

<u>PARKING</u>				
<u>REQUIRED</u>				
LVL	AREA (sf)	RQMT.	STALL	
1	35,750	1/200	177	
2	35,750	1/300	117	
TOTAL			294	
<u>PROVIDED</u>				
HANDICAPPED			8	
LEV PREFERRED			17	
VISITOR			15	
STAFF			26	
TOTAL			29	
<u>AREA CALCULATIONS</u>				
SITE	7.40 Acres (322.34)			
BUILDING (2 LVLS)	76.93			
FAR				
BLD FOOTPRINT	38.4			
LANDSCAPE	153,450 SF (4)			
<u>FENCE LEGEND</u>				
K-12 FENCE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
K-4 FENCE	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

PageSouthernlandPage

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ICE Albuquerque
5441 Watson Drive
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PROFESSIONAL SEALS



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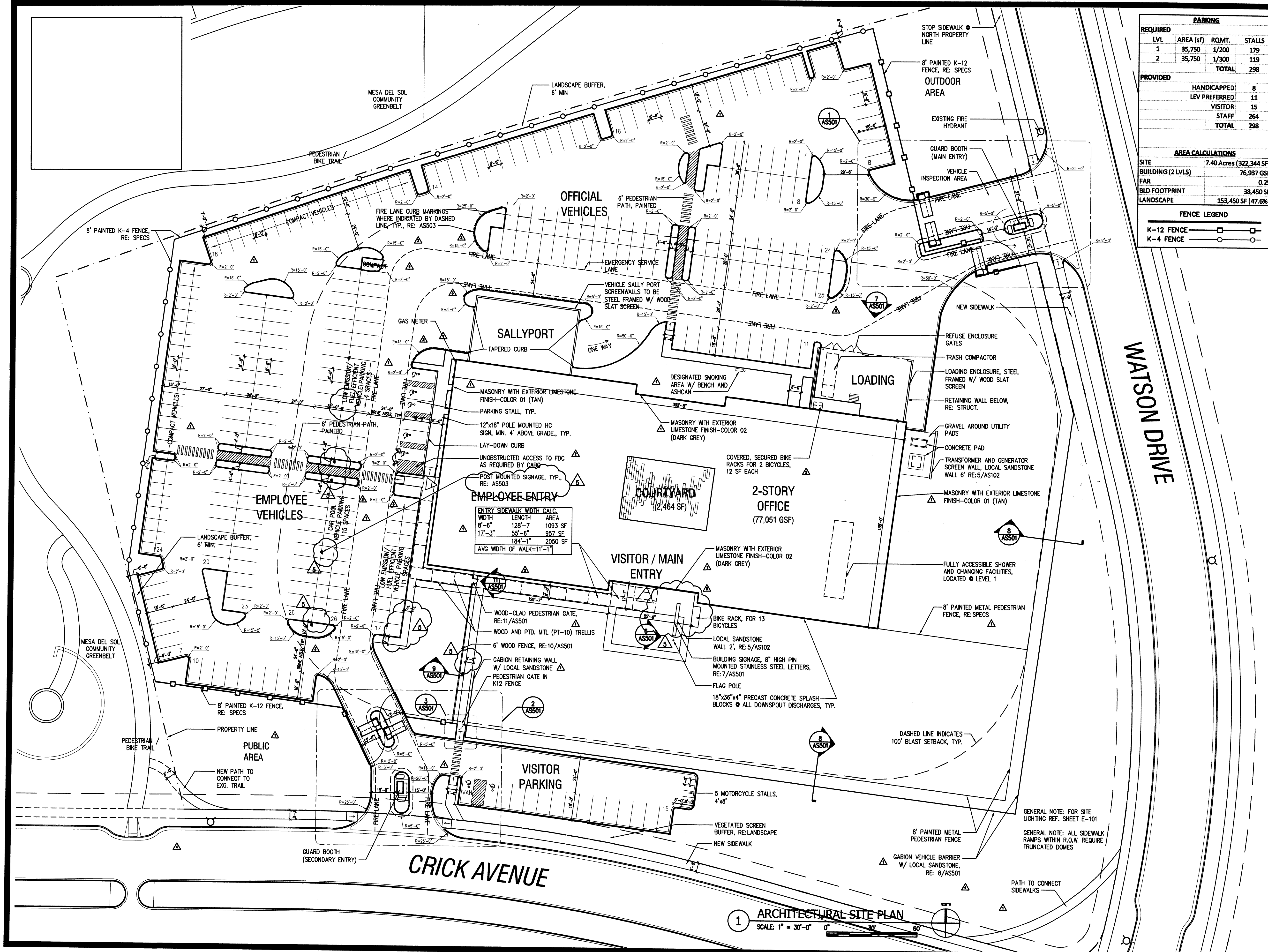
HYDROLOGY
SECTION

ARCHITECTURAL SITE PLAN

DRAWN BY	RLW	CHECKED BY	JE
PROJECT NUMBER	109036	PROJECT ABBREVIATION	ICEA
ORIGINAL ISSUE	01/07/2011	CURRENT DOCUMENTATION STAGE	
		ISSUE FOR CONSTRUCTION	
		FILE NAME	Y0036-SIT

AS101

DRAWING NUMBER



PARKING			
REQUIRED			
LVL	AREA (sf)	RQMT.	STALLS
1	35,750	1/200	179
2	35,750	1/300	119
TOTAL			298
PROVIDED			
HANDICAPPED			8
LEV PREFERRED			11
VISITOR			15
STAFF			264
TOTAL			298
AREA CALCULATIONS			
SITE	7.40 Acres (322,344 SF)		
BUILDING (2 LVLS)	76,937 GSF		
FAR	0.25		
BLD FOOTPRINT	38,450 SF		
LANDSCAPE	153,450 SF (47.6%)		
FENCE LEGEND			
K-12 FENCE	□ — □		
K-4 FENCE	○ — ○		

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REVISION HISTORY

5	ASI NO. 4	03/28/2011
4	ADDENDUM NO.4	02/11/2011
3	ADDENDUM #3	01/26/2011
2	ISSUED FOR CONSTRUCTION	01/07/2011
1	ADDENDUM #1	11/23/2010
0	SITE, GRADING, FOUNDATION	10/18/2010

