

NOTICE TO CONTRACTORS

1. ALL WORK DETAILED THIS SHEET TO BE PERFORMED UNDER CONTRACT SHALL EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE No. 7, AMENDMENT #1.
2. TWO WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM (260-1990) FOR LOCATION OF EXISTING UTILITIES.
3. 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 OR SURVEYOR IMMEDIATELY SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. FIVE (5) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO CONSTRUCTION COORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (924-3400) PRIOR TO OCCUPYING AN INTERSECTION. REFER TO SECTION 19 OF THE STANDARD SPECIFICATIONS.
5. ALL PERMANENT STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED WITH PLASTIC REFLECTORIZED PAVEMENT MARKING BY CONTRACTOR IN SAME LOCATION AS EXISTING OR AS INDICATED BY THIS PLAN SET.
6. ANY WORK WITHIN AN ARTERIAL ROADWAY REQUIRES TWENTY-FOUR HOUR CONSTRUCTION.
7. CONTRACTOR SHALL MAINTAIN A GRAFFITI-FREE WORK SITE. CONTRACTOR SHALL PROMPTLY REMOVE ANY GRAFFITI FROM ALL EQUIPMENT, WHETHER PERMANENT OR TEMPORARY.
8. CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL CONSTRUCTION SIGNING UNTIL THE PROJECT HAS BEEN ACCEPTED BY THE OWNER.
9. DRIVE PADS SHALL BE PER DWG 2425 EXCEPT FLARES MODIFIED TO 8'@12:1 SLOPE.
10. ALL PRIVATE PAVING TO 4" AC PER COA STD DWG 2405B.

DRAINAGE MANAGEMENT PLAN

THIS SITE WILL FREE DISCHARGE SURFACE DRAINAGE TO THE ADJACENT STREETS (FUTURE BY SEPARATE PROJECT) TO BE ROUGH GRADED THIS PROJECT WHICH WILL CONVEY STORMWATER RUNOFF TO A PERMANENT OFFSITE PRIVATE RETENTION POND, ALSO TO BE ROUGH GRADED THIS PROJECT.

THE FUTURE STREETS AND OFFSITE POND WILL BE CONSTRUCTED WITH THE SUBDIVISION OF TOWN CENTER UNITS 1 & 2 AT MESA DEL SOL.

TOTAL LAND DISTURBANCE THIS PROJECT IS 12ac PORTION OF 33ac TOWN CENTER UNITS 1 AND 2. POND VOLUME BY PRORATION IS 3.1ac THIS PROJECT. SEE SEPARATE TOWN CENTER UNITS 1 AND 2 DRAINAGE REPORT FOR DRAINAGE CALCULATIONS.

WATER HARVESTING MANAGEMENT PLAN

SUSTAINABILITY GOALS WILL BE MET TO THE EXTENT POSSIBLE BY DIRECTING STORMWATER FROM THE IMPERVIOUS SURFACES INTO THE VEGETATED LANDSCAPE AREAS WHICH WILL REMOVE SOME OF THE POLLUTANTS AND CONSERVE WATER. GROUND WATER RECHARGE AND SUSTAINABILITY GOALS OF WATER QUALITY ARE FURTHER MET BY THE PRIVATE RETENTION POND.

THE PRIVATE RETENTION POND WILL REMOVE THE REMAINING POLLUTANTS FROM WATER NOT PASSED OVER THE BIO-RETENTION LANDSCAPE STRIPS SO THAT NO POLLUTANTS WILL BE CARRIED OFF SITE BY STORMWATER AND THE POND LANDSCAPING WILL BE SUSTAINED LARGELY BY STORMWATER RUNOFF.

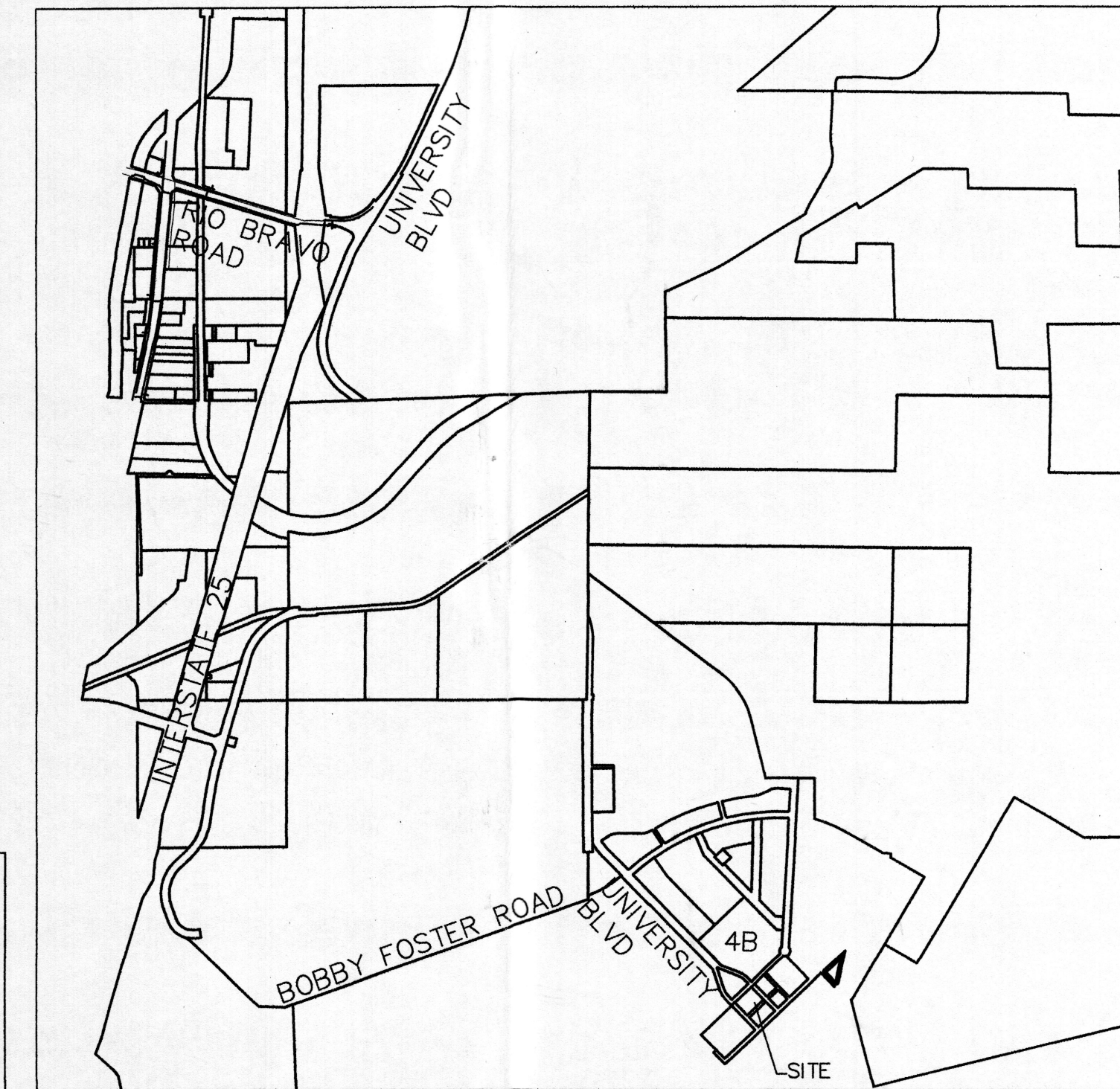
ADDITIONAL BENCHMARK INFO:
BENCHMARK INFORMATION BELOW IS PROVIDED FOR INFORMATION ONLY AND IS NOT THE BENCHMARK INFORMATION USED TO GENERATE THE EXISTING TOPOGRAPHIC INFORMATION SHOWN

