GRADING & DRAINAGE PLAN

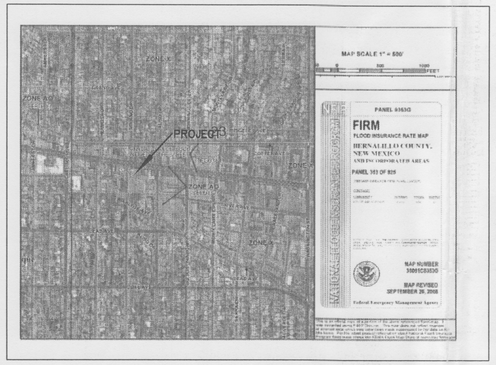
THE RETAIL RESTAURANT – COMMERCIAL PROJECT IS LOCATED IN THE MANKATO ADDITION OF ALBUQUERQUE APPROXIMATELY 3 MILES EAST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88–46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: FORMER BUILDING, PARKING AREAS INCLDG. FLATWORK.
2. PROPOSED IMPROVEMENTS: 1200 SF BUILDING ADDITION, NEW CONCRETE DRIVEPADS AND OUTDOOR PATIO AREA, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF–SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH BY COMMERCIAL–USE ASPHALT PARKING, TO THE EAST BY COMMERCIAL USE. CENTRAL AVENUE & SOLANO STREET ON THE NORTH AND WEST ARE PAVED WITH CURB, GUTTER AND SIDEWALK, AND MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT 1% FROM SOUTH TO NORTH.

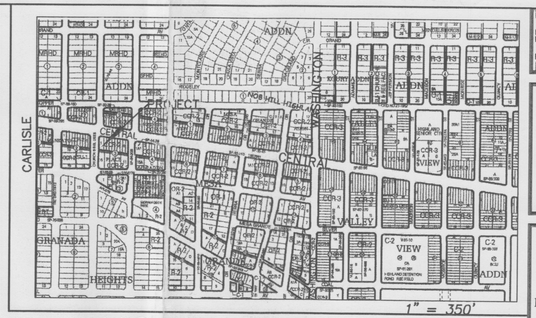
HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIVEPAD RECONSTR–N) IS PROPOSED WITHIN THE CITY R.O.W. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE SINCE THE TOTAL INCREASE OF DEVELOPED FLOW IS MINIMAL, AND CAPACITY EXISTS DOWNSTREAM.

THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF–SITE DRAINAGE FLOWS.



FIRM MAP PANEL # 353 G

SUBJECT PROPERTY IS ADJACENT TO, A FLOOD HAZARD ZONE.
& within BC



VICINITY MAP ZONE K–17

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100–YEAR/6–HOUR, 10–YEAR/6–HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS 50% 'C', 50% 'D'

TOTAL AREA = 0.13 ACRES, WHERE EXCESS PRECIP. 'W' =1.63 In. [0.93]
PEAK DISCHARGE, Q100 = 0.51 CFS 0.31], WHERE UNIT PEAK DISCHARGE 'W' = 3.9 CFS/AC. [2.4]
THEREFORE: VOLUME 100 = 769 CF [439]

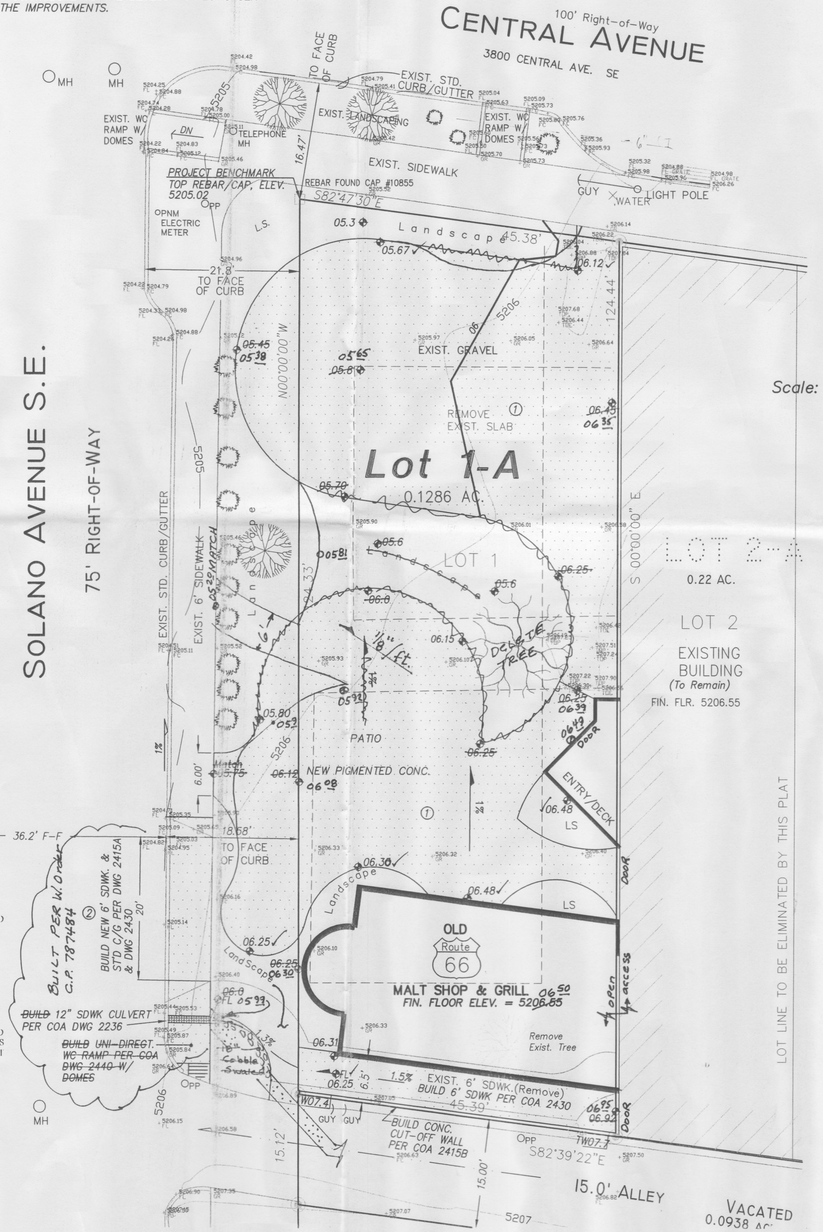
DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	--- Ac.	A	1.56[0.38]	0.53[0.13]
LANDSCAPING	0.01 Ac.	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.02 Ac.	C	3.14[1.71]	1.13[0.52]
ROOF – PAVEMENT	0.10 Ac.	D	4.70[3.14]	2.12[1.34]
	0.13 Ac.			

