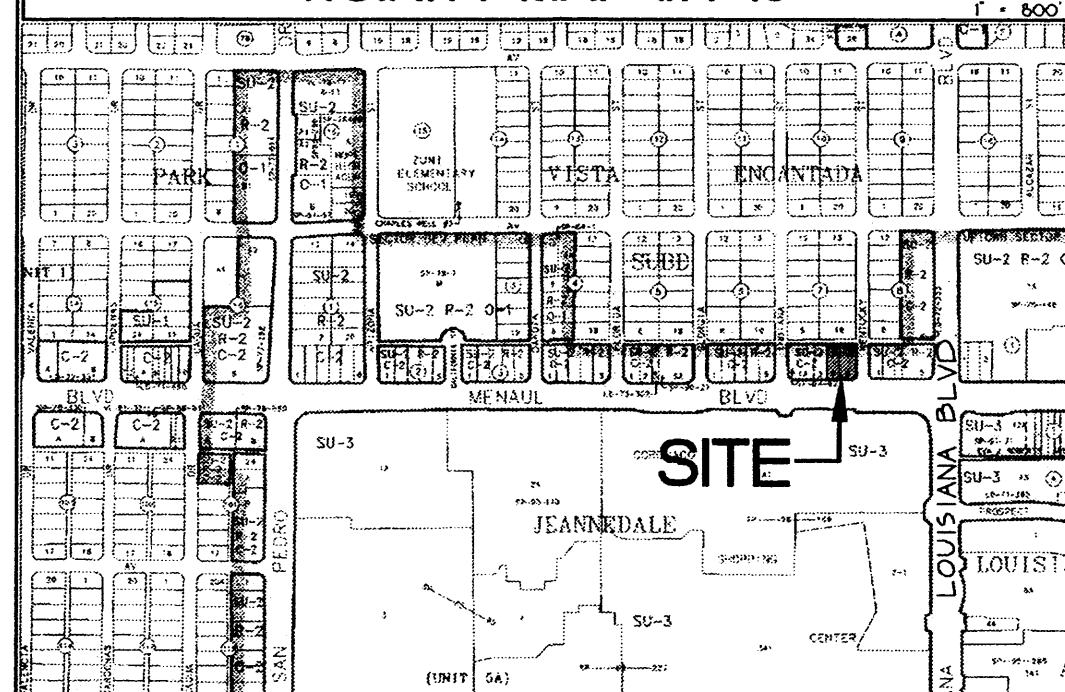
KEYNOTES

- EXISTING TWO DRIVEPADS THIS AREA TO BE REMOVED TO NEAREST SIDEWALK JOINT AND REPLACED WITH A SINGLE DRIVEPAD WITH NEW CONCRETE WALK / CURB AND GUTTER. SEE ARCHITECTURAL FOR ADDITIONAL INFO.
- CONSTRUCT SITE DRIVEPAD ENTRANCE WITH NEW CONCRETE WALKS BOTH SIDES PER C.O.A. STANDARD DTL 2425. SEE ARCHITECTURAL FOR DIMENSIONS / DETAILS / DEMOLITION OF EXISTING DRIVEPADS. MATCH TOP OF EXISTING WALKS FOR SMOOTH TRANSITION.
- CONSTRUCT CONCRETE HEADER CURB PER C.O.A. STD. DWG. 2415 AS NOTED. TOP OF CURB TO BE 0.5' ABOVE TOP OF ASPHALT / WALK ELEVATION (TYP).
- ADDITIVE ALTERNATE #1 - SEE KEYED NOTE 3.
- PROPOSED ASPHALT OVERLAY REMOVE / GRIND EXISTING ASPHALT AS REQUIRED TO ACHIEVE NEW GRADES SHOWN. NOTE: SOME AREAS MAY REQUIRE ADDITIONAL CUT / FILL TO ACHIEVE NEW GRADES. MINIMUM OVERLAY TO BE 1.5" THICK. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION REGARDING PARKING LAYOUT, DIMENSIONS, STRIPING, ETC.
- ROOF FLOWS TO BE RELEASED TO FRONT PARKING AREA THROUGH DOWNSPOUTS IN COLUMNS. SEE ARCHITECTURAL FOR ADD'L INFO.
- CONSTRUCT 2' WIDE (BOTTOM WIDTH) 'U' SHAPED CONCRETE CHANNEL AT FLOWLINE ELEVATIONS SHOWN TO DIRECT FLOWS TO PROPOSED SIDEWALK CULVERT. SEE DETAIL THIS SHEET.
- CONSTRUCT STANDARD CURB AND GUTTER PER C.O.A. STD. DWG. 2415 WHERE CONCENTRATED FLOW IS CARRIED AS NOTED. TOP OF CURB TO BE 0.5' ABOVE TOP OF ASPHALT / WALK ELEVATION.
- CONSTRUCT CONCRETE WALK THIS AREA WITH 2% CROSS SLOPE. SEE ARCHITECTURAL FOR ADDITIONAL INFORMATION PROVIDE RAMP AS SHOWN.
- CONSTRUCT 2' WIDE SIDEWALK CULVERT WITH STEEL PLATE TOP AT ELEVATIONS SHOWN. CONSTRUCT PER C.O.A. DETAIL 2236.
- MATCH EXISTING GRADES AT PROPERTY LINE FOR SMOOTH TRANSITION. GRIND EXISTING ASPHALT AS REQUIRED TO PROVIDE MIN 1.5" OVERLAY.
- TOP OF NEW ASPHALT TO MATCH TOP OF NEW CONCRETE WALK TYPICAL.
- CONSTRUCT PLANTER THIS AREA TO ACHIEVE PAVING TRANSITION SHOWN. SEE ARCHITECTURAL FOR ADD'L INFO.
- TAPER EDGE OF CURB OVER 1' THIS AREA FROM 6" HIGH TO FLUSH WITH TOP OF WALK.