BENCH MARK:
2 1/2" ALUMINUM CAP SET IN CONCRETE
STAMPED "3-R16, 2006"
NM STATE PLANE, CENTRAL ZONE
N=142708.036 E=1511081.785 ELEV: 5296.579 (NAVD 88)
From the intersection of University Blvd and Eastman, go northeast approximately 1100 feet then proceed south west approximately 1800 feet

BENCH MARK:
2 1/2" ALUMINUM CAP SET IN CONCRETE
STAMPED "4-R16, 2006"
NM STATE PLANE, CENTRAL ZONE
N=143048.885 E=1533217.996 ELEV: 5294.737 (NAVD 88)
From the intersection of East University Blvd and Stryker Road, go east approximately 1300 feet then turn south approximately 300'

LEGEND

- AREA TO BE ROUGH GRADED THIS PROJECT 4" BELOW FINISHED GRADE SHOWN ON PLANS
- PAVING THIS PROJECT



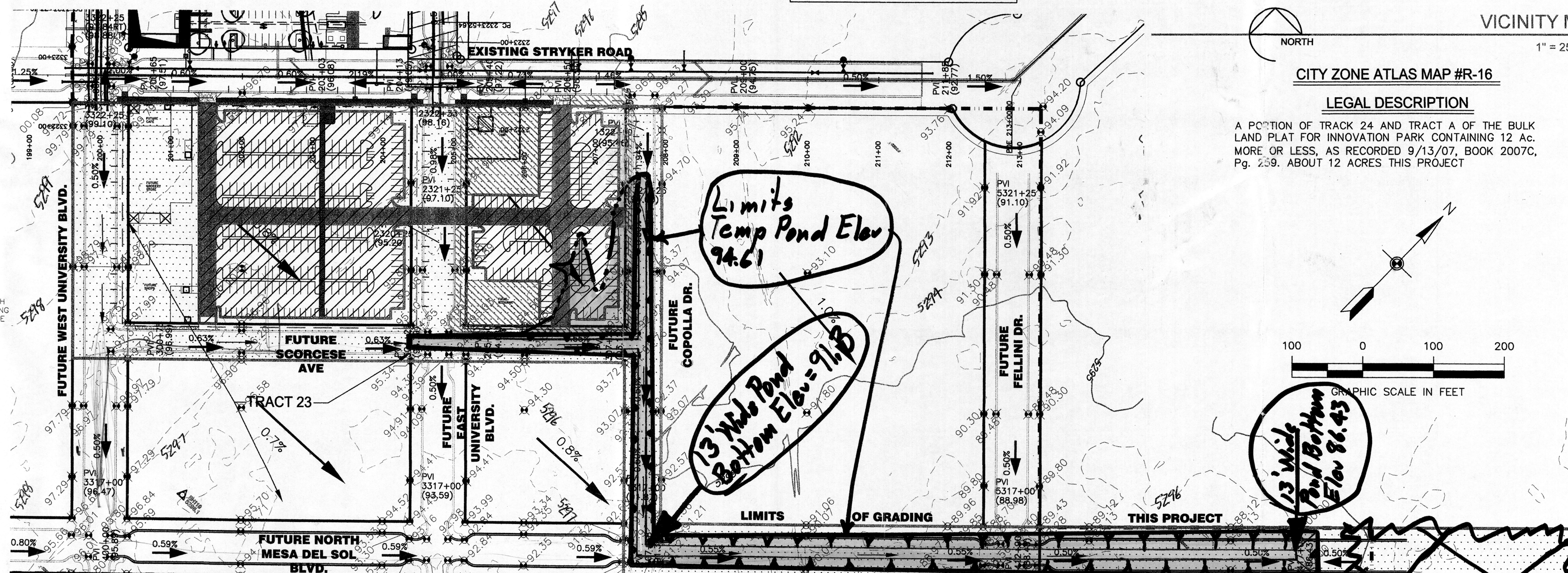
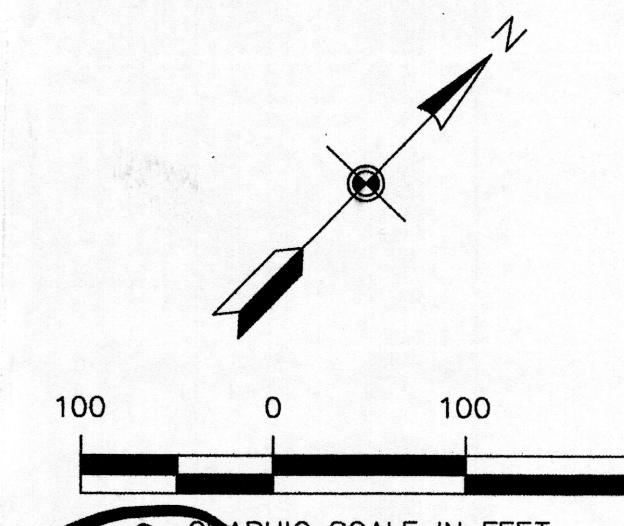
VICINITY MAP

1" = 2500'-0"

CITY ZONE ATLAS MAP #R-16

LEGAL DESCRIPTION

A PORTION OF TRACT 24 AND TRACT A OF THE BULK LAND PLAT FOR INNOVATION PARK CONTAINING 12 AC. MORE OR LESS, AS RECORDED 9/13/07, BOOK 2007C, Pg. 239. ABOUT 12 ACRES THIS PROJECT



ENGINEER'S CERTIFICATION FOR MESA DEL SOL, COMMUNITY CENTER, PARKING BLOCK 'F' & 'O'
I, James D. Hughes, NMPE # 11674, of the firm URS Corporation, hereby certify that this project has been paved and graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 11/12/2008 except as noted below. The record information edited onto the original design document has been obtained by me. I further certify that I have personally visited the project site on 7/17/2008 and have determined by visual inspection that original planned elevations are representative of actual site conditions and are true and correct to the best of my knowledge and belief. This certification is submitted for city files as requested in the permit letter dated 12/8/2008.