PROFESSIONAL SEALS

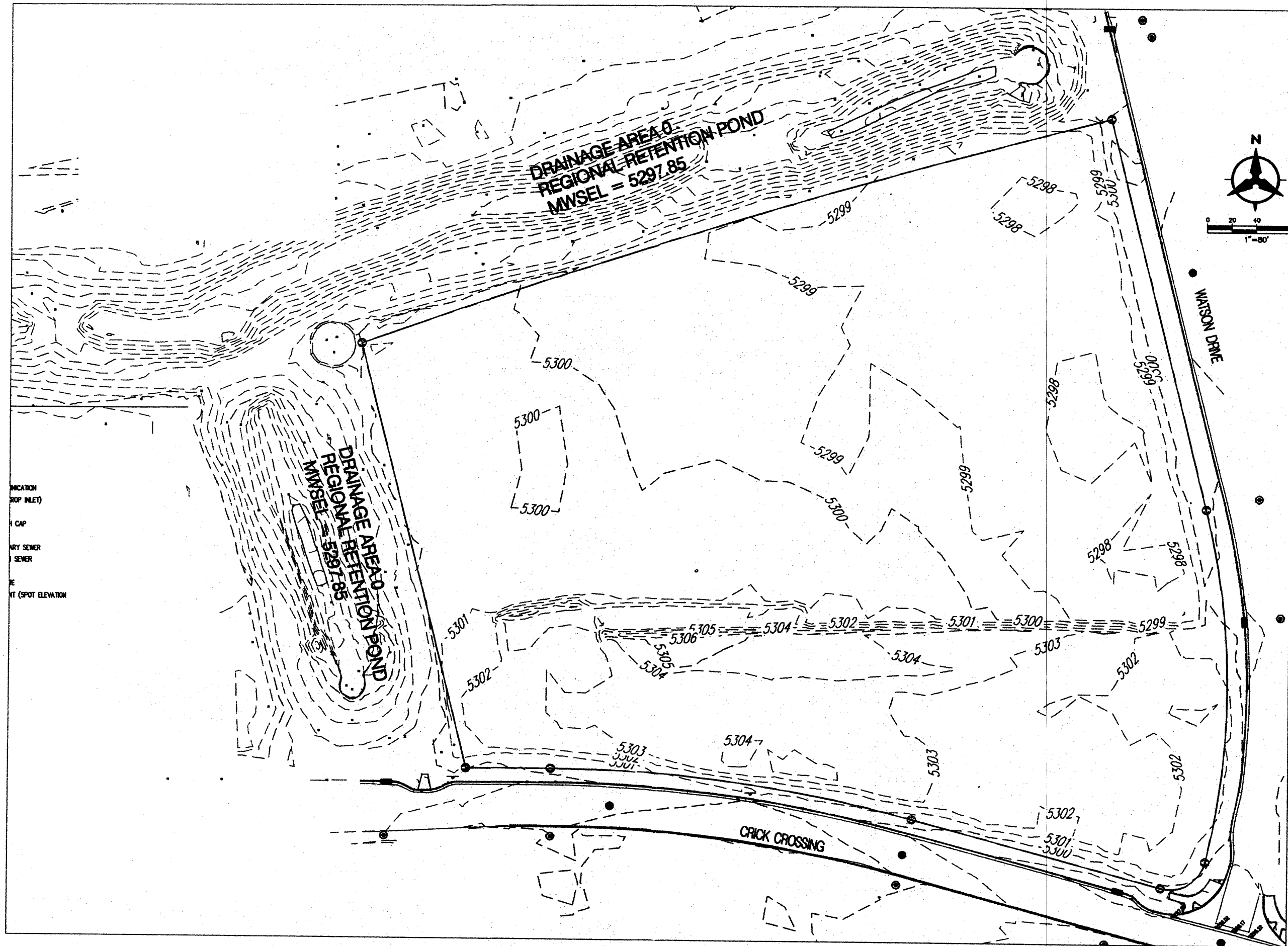
STATE OF NEW MEXICO
MATTHEW F. KREISLE, III
REGISTERED ARCHITECT
NO. 004440

ARCHITECTURAL SITE PLAN

DRAWN BY	RLW	CHECKED BY	JEG
PROJECT NUMBER	109036	PROJECT ABBREVIATION	ICEALB
ORIGINAL ISSUE	01/07/2011	CURRENT DOCUMENTATION STATUS	ISSUE FOR CONSTRUCTION
		FILE NAME	X9036-SITE

AS101

DRAWING NUMBER



I. INTRODUCTION
The purpose of this submittal is to present a grading and drainage plan for the proposed Project ICE building at Mesa del Sol. The site is located southeast of Fidelity Investments. It is surrounded by the regional retention pond to the north and west, Watson Dr. to the east and Crick Crossing to the south. The project will include one two story building, parking, landscaped areas and a perimeter retaining wall located around the southeast corner of the building for security purposes. This submittal is in support of COA rough grading and foundation permit approval.

III. EXISTING HYDROLOGIC CONDITIONS
The site is approximately 7.4 acres and is currently undeveloped. It lies within drainage area 0 of the mesa del sol innovation park (COA Hydro file # R16/da0001). There is a stock pile along the southern end of the site that runs parallel with Crick Crossing. The northern end of the site slopes 0.5% to 1.0% from the southwest to the northeast toward the existing Regional Retention Pond (RRP). The entire regional retention pond was constructed with the Fidelity investments project (coa hydro file R16/da0001) and there was a 30" storm drain line provided to the site at the northeast corner of the property and an 18" line provided to the site at the southwest corner of the property which both outfall directly into the RRP forebays. Based on the approved grading and drainage plan for the RRP, the site has set limits to the amount of drainage that enters these pipes. The 30" has an allowable flow of 33.03cfs and the 18" has an allowable flow of 10.50cfs.

IV. PROPOSED HYDROLOGIC CONDITIONS
The site was divided into 5 basins and will drain overland through a series of valley gutters and curb openings to water harvesting areas throughout the site. Once the drainage reaches the water harvesting areas it will be conveyed to the RRP via onsite storm drainage tied to the existing 30" and 18" storm drainage connection point.

Basin 1 includes the northern half of the parking area and drains across along the northern curb and gutter into various landscape areas until it enters a water harvesting area (WHA-A) at the northeast corner of the site where it eventually outfalls to an inlet and into the RRP's eastern forebay.

Basin 2 includes a portion of the western edge of the parking which drains into a valley gutter and enters a water harvesting area (WHA-B) in the southwest corner of the site where it will eventually enter an inlet and outfall into the RRP's southern forebay.

Basin 3 includes the building, a small portion of the northern employee parking, and the area between the building and the retaining wall at the southeast corner of the site. This basin will outfall to small water harvesting area (WHA-C1) located within the landscaped area between the building and the retaining wall and then overflow to the larger water harvesting area below (WHA-C2) via an inlet and storm drain. In the event this inlet become inundated with flow, there is another inlet tied directly to the storm drainage pipe that outfalls to the north.

Basin 4 includes the visitor parking and the remainder of the landscaped area at the southeast corner of the site. The visitor parking will outfall directly to the water harvesting area (WHA-C2). Both WHA-C1 & WHA-C2 have been sized to accept the 2yr, 24hr storm events from Basin 3 & 4 before they enter an inlet at the north end of Basin 4 which ultimately outfall to the eastern forebay.

Basin 5 includes the remaining of the parking area at the northwest corner of the site and drains to a water harvesting area (WHA-D) at the northwest corner of the site. This water harvesting feature will ultimately outfall to an inlet south of the basin which drains to the southern forebay of RRP.

The water harvesting retention on site reduces the total volume contributing to the RRP. Per the approved plan the original contributing volume was 70,771CF. This grading and drainage plan will reduce the total volume to 49,608CF.

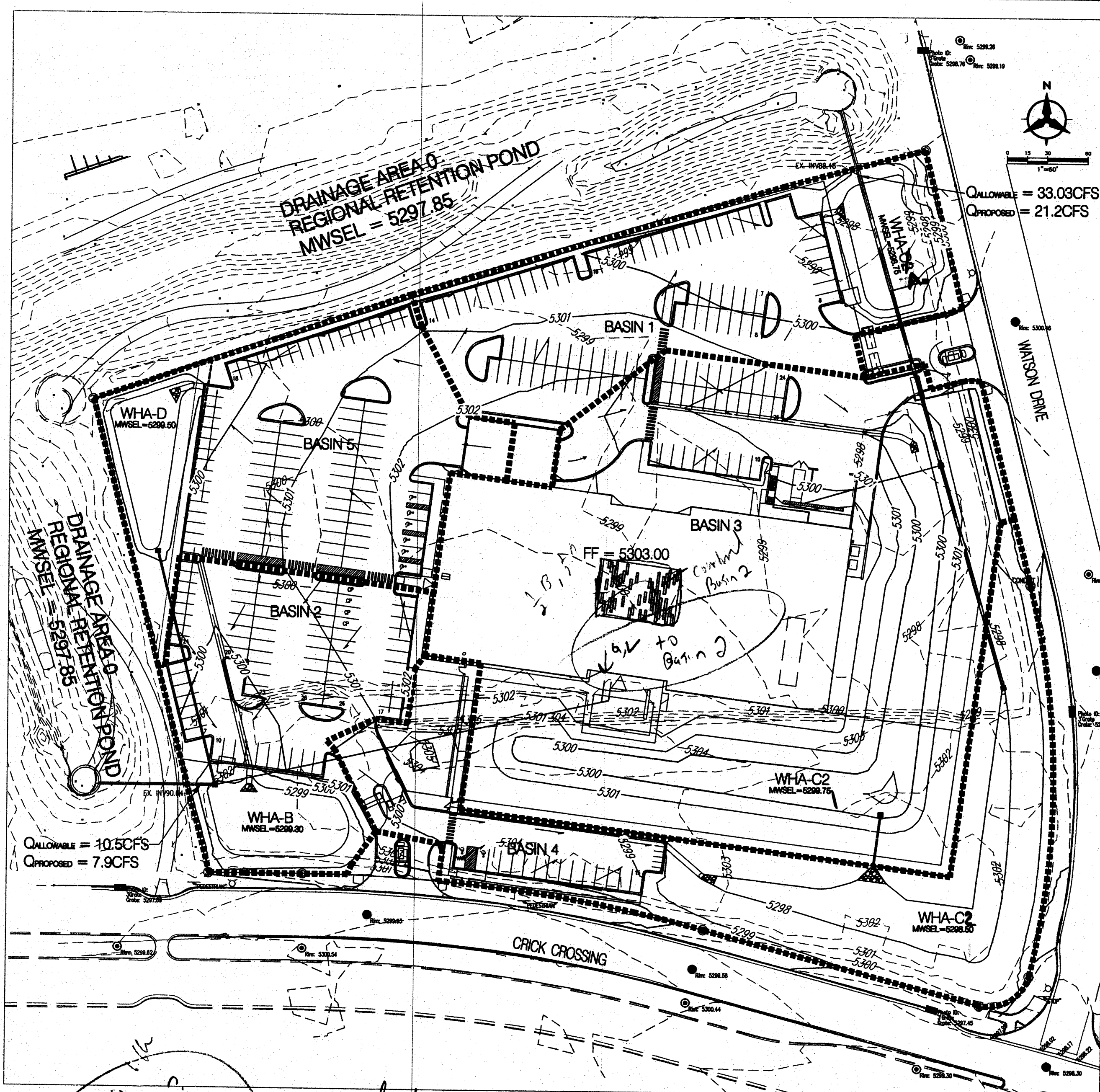
Water harvesting areas will be present on the site in all major median areas within the parking but were not included in the hydrologic analysis of the site to account for all developed discharge. They will be used strictly for nuisance flows during smaller storm events. Please see Basin Data table and Water Harvesting (WH) Volume Calculations for associated calculations.