THEREFORE: $E_{Weighted}$ = 1.86 In.[1.13] &
Q100 = 0.55 CFS VOLUME 100 = 877 CF
Q10 = 0.35 CFS VOLUME 10 = 533 CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING



NOTES

1. ALL WORK WITHIN THE RIGHT–OF–WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
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 LANDSCAPING AREA SHALL BE SOFT–LINED WITH NATIVE VEGETATION AND/OR GRAVEL. ASPHALT PARKING AREA SHALL DRAIN DIRECTLY TO EXISTING CURB CUTS.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT–OF–WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

① REMOVE EXISTING CONCRETE SLABS

② CLOSE EXISTING DRIVEPAD AND BUILD ST'D. C/G PER COA 2415
REPAIR SDWK. PER COA 2430

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION	◆ 24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
FLOWLINE	FL
EXISTING POWER POLE	o
FACE OF CURB/FACE OF CURB	F–F
WATER BLOCK	
{AS·BUILT SPOT	05 91

PHILIP W. CLARK 10265 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER 12/15/09

RECEIVED
AUG 04 2010
HYDROLOGY SECTION

PROJECT DATA

LEGAL DESCRIPTION

LOT 1, BLOCK 3, MANKATO PLACE ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT NORTHWEST CORNER MSL ELEVATION = 5205.02, AS TIED FROM COA 1–3/4" DIAMETER BRASS DISK SET IN SIDEWALK, 5_K17A, MSL, NAVD 88, 5222.21, LOCATED 178' EAST OF THE INTERSECTION OF MORNINGSIDE AND CENTRAL AVEUNE, SE.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CLARK CONSULTING ENGINEERS, DATE NOVEMBER 2009, FROM DATA COLLECTED BY THE SURVEY OFFICE, UNDER THE DIRECTION OF TONY HARRIS, P.S. OF HARRIS SURVEYING, INC.

Clark Consulting Engineers
19 Ryan Road
Edgewood, New Mexico 87015
Tele: (505) 281–2444 Fax: (505) 281–2444

DRAINAGE CERTIFICATION

I, Philip W. Clark, NMPE 10265 OF THE FIRM Clark Consulting Eng'rs. HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 12-15-09 THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION ~~) AS SUPPLEMENTAL DATA TO THE ORIGINAL~~ TOPOGRAPHIC SURVEY PREPARED BY Tony Harris, NMPS/463 OF THE FIRM Harris Surveying, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Permanent Certificate of Occupancy

(DESCRIBE ANY EXCEPTIONS) Alley Gutter in Lieu of Cobble Swale – Also See W.order, CP 787484.

~~(DESCRIBE ANY DEFICIENCIES)~~

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 RELYING IT FOR ANY OTHER PURPOSE.

Philip W. Clark, NMPE 10265

DATE 8.3.10

PHILIP W. CLARK 10265 NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

Nob Hill DEVELOPMENT CORP

Route 66 MALT SHOP & GRILL

MARTIN FM GRUMMER ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265–2507

REVISIONS
8/3/10 AS-BUILT

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

BEAUTY COLLEGE PROJECT
ROUTE 66 MALT SHOP & GRILL
ALBUQUERQUE, NM 87108
GRADING & DRAINAGE PLAN

DATE:
DRAWN BY:
CHECKED BY:
VERIFIED BY:

DESIGNS BY JAF CONCEPTS (505)315-9644

SHEET NO: C1.1 PHASE 1

AS-BUILT(S)