Noteworthy deviations from the approved plan include:
1) The offsite retention pond replaced with retention ponding in the offsite future roadway on the same parcel of land with the same private ownership as the pond was originally located on. Only private water, no public water, drains to the ponding site. As-built volume calculations by conic section equation are as follows:
The record information presented herein is not necessarily complete and is intended only to verify substantial compliance of the paving, 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.

James D. Hughes
James D. Hughes, NMPE 11674
8-13-09
Date

Elev. (Ft)	Area (SF)	Volume (Ac-Ft)
5287.00	0	0
5293.00	33170	1.52
5294.00	43865	2.40
5294.61	3.10	3.10
5295.00	54560	3.62

Handwritten Note:
Temporary Pond Relocated to Future Roadway
Grading This Project

OFFSITE RETENTION POND
FUTURE VOLUME (100 YEAR, 10 DAY) = 8.5 AC. FT.
TO SERVE FUTURE 33ac TOWN CENTER UNITS 1 AND 2
POND VOLUME = 3.1ac THIS PROJECT FOR 12ac LAND DISTURBANCE.

URS

6501 americas parkway ne
suite 900
albuquerque, nm 87110
505 855 7500 p
505 855 7555 f

landscape architect
heads up
po box 10597
albuquerque, nm 87184
505 898 9615 p
505 898 2105 f