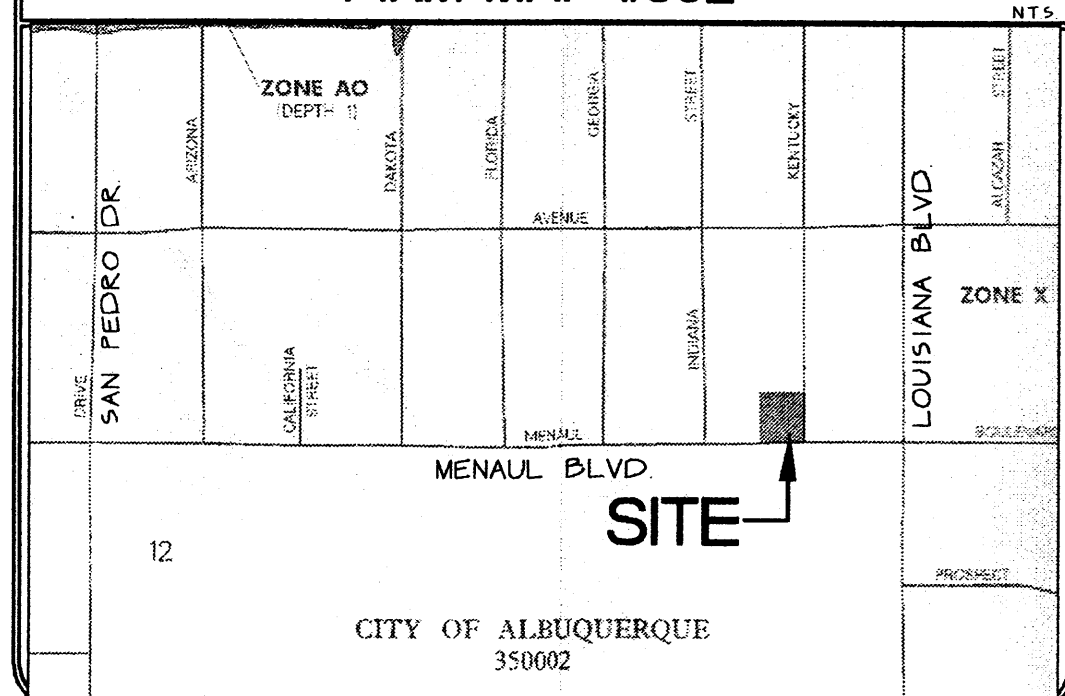


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VICINITY MAP #H-18



FIRM MAP #352



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Albuquerque, New Mexico



Revisions:

Sheet Title:

DRAINAGE AND
GRADING PLAN

Scale: 1" = 20'

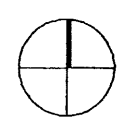
Date: 21 June '02

Drawn: BJB

Checked: CLW

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JOB NUMBER:



C101