*A small portion of the site will outfall directly into Crick Crossing and Watson Dr. which is negligible to the capacity of these existing roadways.

Offsite Drainage
There are no offsite drainage considerations that will affect this site.

Floodplain
In accordance with FEMA Community Map Panel #35001C0555 D, the site is not located within a floodplain.

V. CONCLUSION
The total volume entering the RRP and the allowable Q's, are within the requirements of the Approved Drainage Management Plan. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm event and meets Mesa del Sol Level B and City of Albuquerque requirements. With this submittal we are seeking grading and foundation plan approval.



Water Harvesting (WH) Volume Calculations							
Water Harvesting Area (WHA-)	Contributing Basin	Top Elev. of WH Area	Bottom Elev. of WH Area	Depth	Side Slopes of WH Area	2-YR, 24-HR storm event	Total Volume (CF)
A	1	5298.75	5298	0.75	8:1	4003	4085
B	2	5298.30	5298.7	0.6	8:1	2771	2925
*C1	3	5299.75	5299	0.75	10:1	7712	3240
*C2	4	5298.50	5298	0.5	20:1	2929	8460
D	5	5298.50	5298.5	1	5:1	3707	4070
* Once water harvesting C4 fills up, it overflows to water harvesting area C2.						21,122	22,780

3240 CFS
V₆ = 52125
V₁₀ = 91130

PROJECT ICE BASIN PROPERTIES (Basin 0J of DA0 Drainage Management Plan)															
Proposed Ultimate Development Conditions Basin Data Table															
This table is based on the DPM Section 22.2, Zone:2															
Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100yr) (cfs/ac.)	Q(100yr) (CFS)	WTE (Inches)	V(100-6hr) (CF)	V(100-10day) CF	LEED CALCULATIONS		WHA V(provided) (CF)	
			A	B	C	D						V(2yr-6hr) (CF)	V(2yr-24hr) (CF)	MDS 1/2" Rainfall	
Onsite Basins															
1	47350	1.09	0.0%	15.0%	0.0%	85.0%	4.34	4.71	1.92	7572	12938	2661	4003	1973	4085
2	34786	0.80	0.0%	20.0%	0.0%	80.0%	4.22	3.37	1.85	5369	9079	1844	2771	1449	2925
*3	132970	3.05	0.0%	20.0%	25.0%	55.0%	3.83	11.68	1.60	17779	27530	5274	7712	5540	3240
4	54570	1.25	0.0%	20.0%	30.0%	50.0%	3.75	4.70	1.56	7071	10709	2019	2929	2274	8460
5	46535	1.07	0.0%	20.0%	0.0%	80.0%	4.22	4.50	1.85	7182	12146	2466	3707	1939	4070
TOTAL	316211	**7.26						28.96			***72403		21122	13175	22780
*BASIN 3's water harvesting area will has an overflow to BASIN 4's water harvesting area before it is discharged to the Regional Retention Pond.															
**Total acreage is 7.41. 0.15 acres will outfall directly to the surrounding roadways which is negligible.															
***Total volume contributing to the RRP = 100yr 10day storm - WHA provided (72,403CF - 22,780CF = 49,623CF)															

Bohannon & Huston
Consulting Engineers
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Artesia Development ICE Albuquerque

REVISION HISTORY

REVISION	ISSUE NAME	ISSUE DATE
0	GRADING AND DRAINAGE PACKAGE	10/18/2010

PROFESSIONAL SEAL
MICHAEL B. ZIMMERMAN
NEW MEXICO
18187
1018-10
LICENSED PROFESSIONAL ENGINEER

DRAINAGE MANAGEMENT PLAN

DRAWN BY: _____ CHECKED BY: _____
PROJECT NUMBER: 109036 PROJECT ABBREVIATION: ICEAIB
ORIGINAL ISSUE: 10/18/10 CURRENT DOCUMENTATION STAGE: Construction Documents
FILE NAME: _____