MESA DEL SOL
COMMUNITY CENTER
PARKING BLOCK F & O
ALBUQUERQUE, NEW MEXICO

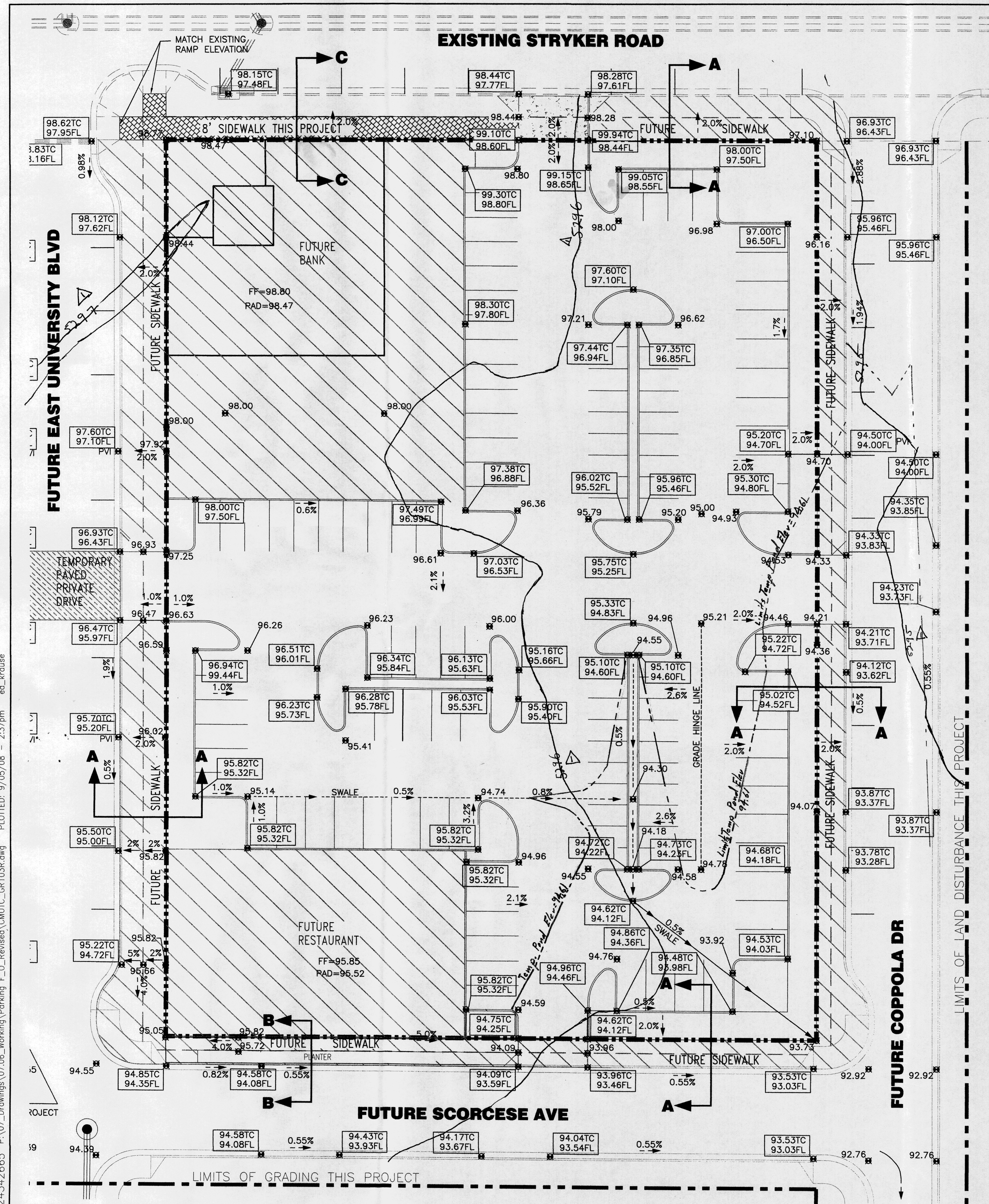
RECEIVED
AUG 13 2009
HYDROLOGY
SECTION

PROFESSIONAL ENGINEER
JAMES D. HUGHES
11674
NEW MEXICO

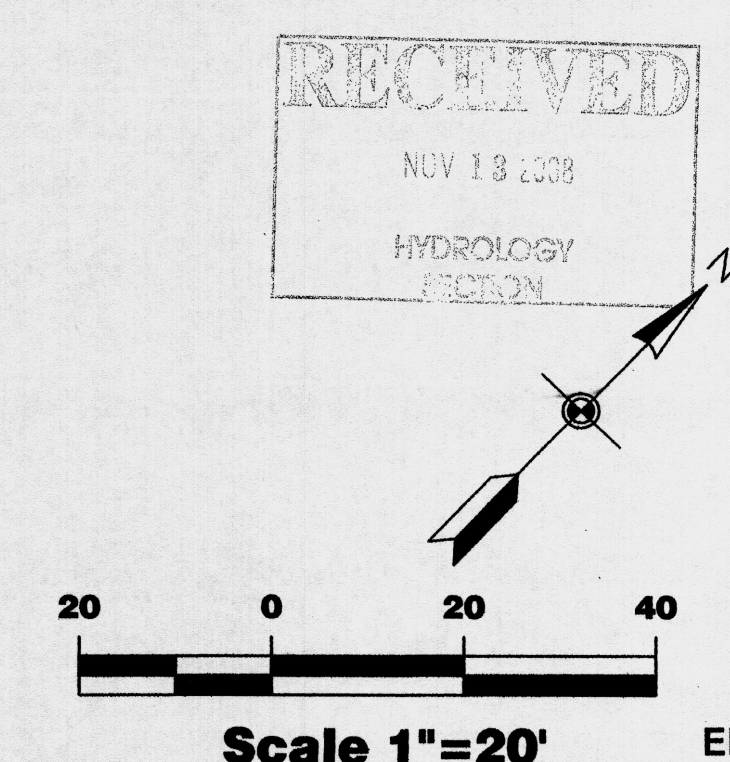
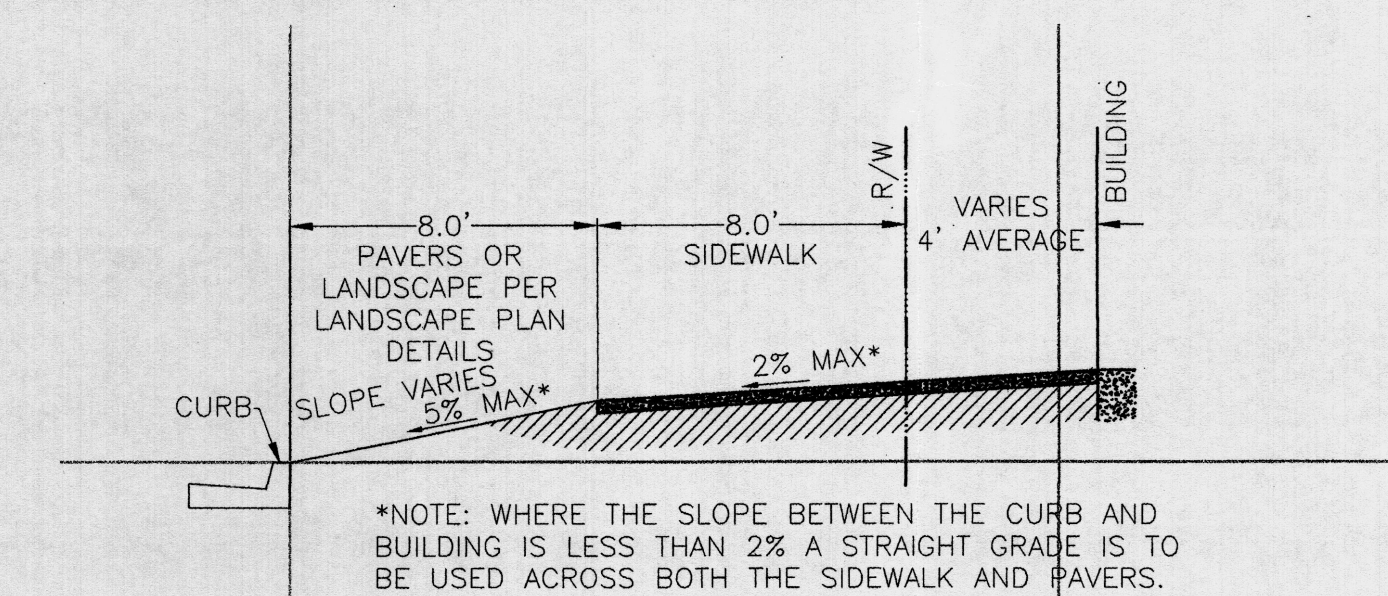
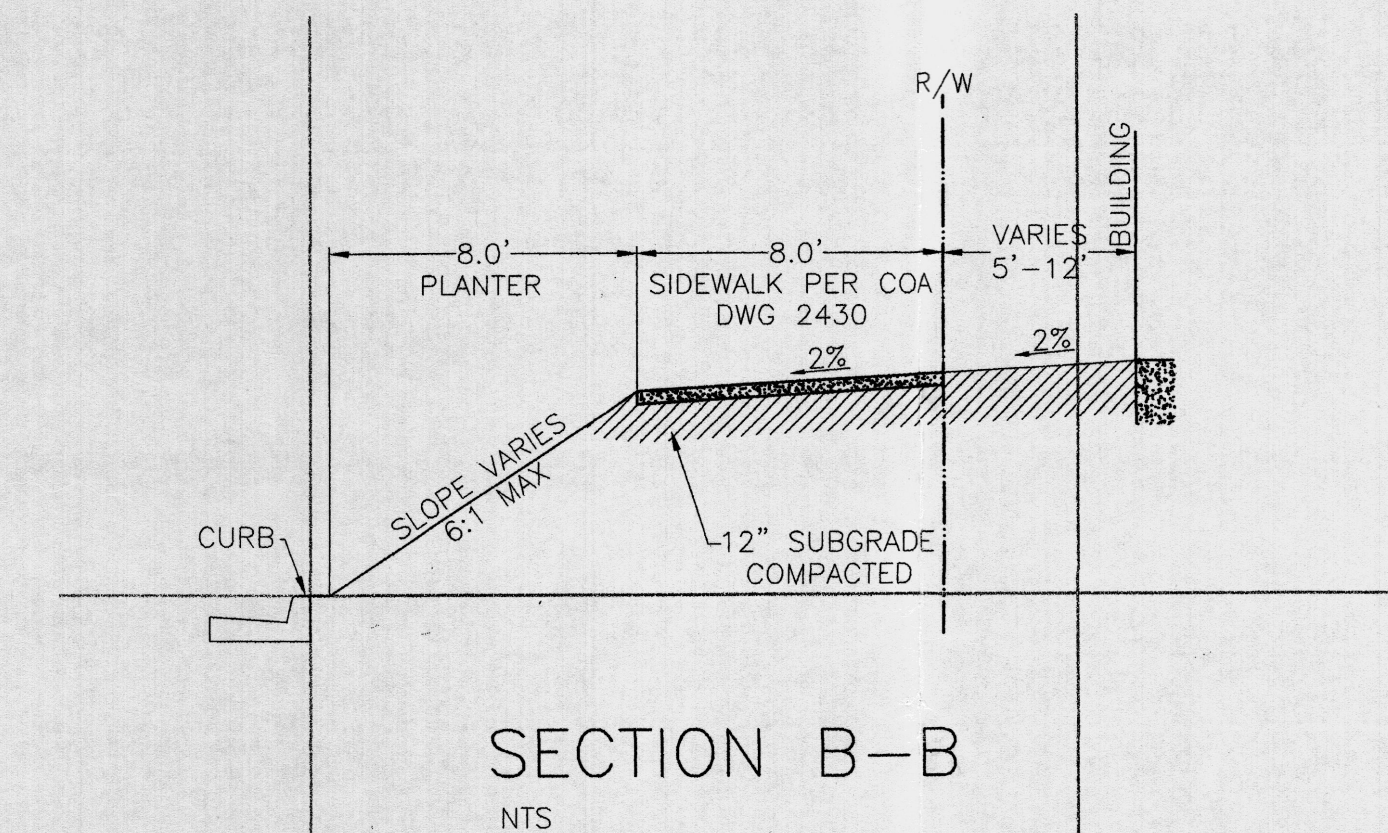
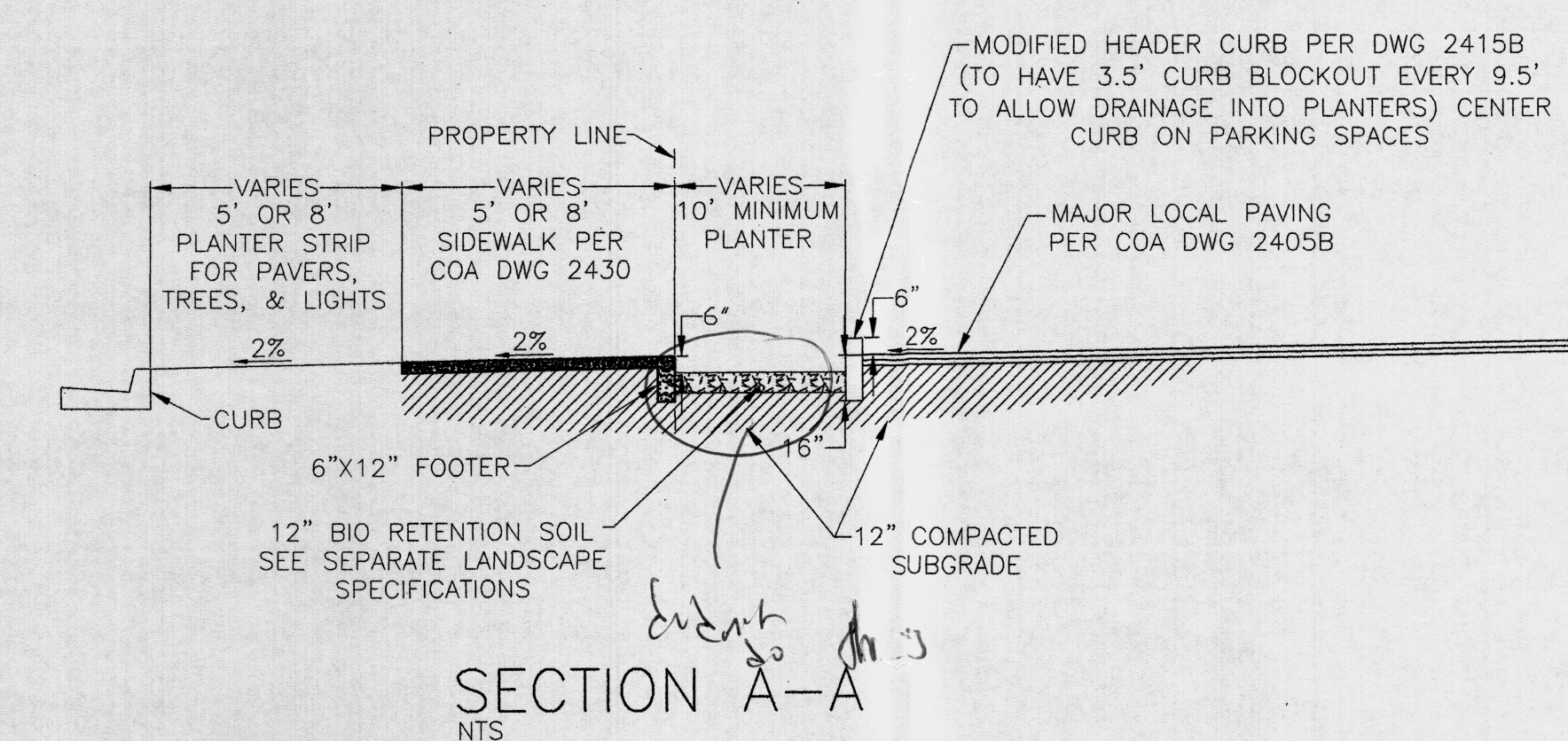
DATE:
SEPTEMBER 9, 2008
SHEET TITLE:
PAVING, GRADING,
AND DRAINAGE PLAN
SHEET NUMBER:
SHEET 1 OF 418