GRADING & DRAINAGE PLAN

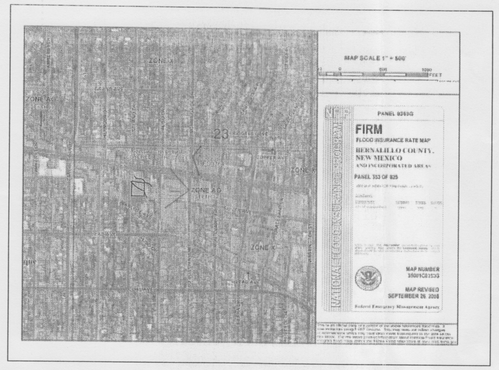
THE RETAIL RESTAURANT – COMMERCIAL PROJECT IS LOCATED IN THE MANKATO ADDITION OF ALBUQUERQUE APPROXIMATELY 3 MILES EAST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: FORMER BUILDING, PARKING AREAS INCLDG. FLATWORK.
2. PROPOSED IMPROVEMENTS: PARKING LOT RECONSTRUCTION, NEW CONCRETE DRIVEPADS, NEW GRADE ELEVATIONS, FINE GRADING, FLATWORK AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY COMMERCIAL-USE ASPHALT PARKING, TO THE EAST BY COMMERCIAL USE. SILVER AVENUE & SOLANO STREET ON THE SOUTH AND WEST ARE PAVED WITH CURB, GUTTER AND SIDEWALK, AND MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT 10% TO 1% FROM SOUTH TO NORTH.

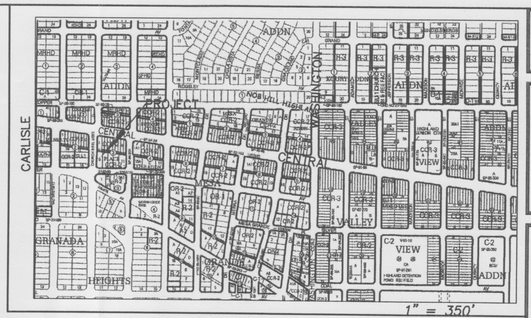
HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIVEPAD RECONSTR-N) IS PROPOSED WITHIN THE CITY R.O.W. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE SINCE THE TOTAL INCREASE OF DEVELOPED FLOW IS MINIMAL, AND CAPACITY EXISTS DOWNSTREAM.

THE GRADING AND DRAINAGE SCHEME MITIGATES IMPACT TO ADJACENT PROPERTY.

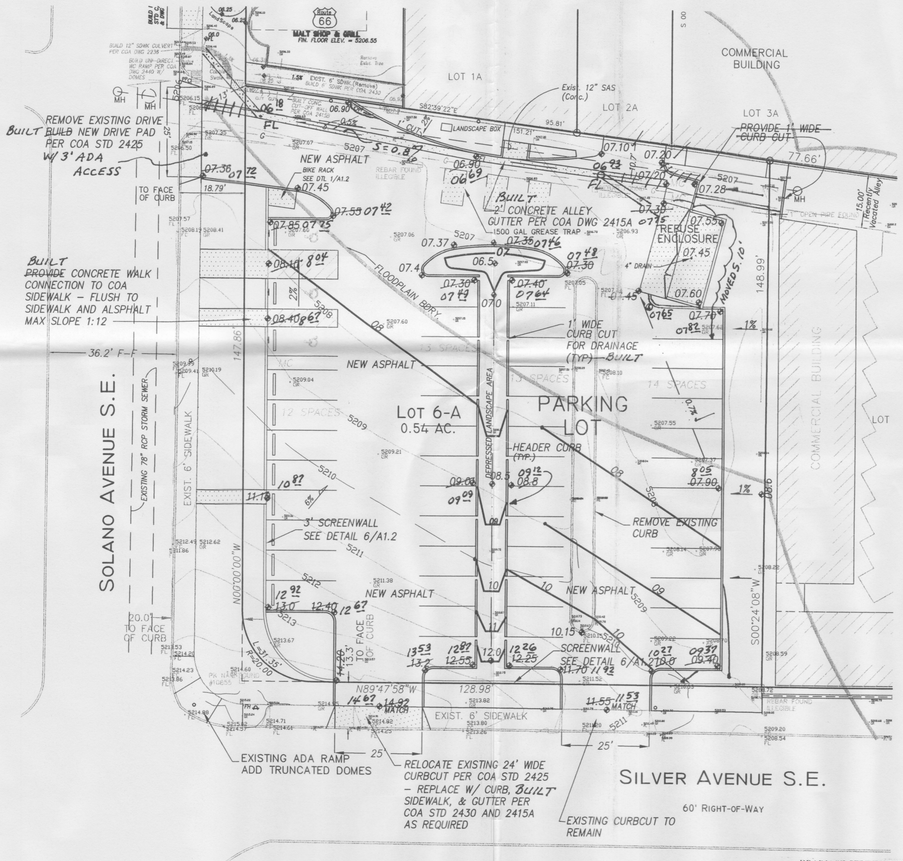


FIRM MAP PANEL # 353 G

SUBJECT PROPERTY IS WITHIN A FLOOD HAZARD ZONE.



VICINITY MAP ZONE K-17



Scale: 1" = 20'

CALCULATIONS

DESIGN CRITERIA

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VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS 50% 'C', 50% 'D'

TOTAL AREA = 0.54 ACRES, WHERE EXCESS PRECIP. 'W' =1.63 In. [0.93]
PEAK DISCHARGE, Q100 = 2.1 CFS [1.31], WHERE UNIT PEAK DISCHARGE 'W' = 3.9 CFS/AC. [2.4]
THEREFORE: VOLUME 100 = 3195 CF [1823]

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	--- Ac.	A	1.56[0.38]	0.53[0.13]
LANDSCAPING	0.11 Ac.(20%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.00 Ac.	C	3.14[1.71]	1.13[0.52]
ROOF – PAVEMENT	0.43 Ac.(80%)	D	4.70[3.14]	2.12[1.34]
	0.54 Ac.			