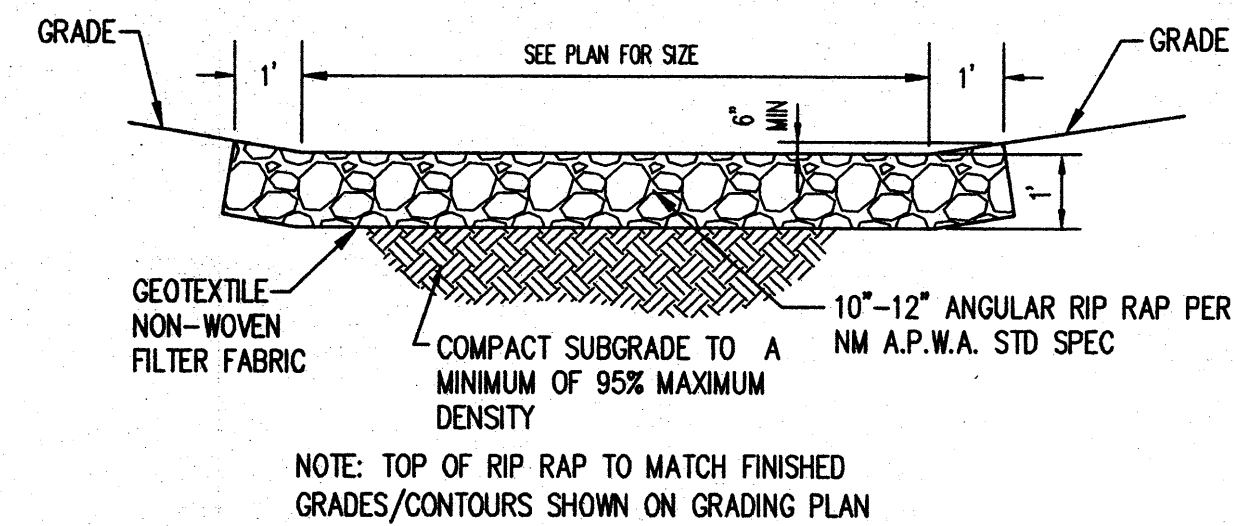
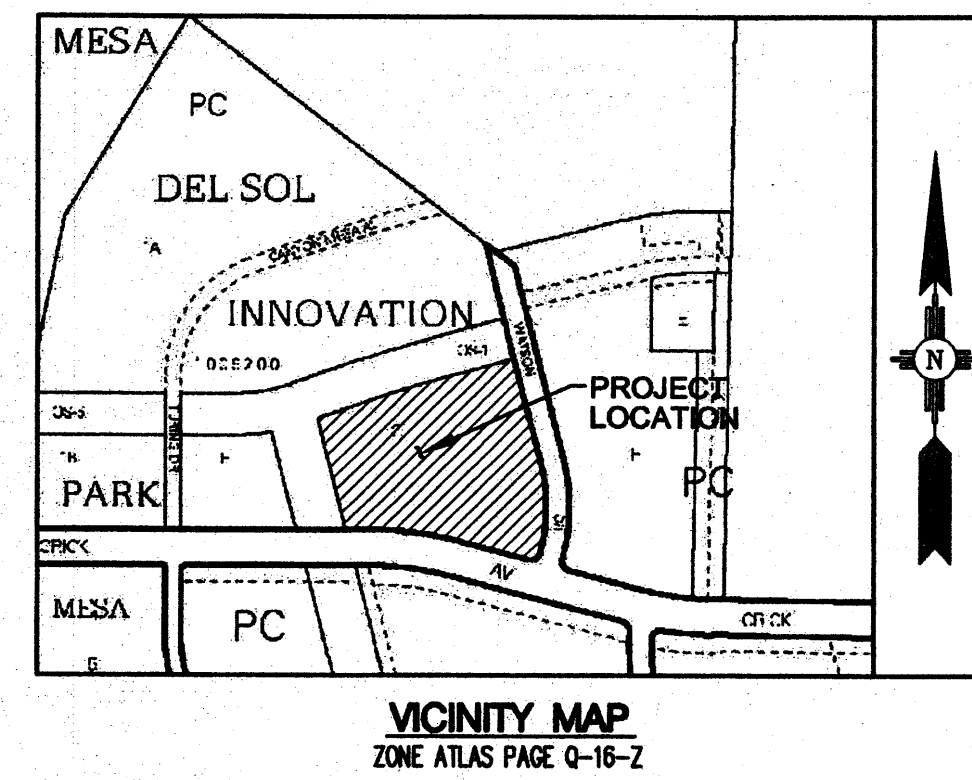
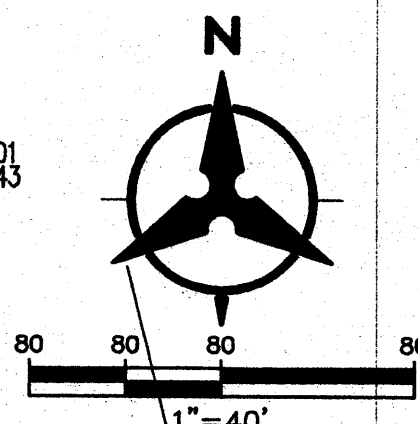
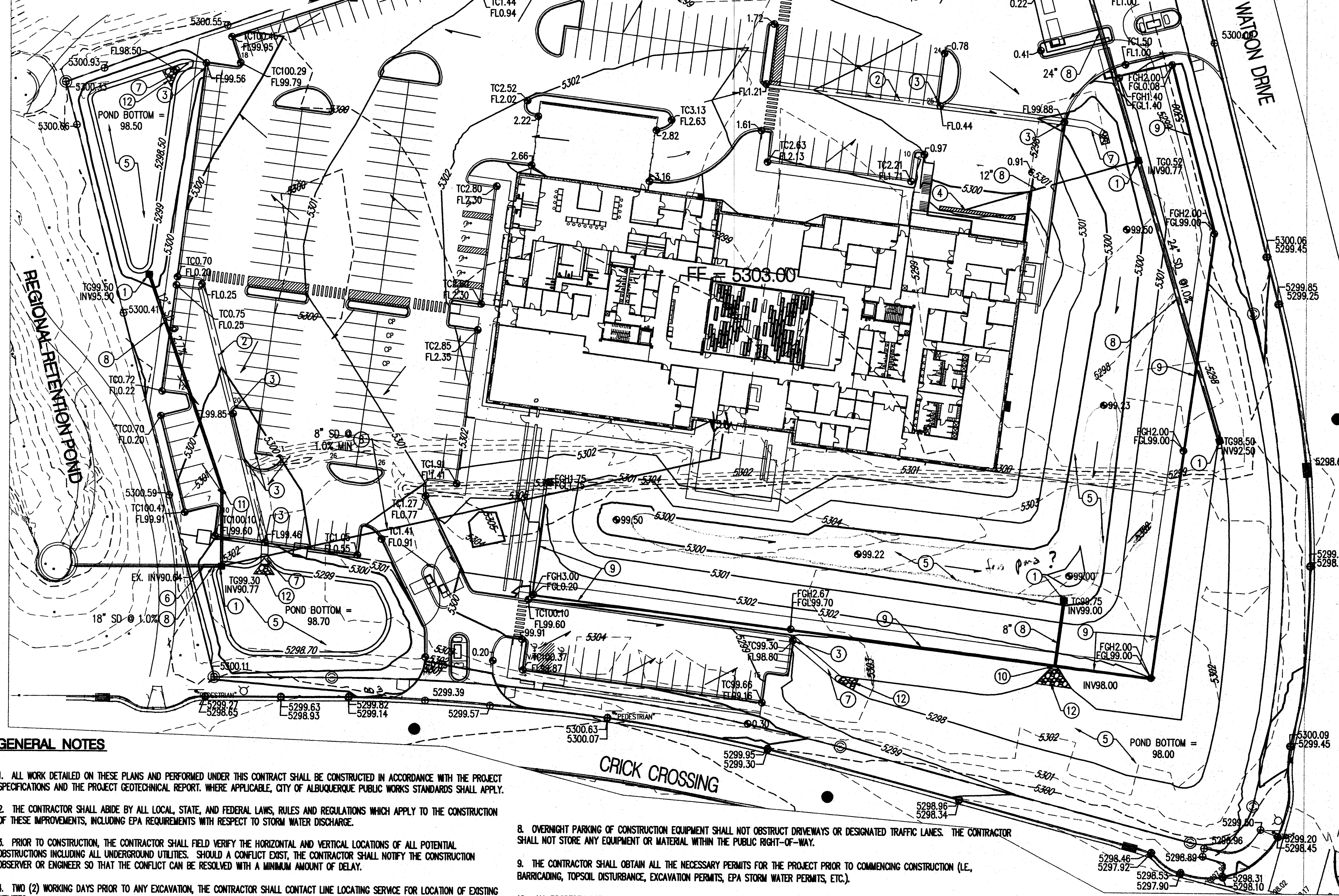
C-010

DRAWING NUMBER

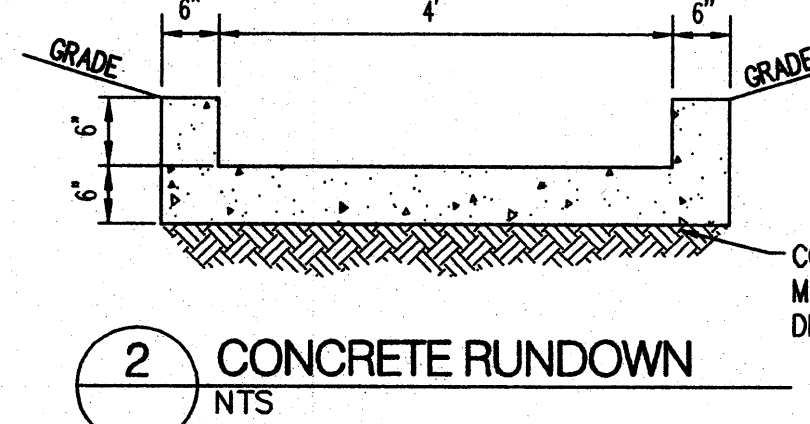
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OCT 18 2010
SECTION