ENGINEER'S CERTIFICATION
FOR MESA DEL SOL,
COMMUNITY CENTER,
PARKING BLOCK 'F' & 'O'

24342665 P:\07_Drawings\07_06_Working\Parking_F.O_Revise\DMTC_GRI03R.dwg PLOTTED: 9/05/08 - 2:37pm ed_krause



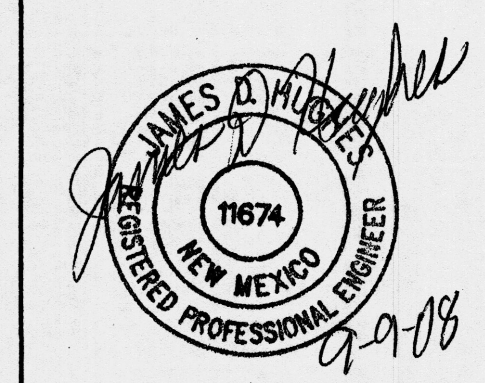
NOTE:
ALL CURB THIS PROJECT IS TO BE SAWTOOTH AS
ILLUSTRATED IN SECTION A-A TO ALLOW DRAINAGE
THROUGH IT. CONTRACTOR IS TO CONSTRUCT CURBS
TO PREVENT PONDING ON ASPHALT.



URS
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suite 900
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505 855 7555 f

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heads up
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505 898 9615 p
505 898 2105 f

MESA DEL SOL
COMMUNITY CENTER
PARKING BLOCK F&O
ALBUQUERQUE, NEW MEXICO



DATE:
SEPTEMBER 9, 2008
SHEET TITLE:
GRADING PLAN
SHEET NUMBER:
SHEET 3X OF 4X

ENGINEER'S CERTIFICATION
FOR MESA DEL SOL,
COMMUNITY CENTER,
PARKING BLOCK 'F' & 'O'

URS

6501 americas parkway ne
suite 900
albuquerque, nm 87110
505 855 7500 p
505 855 7555 f

landscape architect
heads up
po box 10597
albuquerque, nm 87184
505 898 9615 p
505 898 2105 f

MESA DEL SOL
COMMUNITY CENTER
PARKING BLOCK F & O
ALBUQUERQUE, NEW MEXICO

ENGINEER'S CERTIFICATION FOR MESA DEL SOL, COMMUNITY CENTER, PARKING BLOCK 'F' & 'O'
I, James D. Hughes, NMPE # 11674, of the firm URS Corporation, Hereby Certify that this project has been paved and graded and will drain in substantial compliance with and in accordance with the design intent of the approved plan dated 11/12/2008 except as noted below. The record information edited onto the original design document has been obtained by me, I further certify that I have personally visited the project site on 7/17/2009 and have knowledge and belief. This certification is submitted for city files as requested in the permit letter dated 12/8/2008.