THEREFORE: $E_{Weighted}$ = 1.85 In.[1.13] &
Q100 = 2.27 CFS VOLUME 100 = 3626 CF
Q10 = 1.46 CFS VOLUME 10 = 2215 CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

DRAINAGE CERTIFICATION

I, Philip W. Clark, NMPE 10265 OF THE FIRM Clark Consulting Engineers, 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 4.5.10 THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION) **AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY** HARRIS SURVEYING, NMPS ____, **OF THE FIRM** _____,) AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR Permanent Certificate of Occupancy.

(DESCRIBE ANY EXCEPTIONS) & Pt. in Alley Gutter

~~(DESCRIBE ANY DEFICIENCIES)~~

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Philip W. Clark, NMPE 10265

DATE 8/3/10

NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
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5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.
8. REMOVE AND PULVERIZE EXISTING ASPHALT INTO 6" DEPTH SUBGRADE. COMPACT TO 95% MODIFIED PROCTOR, ASTM D 1557. SURFACE COURSE SHALL BE 3 INCH THICK ASPHALT CONCRETE, SUPERPAVE III.

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
FLOWLINE	FL
EXISTING POWER POLE	o
FACE OF CURB/FACE OF CURB	F-F
WATER BLOCK	
AS-BUILT SPOT	8.05 / FL

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 4.5.10

PROJECT DATA

LEGAL DESCRIPTION

LOT 6A, BLOCK 3, MANKATO PLACE ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT NORTHWEST CORNER MSL ELEVATION = 5205.02, AS TIED FROM COA 1-3/4" DIAMETER BRASS DISK SET IN SIDEWALK, 5_K17A, MSL, NAVD 88, 5222.21, LOCATED 178' EAST OF THE INTERSECTION OF MORNINGSIDE AND CENTRAL AVEUNE, SE.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CLARK CONSULTING ENGINEERS, DATE NOVEMBER 2009, FROM DATA COLLECTED BY THE SURVEY OFFICE, UNDER THE DIRECTION OF TONY HARRIS, P.S. OF HARRIS SURVEYING, INC.

RECEIVED
AUG 04 2010
HYDROLOGY SECTION

Nob Hill DEVELOPMENT CORP

Route 66 MALT SHOP & GRILL Home Made Root Beer

MARTIN FM GRUMMER ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265-2507

REVISIONS	
8/3/10	AS-BUILT

BEAUTY COLLEGE PROJECT
ROUTE 66 MALT SHOP & GRILL
ALBUQUERQUE, NM 87108
GRADING & DRAINAGE PLAN
PARKING LOT GRADING

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

DATE:	01 APR 2010
DRAWN BY:	PWC/MFMG
CHECKED BY:	
VERIFIED BY:	

Clark Consulting Engineers
10 Forts Road
Edgewood, New Mexico 87015
Tele: (505) 281-2444
Fax: (505) 281-2444

SHEET NO:
C1.2
PHASE 1

GRADING & DRAINAGE PLAN

THE RETAIL RESTAURANT – COMMERCIAL PROJECT IS LOCATED IN THE MANKATO ADDITION OF ALBUQUERQUE APPROXIMATELY 3 MILES EAST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERN–ALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88–46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

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3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
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THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE NORTH BY COMMERCIAL–USE ASPHALT PARKING, TO THE EAST BY COMMERCIAL USE. SILVER AVENUE & SOLANO STREET ON THE SOUTH AND WEST ARE PAVED WITH CURB, GUTTER AND SIDEWALK, AND MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT 10% TO 1% FROM SOUTH TO NORTH.

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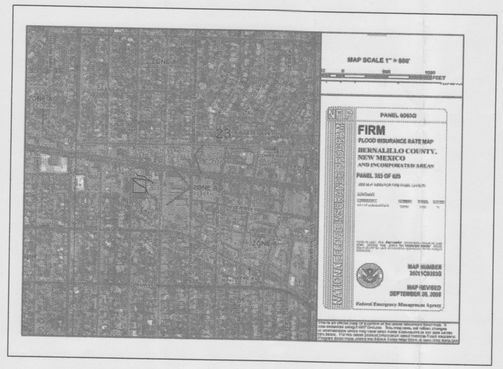
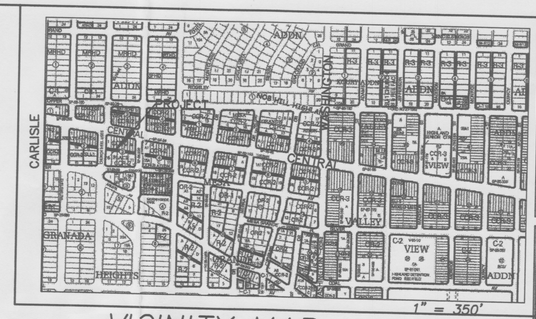
THE GRADING AND DRAINAGE SCHEME MITIGATES IMPACT TO ADJACENT PROPERTY.