GRADING KEYED NOTES

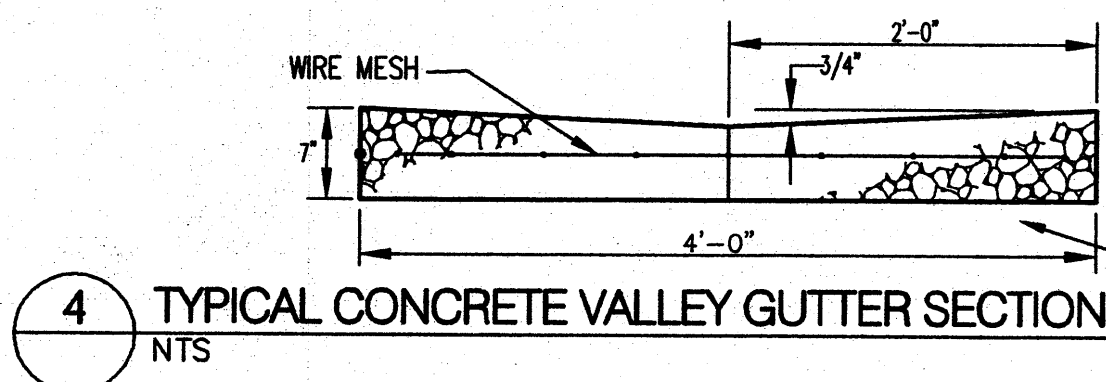
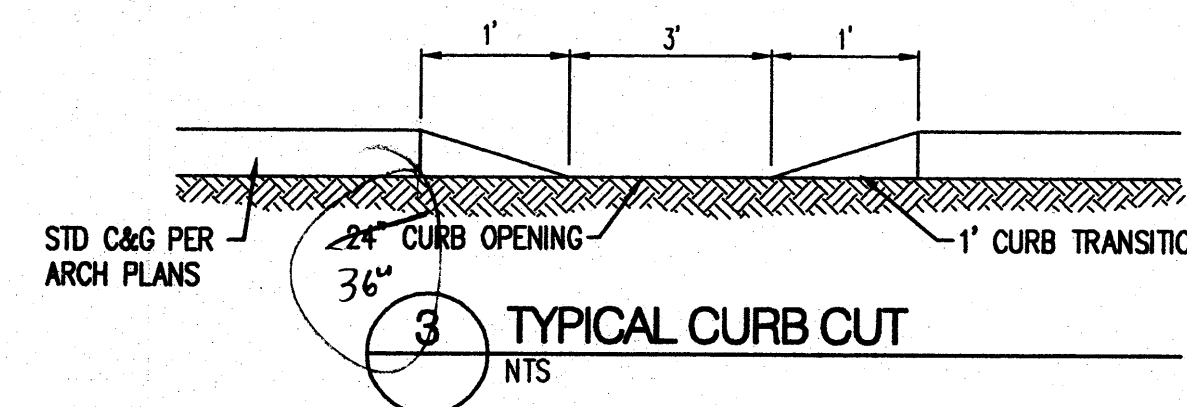
1. INSTALL STORM DRAIN INLET TYPE "D" INLET PER NM COA STD DWG 2206 OR APPROVED NYLOPLAST INLET WITH SAME CAPACITY
2. INSTALL 4' WIDE CONCRETE VALLEY GUTTER PER DETAIL 4 THIS SHEET
3. INSTALL 3' WIDE CURB OPENING PER DETAIL 3 THIS SHEET
4. INSTALL TRENCH DRAIN
5. WATER HARVESTING AREA, SEE LANDSCAPE PLAN FOR DETAILS AND EROSION PROTECTION.
6. CONNECT TO EXISTING STORM DRAIN STUB OUT. CONTRACTOR SHALL VERIFY INVERT AND CONTACT ENGINEER OF ANY DISCREPANCIES
7. INSTALL CONCRETE RUNDOWN PER DETAIL 2 THIS SHEET.
8. INSTALL HDPE (N-12 OR APPROVED EQUAL) STORM DRAIN, SEE PLAN FOR SIZE
9. INSTALL 3' HIGH RETAINING WALL. SEE STRUCTURAL FOR DETAILS
10. INSTALL PREMANUFACTURED FLARED END SECTION
11. INSTALL PREMANUFACTURED DRAINAGE FITTING. SEE PLAN FOR SIZE
12. INSTALL RIP RAP BLANKET PER DETAIL 1 THIS SHEET



1 RIP RAP BLANKET
NTS



2 CONCRETE RUNDOWN
NTS



GRADING NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIANS AND ISLANDS.
10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

ROUGH GRADING NOTES

8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
14. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

GENERAL NOTES

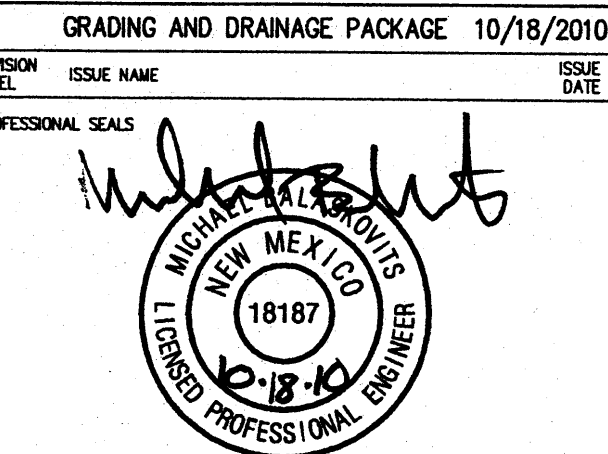
1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.

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Artesia Development ICE Albuquerque

REVISION HISTORY

REVISION	LEVEL	ISSUE NAME	ISSUE DATE
0	GRADING AND DRAINAGE PACKAGE	10/18/2010	
1	REVISION	ISSUE NAME	ISSUE DATE
2	REVISION	ISSUE NAME	ISSUE DATE
3	REVISION	ISSUE NAME	ISSUE DATE
4	REVISION	ISSUE NAME	ISSUE DATE
5	REVISION	ISSUE NAME	ISSUE DATE
6	REVISION	ISSUE NAME	ISSUE DATE
7	REVISION	ISSUE NAME	ISSUE DATE
8	REVISION	ISSUE NAME	ISSUE DATE
9	REVISION	ISSUE NAME	ISSUE DATE
10	REVISION	ISSUE NAME	ISSUE DATE
11	REVISION	ISSUE NAME	ISSUE DATE
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14	REVISION	ISSUE NAME	ISSUE DATE
15	REVISION	ISSUE NAME	ISSUE DATE
16	REVISION	ISSUE NAME	ISSUE DATE
17	REVISION	ISSUE NAME	ISSUE DATE
18	REVISION	ISSUE NAME	ISSUE DATE
19	REVISION	ISSUE NAME	ISSUE DATE
20	REVISION	ISSUE NAME	ISSUE DATE



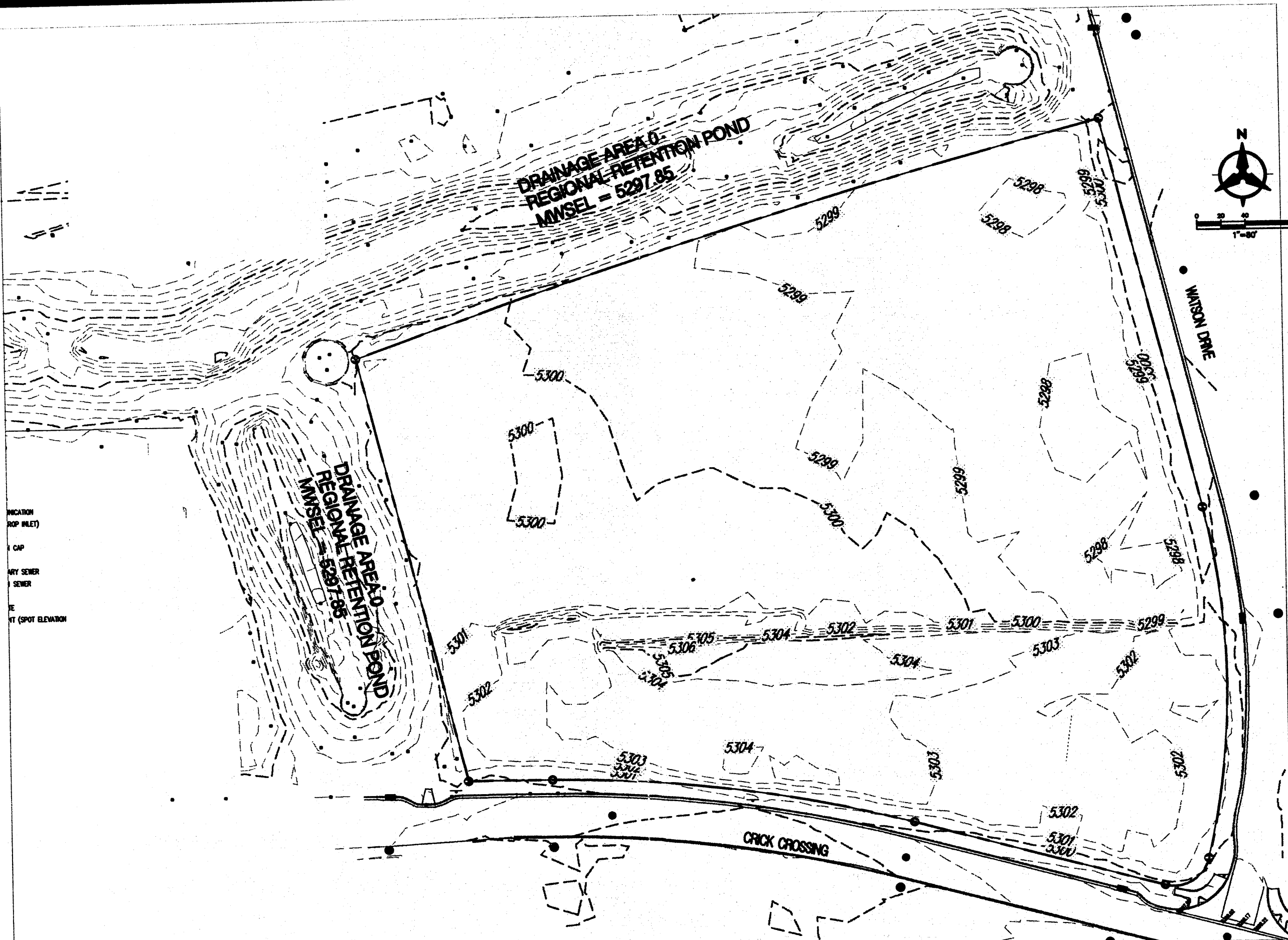
GRADING AND DRAINAGE PLAN (FOR ROUGH GRADING AND FOUNDATION PERMIT)