1) The offsite retention pond replaced with retention ponding in the offsite future roadway on the same parcel of land with the same private ownership as the pond was originally located on. Only private water, no public water, drains to the ponding site. As-built volume calculations by conic section equation are as follows:
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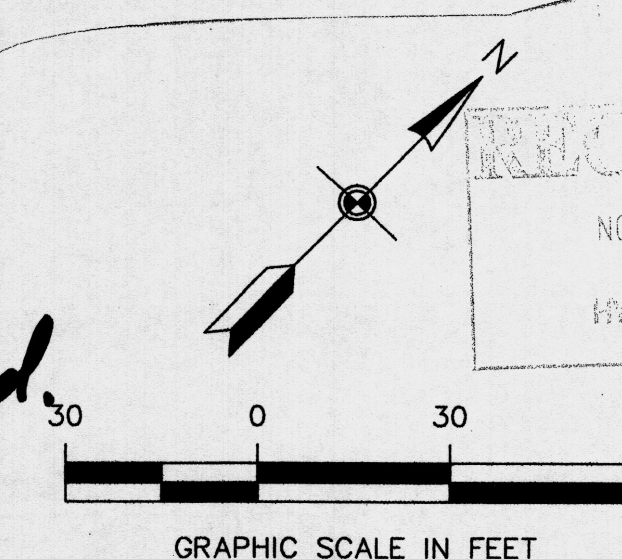
James D. Hughes 8-13-09
James D. Hughes NMPE # 11674 Date

Elev. (Ft)	Area (SF)	Volume (Ac-Ft)
5287.00	0	0
5293.00	33170	1.52
5294.00	43865	2.40
5294.61		3.10
5295.00	64560	3.62

Rd 0 -
Bottom = 84.00

A-A
Not To Scale

This sheet void, see sheet
1 of 4 for limits of Temp. Pond.