FIRM MAP

PANEL # 353 G

SUBJECT PROPERTY IS WITHIN A FLOOD HAZARD ZONE.



VICINITY MAP

ZONE K–17

NOTES

1. ALL WORK WITHIN THE RIGHT–OF–WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
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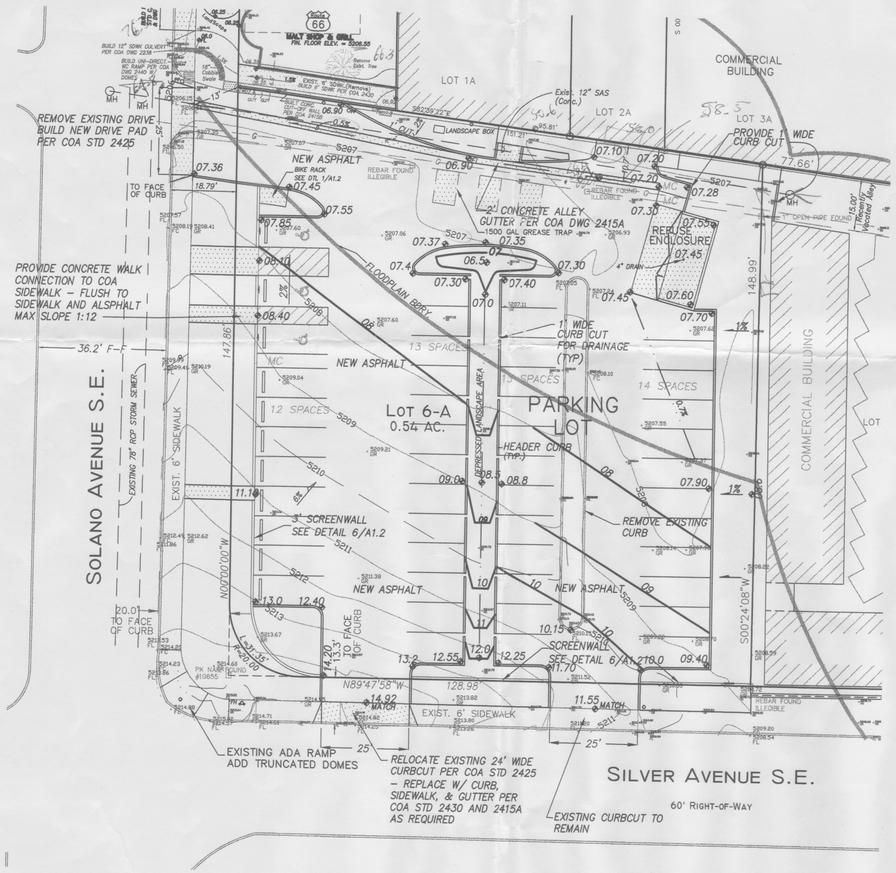
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.
8. REMOVE AND PULVERIZE EXISTING ASPHALT INTO 6" DEPTH SUBGRADE. COMPACT TO 95% MODIFIED PROCTOR, ASTM D 1557. SURFACE COURSE SHALL BE 3 INCH THICK ASPHALT CONCRETE, SUPERPAVE III.



CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM)
REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
DISCHARGE RATE: Q=QPEAK x AREA.."Peak Discharge Rates For Small Watersheds"
VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100–YEAR/6–HOUR, 10–YEAR/6–HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS

TOTAL AREA = 0.54 ACRES, WHERE EXCESS PRECIP. 'W' =1.63 In. [0.93]
PEAK DISCHARGE, Q100 = 2.1 CFS [1.31], WHERE UNIT PEAK DISCHARGE 'W' = 3.9 CFS/AC. [2.4]
THEREFORE: VOLUME 100 = 3195 CF [1823]

DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

50% 'C', 50% 'D'

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	--- Ac.	A	1.56[0.38]	0.53[0.13]
LANDSCAPING	0.11 Ac.(20%)	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.00 Ac.	C	3.14[1.71]	1.13[0.52]
ROOF – PAVEMENT	0.43 Ac.(80%)	D	4.70[3.14]	2.12[1.34]
	0.54 Ac.			

THEREFORE: $E_{Weighted}$ = 1.85 In.[1.13] &
Q100 = 2.27 CFS VOLUME 100 = 3626 CF
Q10 = 1.46 CFS VOLUME 10 = 2215 CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
FLOWLINE	FL
EXISTING POWER POLE	o
FACE OF CURB/FACE OF CURB	F–F
WATER BLOCK	

I, PHILIP W. CLARK, A PROFESSIONAL ENGINEER LICENSED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT I HAVE VISITED THE SITE SHOWN HEREON, AND THAT THE CONTOURS SHOWN REPRESENT THE EXISTING GROUND CONDITIONS, AND DO FURTHER CERTIFY THAT NO EARTHWORK OF ANY KIND, NOR ANY DISTURBANCE OF THE EXISTING GROUND HAS OCCURRED ON THIS SITE SINCE THE CONTOURS WERE DETERMINED.

PHILIP W. CLARK NMPE #10265

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 4.5.10

RECEIVED APR 05 2010 HYDROLOGY SECTION

PROJECT DATA

LEGAL DESCRIPTION

LOT 6A, BLOCK 3, MANKATO PLACE ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT NORTHWEST CORNER MSL ELEVATION = 5205.02, AS TIED FROM COA 1–3/4" DIAMETER BRASS DISK SET IN SIDEWALK, 5_K17A, MSL, NAVD 88, 5222.21, LOCATED 178' EAST OF THE INTERSECTION OF MORNINGSIDE AND CENTRAL AVEUNE, SE.