DRAWN BY	CHECKED BY
PROJECT NUMBER	PROJECT ABBREVIATION
109036	ICE/AB
ORIGINAL ISSUE	CURRENT DOCUMENTATION STAGE
10/18/10	Construction Documents
	FILE NAME

C-100

DRAWING NUMBER

OCT 18 2010
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 OCT 17 2010
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I. INTRODUCTION
The purpose of this submittal is to present a final grading and drainage plan for the proposed Project ICE building at Mesa del Sol. The site is located southeast of Fidelity Investments. It is surrounded by DRAINAGE AREA 0 regional retention pond to the north and west, Watson Dr. to the east and Crick Crossing to the south. The project will include one, two story building, parking, landscaped areas and a perimeter retaining wall located around the southeast corner of the building for security purposes. This submittal is in support of COA hydrology approval for Building Permit approval.

III. EXISTING HYDROLOGIC CONDITIONS
The site is approximately 7.4 acres and is currently undeveloped. It lies within DRAINAGE AREA 0 (DA0) of the Mesa del Sol Innovation Park drainage master plan (COA Hydro file # R16/DA0001). There is a stock pile along the southern end of the site that runs parallel with Crick Crossing. The northern end of the site slopes 0.5% to 1.0% from the southwest to the northeast toward the existing Regional Retention Pond (RRP). The entire regional retention pond was constructed with the Fidelity Investments project (COA hydro file R16/DA0001) and there was a 30" storm drain line provided to the site at the northeast corner of the property and an 18" line provided to the site at the southwest corner of the property which both outfall directly into the RRP forebays. Based on the approved grading and drainage plan for the RRP, the site has set limits to the amount of drainage that enters these pipes. The 30" has an allowable flow of 33.03cfs and the 18" has an allowable flow of 10.50cfs.

IV. PROPOSED HYDROLOGIC CONDITIONS
The site was divided into 5 basins and will drain overland through a series of valley gutters and curb openings to water harvesting areas throughout the site. Once the drainage reaches the water harvesting areas it will be conveyed to the RRP via onsite storm drainage tied to the existing 30" and 18" storm drainage connection points.

Basin 1 includes the northern half of the parking area and drains along the northern curb and gutter into various landscape areas until it enters a water harvesting area (WHA-A) at the northeast corner of the site where it eventually outfalls to an inlet and into to the RRP's northeastern forebay.

Basin 2 includes a portion of the western edge of the parking which drains into a valley gutter and enters a water harvesting area (WHA-B) in the southwest corner of the site where it will eventually enter an inlet and outfall into the RRP's southern forebay.

Basin 3 includes the building, a small portion of the northern employee parking, and the area between the building and the retaining wall at the southeast corner of the site. This basin will outfall to a small water harvesting area (WHA-C1) located within the landscaped area between the building and the retaining wall and then overflow to the larger water harvesting area below (WHA-C2) via an inlet and storm drain. In the event this inlet becomes inundated with flow, there is another inlet tied directly to the storm drainage pipe that outfalls directly to the northeastern forebay to handle the drainage before it reaches the building.

Basin 4 includes the visitor parking and the remainder of the landscaped area at the southeast corner of the site. The visitor parking will outfall directly to the water harvesting area (WHA-C2). Both WHA-C1 & WHA-C2 have been sized to accept the 2yr, 24hr storm events from Basin 3 & 4 before they enter an inlet at the north end of Basin 4 which ultimately outfalls to the eastern forebay.

Basin 5 includes the remaining of the parking area at the northwest corner of the site and drains to a water harvesting area (WHA-D) located in the far northwest corner of the site. This water harvesting feature will ultimately outfall to an inlet south of the basin which drains to the southern forebay of RRP.

The water harvesting retention on site reduces the total volume contributing to the RRP. Per the approved plan the original contributing volume was 70,771CF. This grading and drainage plan will reduce the total volume to 49,608CF.

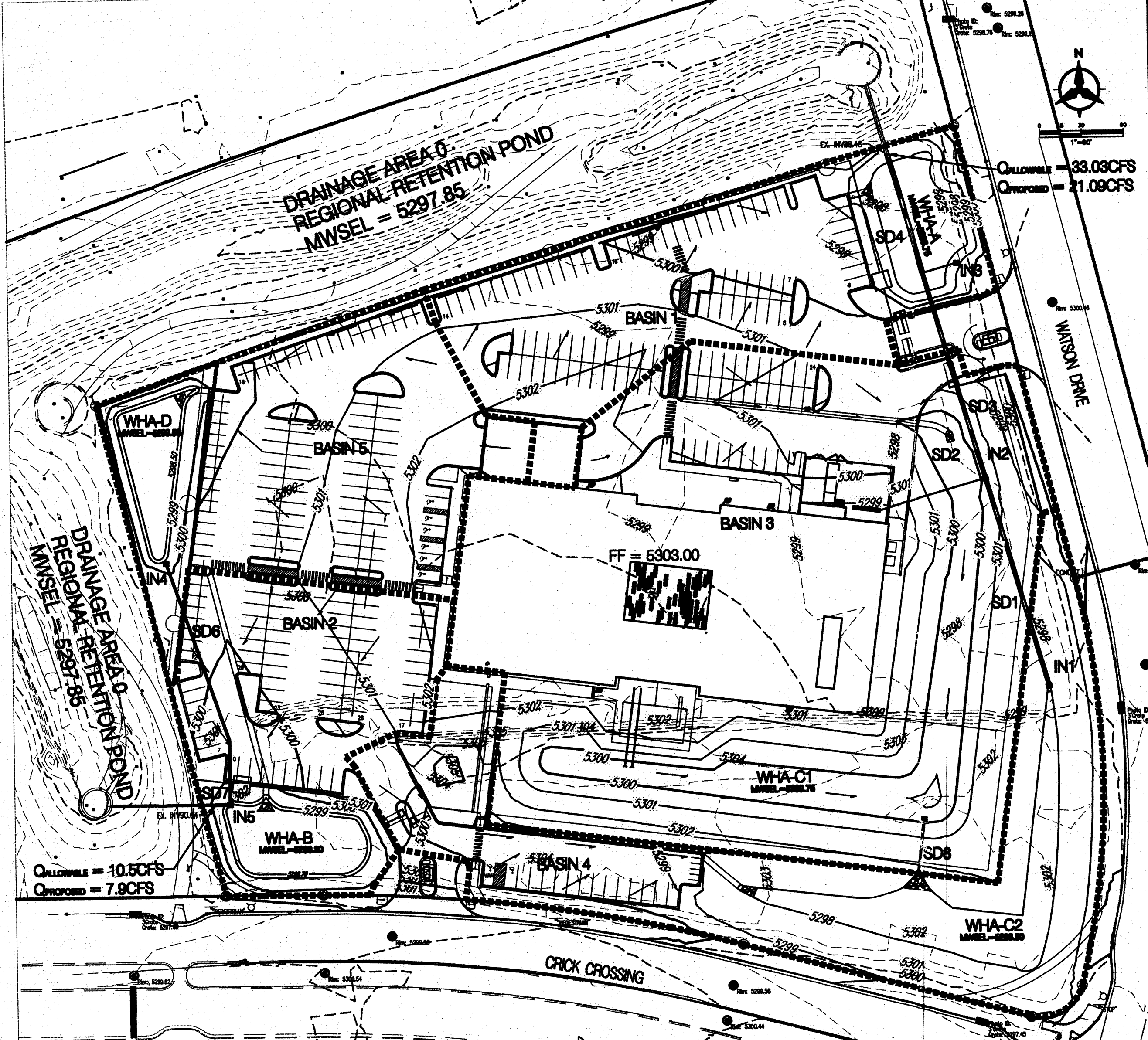
Water harvesting areas will be present on the site in all major median areas within the parking but were not included in the hydrologic analysis of the site to account for all developed discharge. They will be used strictly for nuisance flows during smaller storm events. Please see the Basin Data Table, Water Harvesting (WH) Volume Calculations and the Storm Drain Pipe Table for associated calculations.