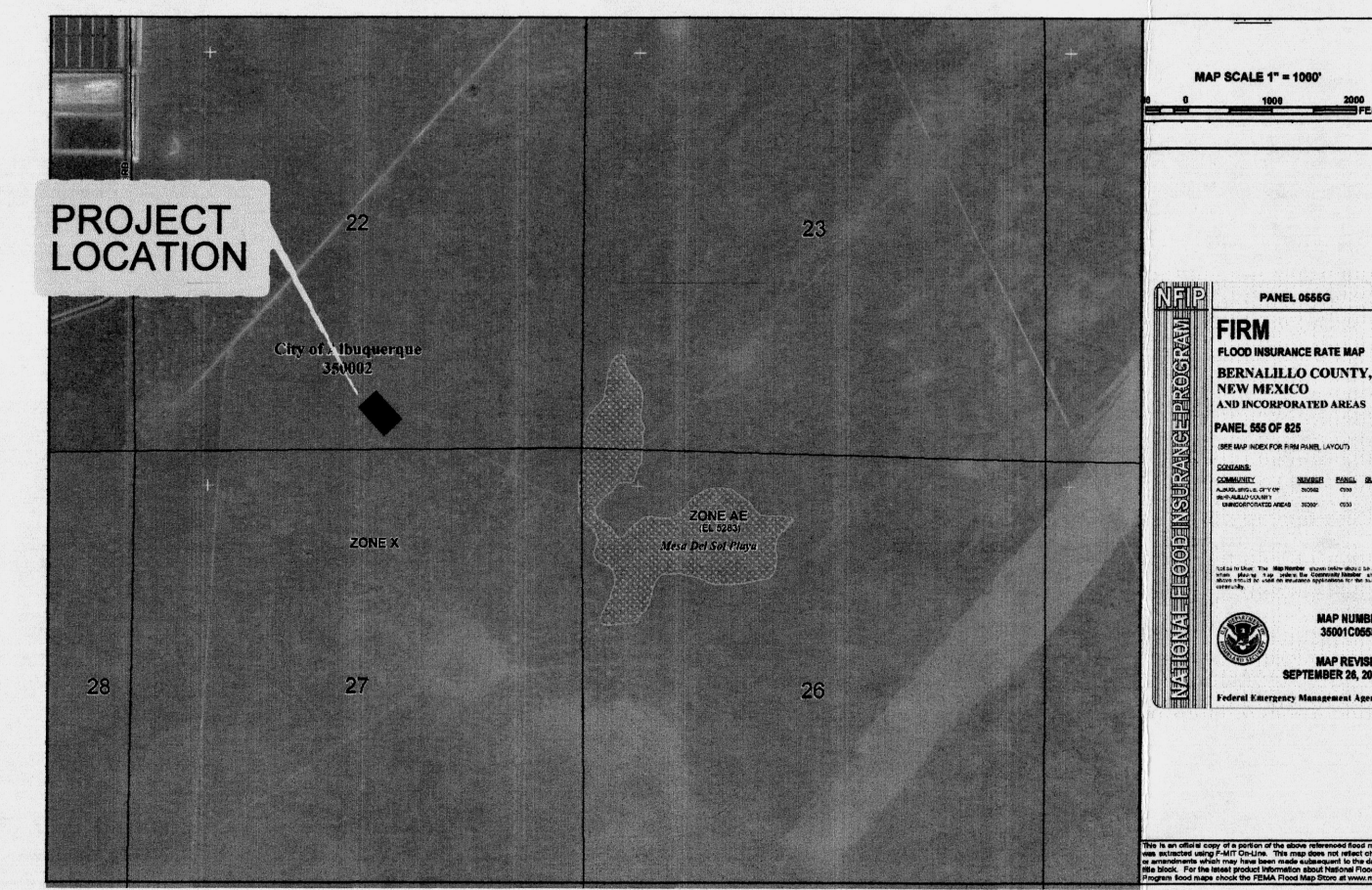


A 11/12/08-cse

JAMES D. HUGHES
11674
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO

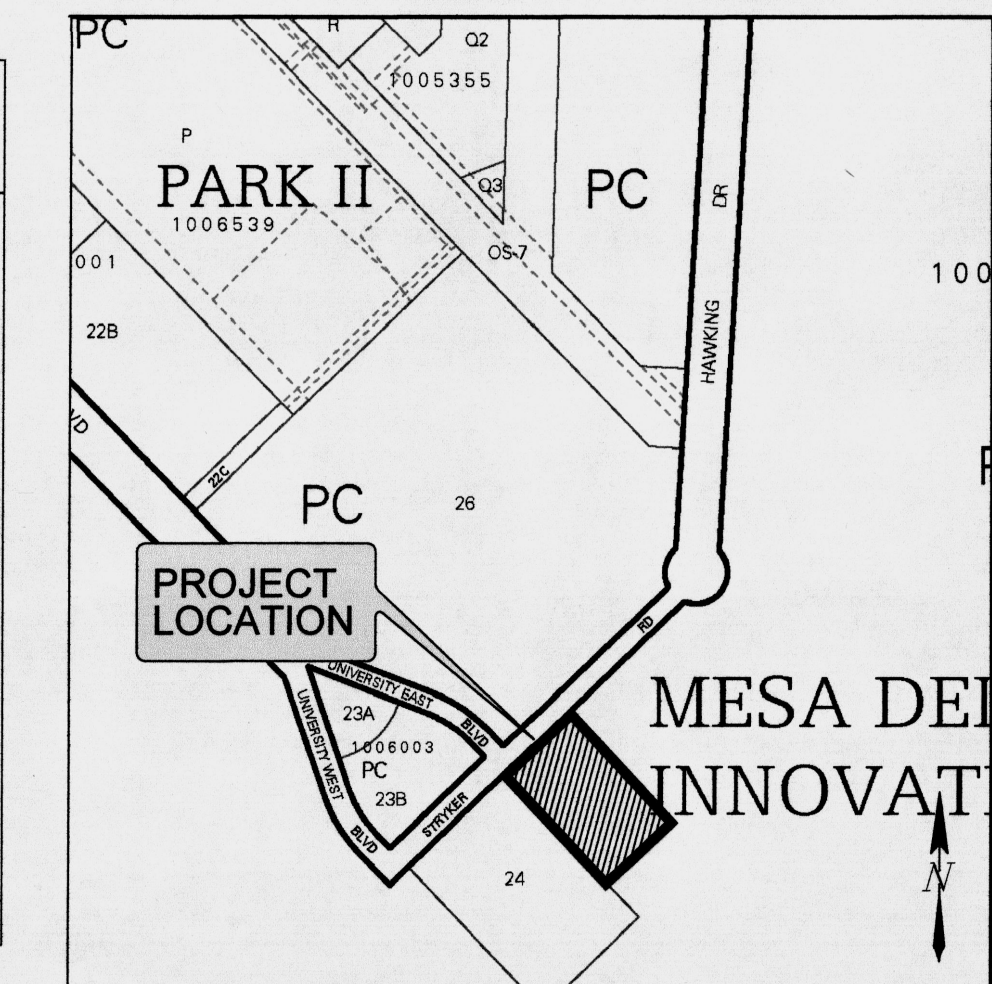
DATE:
SEPTEMBER 9, 2008
SHEET TITLE:
PAVING, GRADING,
AND DRAINAGE PLAN
SHEET NUMBER:
SHEET 4 OF 4

ENGINEER'S CERTIFICATION
FOR MESA DEL SOL,
COMMUNITY CENTER,
PARKING BLOCK 'F' & 'O'



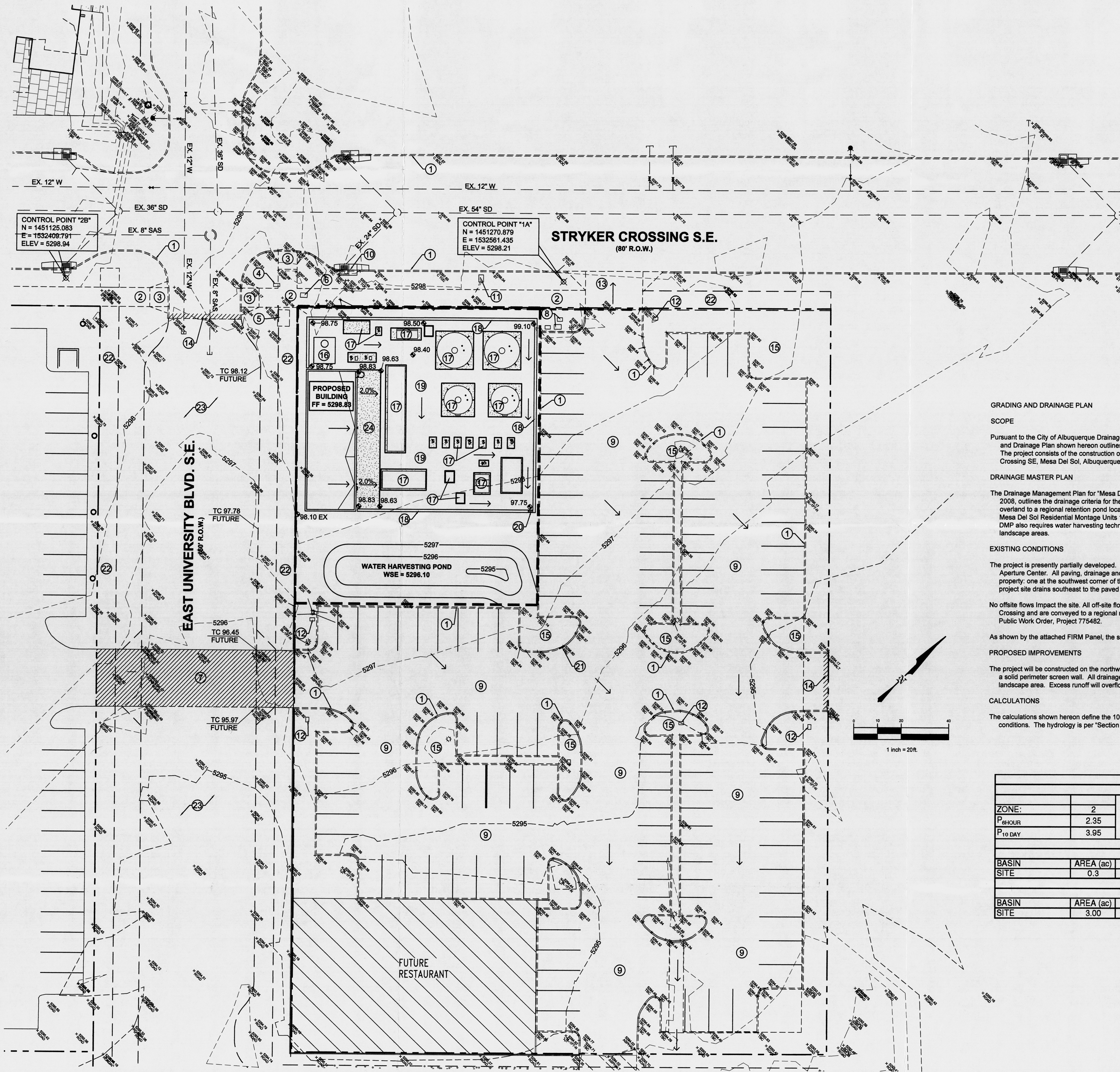
FIRM PANEL

35001C0555G



VICINITY MAP

ZONE ATLAS R-16-Z



GRADING AND DRAINAGE PLAN

SCOPE

Pursuant to the City of Albuquerque Drainage Ordinance and the Development Process Manual, Volume 2, Section 22.2, the Grading and Drainage Plan shown hereon outlines the drainage management criteria for controlling developed runoff from the project site. The project consists of the construction of NEDO - ABQ Micro Grid, a hybrid, green technology test power facility, located on Stryker Crossing SE, Mesa Del Sol, Albuquerque, New Mexico.