TOPOGRAPHIC DESIGN SURVEY

COMPILED BY CLARK CONSULTING ENGINEERS, DATE NOVEMBER 2009, FROM DATA COLLECTED BY THE SURVEY OFFICE, UNDER THE DIRECTION OF TONY HARRIS, P.S. OF HARRIS SURVEYING, INC.

RECEIVED APR 05 2010 HYDROLOGY SECTION

Nob Hill DEVELOPMENT CORP

Route 66 MALT SHOP & GRILL

MARTIN FM GRUMMER ARCHITECT
331 WELLESLEY PLACE NE
ALBUQUERQUE, NEW MEXICO 87106
(505) 265–2507

REVISIONS

BEAUTY COLLEGE PROJECT
ROUTE 66 MALT SHOP & GRILL
ALBUQUERQUE, NM 87108
PARKING LOT GRADING & DRAINAGE PLAN

ALL DIMENSIONS ARE TO BE FIELD VERIFIED. IF THERE ARE DISCREPANCIES, PLEASE NOTIFY THE ARCHITECT. DRAWING ARE NOT TO BE SCALED. USE DIMENSIONS FOR ACCURACY.

DATE:	01 APR 2010
DRAWN BY:	PWC/MFMG
CHECKED BY:	
VERIFIED BY:	

Clark Consulting Engineers
Ken Road
Edgewood, New Mexico 87015
Telc: (505) 281–2444 Fax: (505) 281–2444

SHEET NO:
C1.2
PHASE 1

GRADING & DRAINAGE PLAN

THE RETAIL RESTAURANT – COMMERCIAL PROJECT IS LOCATED IN THE MANKATO ADDITION OF ALBUQUERQUE APPROXIMATELY 3 MILES EAST OF THE DOWNTOWN CORE OF ALBUQUERQUE, NM. THE GRADING & DRAINAGE SCHEME HEREON IS IN COMPLIANCE WITH THE BERNALILLO COUNTY FLOOD HAZARD ORDINANCE, NO.88-46, AND THE CITY STORM DRAINAGE ORDINANCE. THE PLAN IS REQUIRED IN ORDER TO FACILITATE THE OWNER'S REQUEST FOR BUILDING PERMIT. THE PLAN SHOWS:

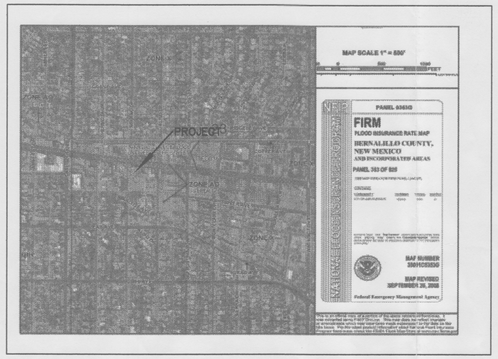
1. EXISTING CONTOURS, AND SPOT ELEVATIONS AND EXISTING DRAINAGE PATTERNS AND EXISTING IMPROVEMENTS: FORMER BUILDING, PARKING AREAS INCLDG. FLATWORK.
2. PROPOSED IMPROVEMENTS: 1200 SF BUILDING ADDITION, NEW CONCRETE DRIVEPADS AND OUTDOOR PATIO AREA, NEW GRADE ELEVATIONS, FLATWORK AND LANDSCAPING.
3. CONTINUITY BETWEEN EXISTING AND PROPOSED ELEVATIONS.
4. QUANTIFICATION AND ACCEPTANCE OF UPSTREAM OFF-SITE FLOWS WHICH CONTRIBUTE TO THE DEVELOPED FLOWS GENERATED BY THE IMPROVEMENTS.

THE PURPOSE OF THE PLAN IS TO ESTABLISH CRITERIA FOR CONTROLLING STORM RUNOFF AND EROSION, AND ESSENTIALLY ALLOWING HISTORIC FLOWS TO CONTINUE TO DRAIN THROUGH THE PROPERTY. PRESENTLY, THE SITE IS BOUNDED ON THE SOUTH BY COMMERCIAL-USE ASPHALT PARKING, TO THE EAST BY COMMERCIAL USE. CENTRAL AVENUE & SOLANO STREET ON THE NORTH AND WEST ARE PAVED WITH CURB, GUTTER AND SIDEWALK, AND MAINTAINED BY THE CITY OF ALBUQUERQUE. THE SITE CURRENTLY DRAINS AT 1% FROM SOUTH TO NORTH.

HISTORICAL SITE RUNOFF OUTFALL LOCATIONS WILL REMAIN UNCHANGED. SINCE BOTH STREETS ARE IMPROVED ONLY MINIMAL GRADING (DRIVEPAD RECONSTR~N) IS PROPOSED WITHIN THE CITY R.O.W. FREE DISCHARGE OF DEVELOPED FLOW IS ACCEPTABLE SINCE THE TOTAL INCREASE OF DEVELOPED FLOW IS MINIMAL, AND CAPACITY EXISTS DOWNSTREAM.