(A small portion of the site will outfall directly into Crick Crossing and Watson Dr. which is negligible to the capacity of these existing roadways.)

Offsite Drainage
There are no offsite drainage considerations that will affect this site.

Floodplain
In accordance with FEMA Community Map Panel #35001C0555 D, the site is not located within a floodplain.

V. CONCLUSION
The total volume entering the RRP and the allowable Q's, are within the requirements of the Approved Drainage Management Plan. These flows were computed in accordance with section 22.2 of the Development Process Manual. This drainage management plan is capable of safely passing the 100 year storm event and meets Mesa del Sol Level B and City of Albuquerque requirements. With this submittal we are seeking hydrology approval for building permit approval and LEED credit S6.1 and S6.2 acceptance.



PROJECT ICE BASIN PROPERTIES (Basin 0J of DA0 Drainage Management Plan)														
Proposed Ultimate Development Conditions Basin Data Table														
This table is based on the DPM Section 22.2, Zone: 2														
Basin	Area	Area	Land Treatment Percentages				Q(100yr)	Q(100yr-4hr)	WTE	V(100yr-4hr)	V(100yr-10day)	LEED CALCULATIONS		
ID	(SQ. FT)	(AC.)	A	B	C	D	(cfs/ac)	(CFS)	(Inches)	(CF)	CF	Q(2yr)	V(2yr-4hr)	V(2yr-24hr)
Existing	323215	7.42	50.0%	50.0%	0.0%	0.0%	1.92	14.25	0.66	17642	17642	0.30	269	269
Proposed														
1	47350	1.09	0.0%	15.0%	0.0%	85.0%	4.34	4.71	1.92	7572	12938	1.73	2661	4003
2	34786	0.80	0.0%	20.0%	0.0%	80.0%	4.22	3.37	1.85	5369	9079	1.20	1844	2771
*3	132970	3.05	0.0%	20.0%	25.0%	55.0%	3.83	11.68	1.60	17779	27530	3.77	5274	7712
4	54570	1.25	0.0%	20.0%	30.0%	50.0%	3.75	4.70	1.56	7071	10709	1.48	2019	2929
5	46535	1.07	0.0%	20.0%	0.0%	80.0%	4.22	4.50	1.85	7182	12146	1.61	2466	3707
TOTAL	316211	**7.28						29		**72403			21122	13175

*BASIN 3's water harvesting area will has an overflow to BASINS 4's water harvesting area before it is discharged to the Regional Retention Pond.
**Total acreage is 7.41. 0.15 acres will outfall directly to the surrounding roadways which is negligible.
***Total volume contributing to the RRP = 100yr 10day storm - WHA provided (72,403CF - 22,780CF = 49,623CF)

STORM DRAIN PIPE TABLE								
PIPE #	Contributing Basins and Storm Drains	Size in.	Slope	Capacity ¹ cfs	ACTUAL FLOW cfs	PIPE LENGTH ft	INVERT IN	INVERT OUT
ONSITE								
SD1	BASIN 1 + *BASIN 3	24	1.00%	22.62	16.37	174.0	5292.50	5290.76
SD2	LOADING DOCK	12	1.00%	3.56	0.32	100.5	5291.77	5290.76
SD3	SD1+SD2+*BASIN 3	24	1.00%	22.62	16.37	137.0	5290.76	5289.39
SD4	SD3+BASIN 1	30	1.00%	41.02	21.09	89.0	5289.39	5288.50
SD5	Not used							
SD6	BASIN 5	12	2.60%	5.74	4.50	181.0	5295.48	5290.77
SD7	SD5+SD6+BASIN 2	18	1.00%	10.50	7.87	14.0	5290.91	5290.77
SD8	OVERFLOW OF *BASIN 3	12	0.50%	2.52	11.68	40.0	5298.20	5298.00

1- Capacity Based on Manning's Eq w/ N=0.013
2-SD1 has the capacity to accept BASIN 3
3-SD3 accepts BASIN 3 once SD8 is at it's capacity and the water harvesting area is full
4-SD8 accepts BASIN 3 when this water harvesting area (WHA-C1) fills up.

Water Harvesting (WH) Volume Calculations

Water Harvesting Area (WHA-)	Contibuting Basin	Top Elev. of WH Area	Bottom Elev. of WH Area	Depth	Side Slopes of WH Area	2-YR, 24-HR storm event	Total Volume (CF)
A	1	5298.75	5298	0.75	8:1	4003	4085
B	2	5299.30	5298.7	0.6	8:1	2771	2925
*C1	3	5299.75	5299	0.75	10:1	7712	3240
*C2	4	5298.50	5298	0.5	20:1	2929	8460
D	5	5299.50	5298.5	1	5:1	3707	4070
* Once water harvesting C1 fills up, it overflows to water harvesting area C2.						21,122	22,780

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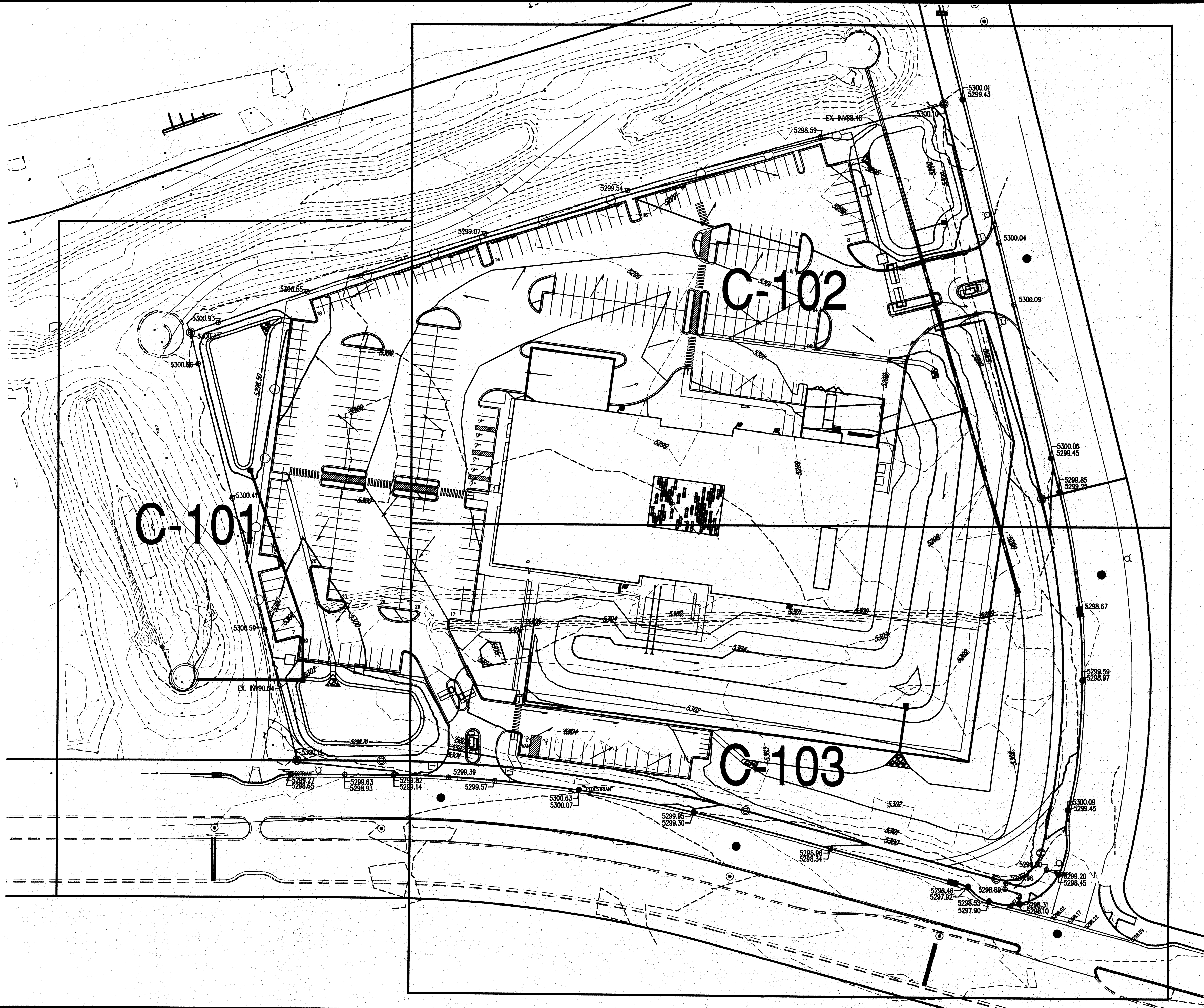
PROFESSIONAL SEAL
MICHAEL BALKINOVITS
NEW MEXICO
18187
LICENSED PROFESSIONAL ENGINEER