DRAINAGE MASTER PLAN

The Drainage Management Plan for "Mesa Del Sol Community Center Parking, Blocks F & G", prepared by URS, dated September 9, 2008, outlines the drainage criteria for the subject project. In accordance with the approved DMP, all excess runoff will drain overland to a regional retention pond located southeast of the site. The pond is currently under construction in conjunction with the Mesa Del Sol Residential Montage Units 1 & 2. The retention pond will have a storage capacity of approximately 8.5-acre-feet. The DMP also requires water harvesting techniques to be implemented in the parking lots by routing excess runoff through depressed landscape areas.

EXISTING CONDITIONS

The project is presently partially developed. The Tract A, Block O parking lot was constructed in 2008 to support construction of Aperture Center. All paving, drainage and landscaping improvements are in place. Two unimproved pad sites are located on the property: one at the southwest corner of the property, and the project site located at the northwest corner. All excess runoff from the project site drains southeast to the paved lot, and through the depressed landscape areas per the DMP.

No offsite flows impact the site. All off-site flows from the north are collected by a public storm drainage network located in Stryker Crossing and are conveyed to a regional retention pond located east of ABQ Studios. All public infrastructure was constructed by Public Works Order, Project 775462.

As shown by the attached FIRM Panel, the site lies within the 500-year Zone "X" Flood Zone.

PROPOSED IMPROVEMENTS

The project will be constructed on the northwest pad site. Site improvements include a control building and a utility yard surrounded by a solid perimeter screen wall. All drainage flows from the site will drain to the southeast corner of the utility yard to a depressed landscape area. Excess runoff will overflow to the paved parking lot and drain to the regional retention pond.

CALCULATIONS

The calculations shown hereon define the 100-year/6 hour design storm falling within the project area under existing and proposed conditions. The hydrology is per "Section 22.2, Part A, Development Process Manual, Vol 2", dated June 1997.

PROJECT HYDROLOGY																
NEDO - ABQ MICRO GRID																
ZONE:	2															
P ₂₄ HOUR									2.35							
P ₁₀ DAY									3.95							
EXISTING CONDITION																
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)								
SITE	0.3	0.00	0.00	0.30	0.00	1.13	0.94	0.028								
PROPOSED CONDITION																
BASIN	AREA (ac)	A (ac)	B (ac)	C (ac)	D (ac)	E	Q (cfs)	VOL (ac ft)								
SITE	3.00	0.00	0.00	0.22	0.08	1.39	1.07	0.349								

LEGEND

ITEM	EXISTING	PROPOSED
CENTERLINE	---	---
EX. EDGE OF PAVING	---	---
PROPERTY LINE	---	---
SPOT ELEVATION	75.5	01.5
RIP-RAP ROCK	---	---
CONTOUR W/ ELEVATION	5800-	5800-
RETAINING WALL	---	---
ASPHALT PAVING	---	---
DIRECTION OF FLOW	---	---
DRAINAGE SWALE	---	---
DRAINAGE BASIN	---	---

DRAINAGE PLAN NOTES

- BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations are top of pavement unless noted otherwise.

PROJECT DATA

PROPERTY ADDRESS:
STRYKER CROSSING S.E.
ALBUQUERQUE, NM
LEGAL DESCRIPTION:
TRACT A, BLOCK O, TOWN CENTER
PROJECT BENCHMARK:
ACS BENCHMARK 4_R16
ALUMINUM CAP
ELEV. = 5294.737
SURVEY:
TOPOGRAPHIC AND FIELD MEASUREMENTS BY
BRASHER & LORENZ FEBRUARY 28, 2009

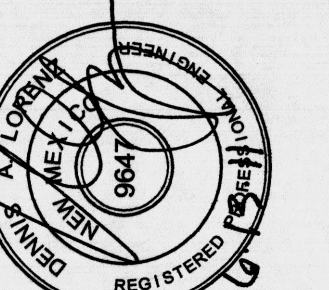
KEYED NOTES

- EXISTING CURB AND GUTTER.
- EXISTING SIDEWALK.
- EXISTING HANDICAP RAMPS.
- EXISTING TRAFFIC SIGNAL BOX.
- EXISTING PMM PULL BOX.
- EXISTING TELECOM PULL BOX.
- EXISTING TEMPORARY ASPHALT CROSSOVER BETWEEN PARKING LOTS.
- EXISTING IRRIGATION EQUIPMENT.
- EXISTING ASPHALT PAVEMENT.
- EXISTING CATCH BASIN.
- EXISTING WATER SERVICE.
- EXISTING ELECTRICAL PULL BOX.
- EXISTING ADA CONCRETE DRIVEPAD.
- EXISTING EDGE OF ASPHALT.
- EXISTING DEPRESSED LANDSCAPE.
- PROPOSED UTILITY VAULT.
- PROPOSED UTILITY FOUNDATION.
- PROPOSED CMU SCREEN WALL.
- GRAVEL YARD.
- PROVIDE DRAINAGE OUTLET BY TURNING 2 CMU BLOCKS 90°.
- SAWCUT EXISTING CURB TO PROVIDE 12" INCH DRAINAGE OVERFLOW FOR WATER HARVESTING POND.
- FUTURE 8' PUBLIC SIDEWALK.
- FUTURE PUBLIC STREET IMPROVEMENTS.
- PROPOSED CONCRETE SIDEWALK.

NEDO - ABQ MICRO GRID

MESA DEL SOL
ALBUQUERQUE, NEW MEXICO

BRASHER & LORENZ
CONSULTING ENGINEERS
2201 San Pedro, NE Building 1, Suite 1200
Albuquerque, NM 87106
Ph: 505-884-6086 Fax: 505-884-6188



FOUNDATION
ONLY
DOCUMENTS

DATE:
June 13, 2011

SHEET TITLE:
Grading and Drainage Plan

SHEET NUMBER:

C-1