THE SITE IS NOT IMPACTED ADVERSELY BY ANY OFF-SITE DRAINAGE FLOWS.

No work of flood plain

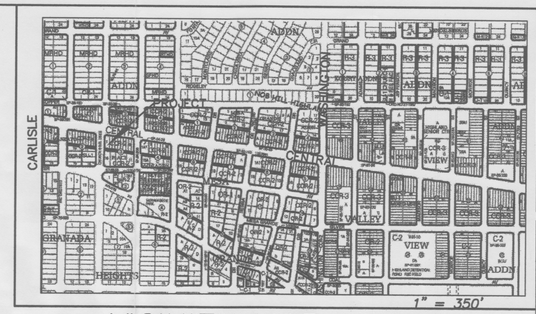


improve this

A0-1

FIRM MAP PANEL # 353 G

SUBJECT PROPERTY IS ADJACENT TO A FLOOD HAZARD ZONE.



VICINITY MAP ZONE K-17

CALCULATIONS

DESIGN CRITERIA

HYDROLOGIC METHODS PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL (DPM) REVISED JANUARY 1993 FOR CITY OF ALBUQUERQUE ADOPTED BY THE COUNTY OF BERNALILLO
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VOLUMETRIC DISCHARGE: VOLUME = EWeighted x AREA
P100 = 2.35 Inches, Zone 2 Time of Concentration, TC = 10 Minutes
DESIGN STORM: 100-YEAR/6-HOUR, 10-YEAR/6-HOUR [ ] = 10 YEAR VALUES

EXISTING CONDITIONS 50% 'C', 50% 'D'

TOTAL AREA = 0.13 ACRES, WHERE EXCESS PRECIP. 'W' =1.63 In. [0.93]
PEAK DISCHARGE, Q100 = 0.51 CFS 0.31] WHERE UNIT PEAK DISCHARGE 'W' = 3.9 CFS/AC. [2.4]
THEREFORE: VOLUME 100 = 769 CF [439]

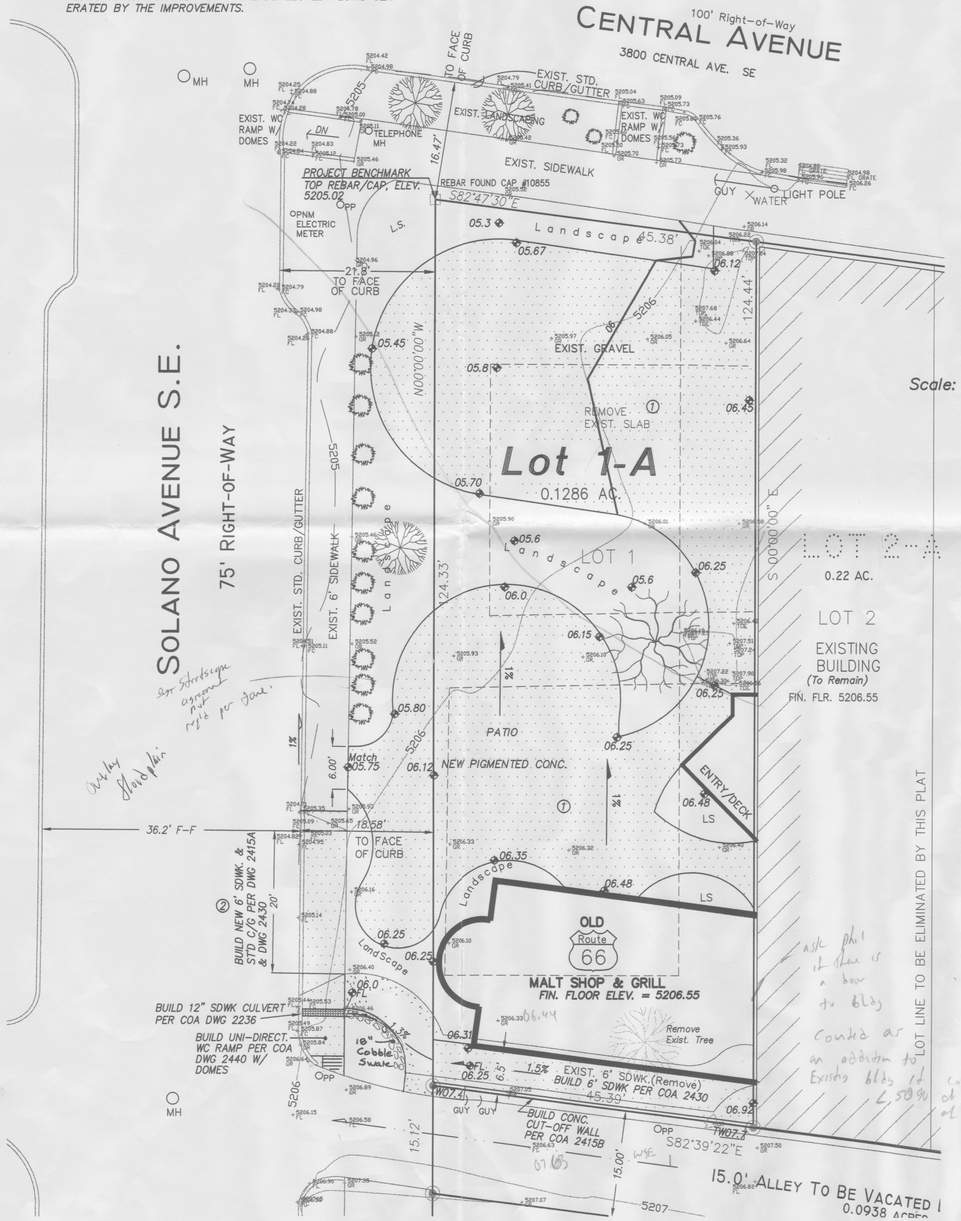
DEVELOPED CONDITIONS

DETERMINE LAND TREATMENTS, PEAK DISCHARGE AND VOLUMETRIC DISCHARGE FOR STUDY AREA

	AREA	LAND TREATM'T	Q Peak	E
UNDEVELOPED	--- Ac.	A	1.56[0.38]	0.53[0.13]
LANDSCAPING	0.01 Ac.	B	2.28[0.95]	0.78[0.28]
GRAVEL & COMPACTED SOIL	0.02 Ac.	C	3.14[1.71]	1.13[0.52]
ROOF – PAVEMENT	0.10 Ac.	D	4.70[3.14]	2.12[1.34]
	0.13 Ac.			

THEREFORE: $E_{Weighted}$ = 1.86 In.[1.13] &
Q100 = 0.55 CFS VOLUME 100 = 877 CF
Q10 = 0.35 CFS VOLUME 10 = 533 CF

RECOMMEND : ROUTE DEVELOPED RUNOFF THROUGH SOFT LANDSCAPING



Scale: 1" = 10'

NOTES

1. ALL WORK WITHIN THE RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECS. FOR PUBLIC WORKS CONSTRUCTION, 7TH EDITION W/ UPDATES.
2. AN EXCAVATION/CONSTRUCTION PERMIT IS REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY R.O.W. AN APPROVED COPY OF THIS PLAN MUST BE SUBMITTED AT THE TIME OF APPLICATION.
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 LANDSCAPING AREA SHALL BE SOFT-LINED WITH NATIVE VEGETATION AND/OR GRAVEL. ASPHALT PARKING AREA SHALL DRAIN DIRECTLY TO EXISTING CURB CUTS.
5. CONTRACTOR SHALL ENSURE THAT NO SITE SOILS/SEDIMENT OR SILT ENTER THE RIGHT-OF-WAYS DURING CONSTRUCTION.
6. REVEGETATE ALL AREAS DISTURBED DUE TO CONSTRUCTION PER CITY OF ALBUQ. SPEC. 1011, NATIVE SEED MIX.
7. MAXIMUM SITE GRADING WITHOUT EROSION PROTECTION: 3 HORIZONTAL TO 1 VERTICAL, 3:1. ALL DIMENSIONS TO FACE OF CURB, UNLESS NOTED OTHERWISE.

(1) REMOVE EXISTING CONCRETE SLABS

(2) CLOSE EXISTING DRIVEPAD AND BUILD ST'D. C/G PER COA 2415 REPAIR SDWK. PER COA 2430

LEGEND

EXIST. SPOT ELEVATION	+24.0
EXIST. CONTOUR	10
NEW SPOT ELEVATION	24.0
NEW CONTOUR	12
NEW SWALE	
DRAINAGE DIRECTION, EXISTING	
NEW CONCRETE CURB (0.5' HEIGHT)	
NEW P.C.C., CONCRETE	
TOP OF CURB, EXISTING	TC
FLOWLINE	FL
EXISTING POWER POLE	o
FACE OF CURB/FACE OF CURB	F-F
WATER BLOCK	

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PHILIP W. CLARK NMPE #10265

PHILIP W. CLARK NEW MEXICO 10265 REGISTERED PROFESSIONAL ENGINEER 12/15/09

ask phil if there is a box to bldg. Could as an addition to Existing bldg it cost is of value of 3 bldg

PROJECT DATA

RECEIVED DEC 15 2009 HYDROLOGY SECTION

LEGAL DESCRIPTION

LOT 1, BLOCK 3, MANKATO PLACE ADDITION ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO

PROJECT BENCHMARK

TOP OF REBAR/CAP AT THE PROJECT NORTHWEST CORNER MSL ELEVATION = 5205.02, AS TIED FROM COA 1-3/4" DIAMETER BRASS DISK SET IN SIDEWALK, 5_K17A, MSL, NAVD 88, 5222.21, LOCATED 178' EAST OF THE INTERSECTION OF MORNINGSIDE AND CENTRAL AVEUNE, SE.

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COMPILED BY CLARK CONSULTING ENGINEERS, DATE NOVEMBER 2009, FROM DATA COLLECTED BY THE SURVEY OFFICE, UNDER THE DIRECTION OF TONY HARRIS, P.S. OF HARRIS SURVEYING, INC.

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Nob Hill DEVELOPMENT CORP

Route 66 MALT SHOP & GRILL

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331 WELLESLEY PLACE NE
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REVISIONS

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BEAUTY COLLEGE PROJECT
ROUTE 66 MALT SHOP & GRILL
ALBUQUERQUE, NM 87108
GRADING & DRAINAGE PLAN

DATE:
DRAWN BY:
CHECKED BY:
VERIFIED BY:

DESIGNS BY JAF CONCEPTS (505)315-9644

SHEET NO: C1.1 PHASE 1