DRAINAGE MANAGEMENT PLAN

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PROJECT NUMBER	PROJECT ABBREVIATION
ORIGINAL ISSUE	CURRENT DOCUMENTATION STAGE
	FILE NAME

C-010
DRAWING NUMBER

DEC 8 2010



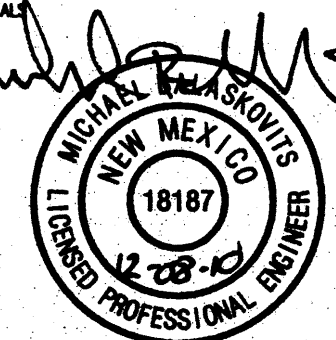
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Artesia Development ICE Albuquerque 5441 WATSON DR ALBUQUERQUE, NM

REVISION HISTORY

2	CONSTRUCTION DOC. PACKAGE	12/07/2010
1	ADDENDUM NO. 1	11/23/2010
0	GRADING AND DRAINAGE PACKAGE	10/18/2010

REVISION LEVEL	ISSUE NAME	ISSUE DATE
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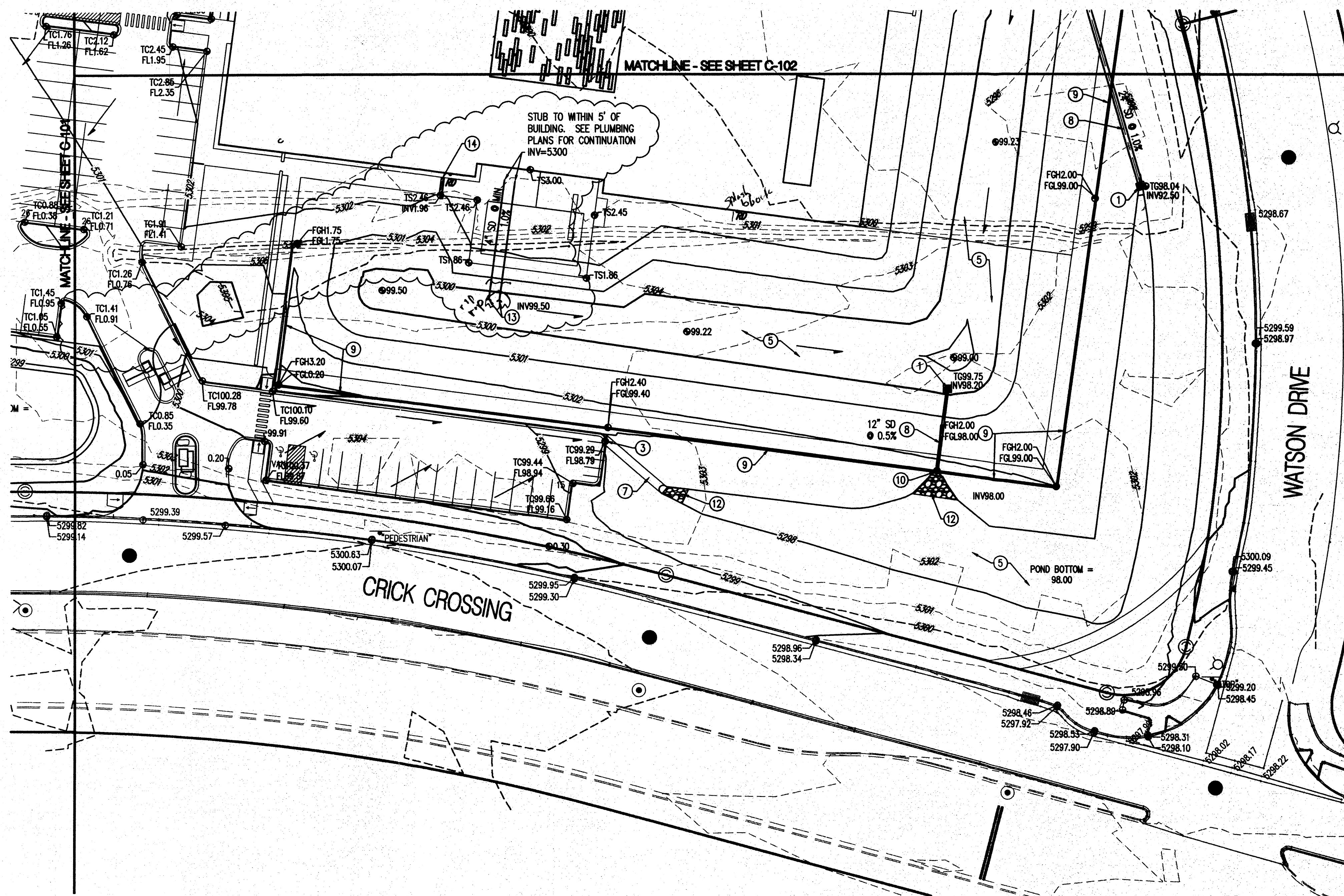
PROFESSIONAL SEAL


OVERALL GRADING AND DRAINAGE PLAN

DRAWN BY	MJB	CHECKED BY	
PROJECT NUMBER	109036	PROJECT ABBREVIATION	ICEalb
ORIGINAL ISSUE	12/07/2010	CURRENT DOCUMENTATION STAGE	CONSTRUCTION DOCS
FILE NAME			

C-100
DRAWING NUMBER

DEC 8 2010
HYDROLOGY
SECTION



GRADING KEYED NOTES

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2. INSTALL 4" WIDE CONCRETE VALLEY GUTTER PER DETAIL 4/C-300.
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4. INSTALL TRENCH DRAIN PER DETAIL SHEET C-102 OR APPROVED EQUAL.
5. WATER HARVESTING AREA, SEE LANDSCAPE PLAN FOR DETAILS AND EROSION PROTECTION.
6. CONNECT TO EXISTING STORM DRAIN STUB OUT. CONTRACTOR SHALL VERIFY INVERT AND CONTACT ENGINEER OF ANY DISCREPANCIES.
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14. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236

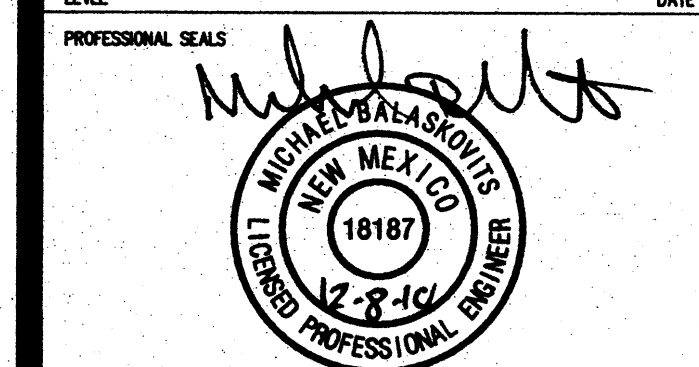


Artesia Development ICE Albuquerque 5441 WATSON DR ALBUQUERQUE, NM

REVISION HISTORY

2	CONSTRUCTION DOC. PACKAGE	12/07/2010
1	ADDENDUM NO. 1	11/23/2010
0	GRADING AND DRAINAGE PACKAGE	10/16/2010

REVISION	ISSUE NAME	ISSUE DATE
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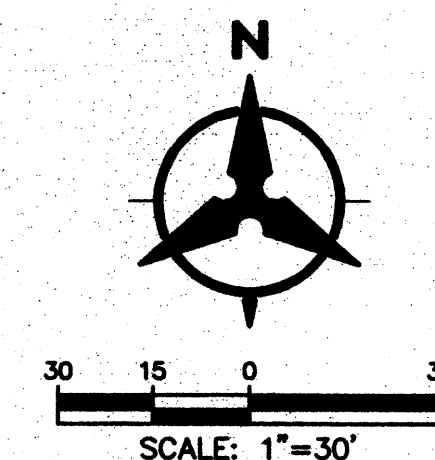


GRADING AND DRAINAGE PLAN

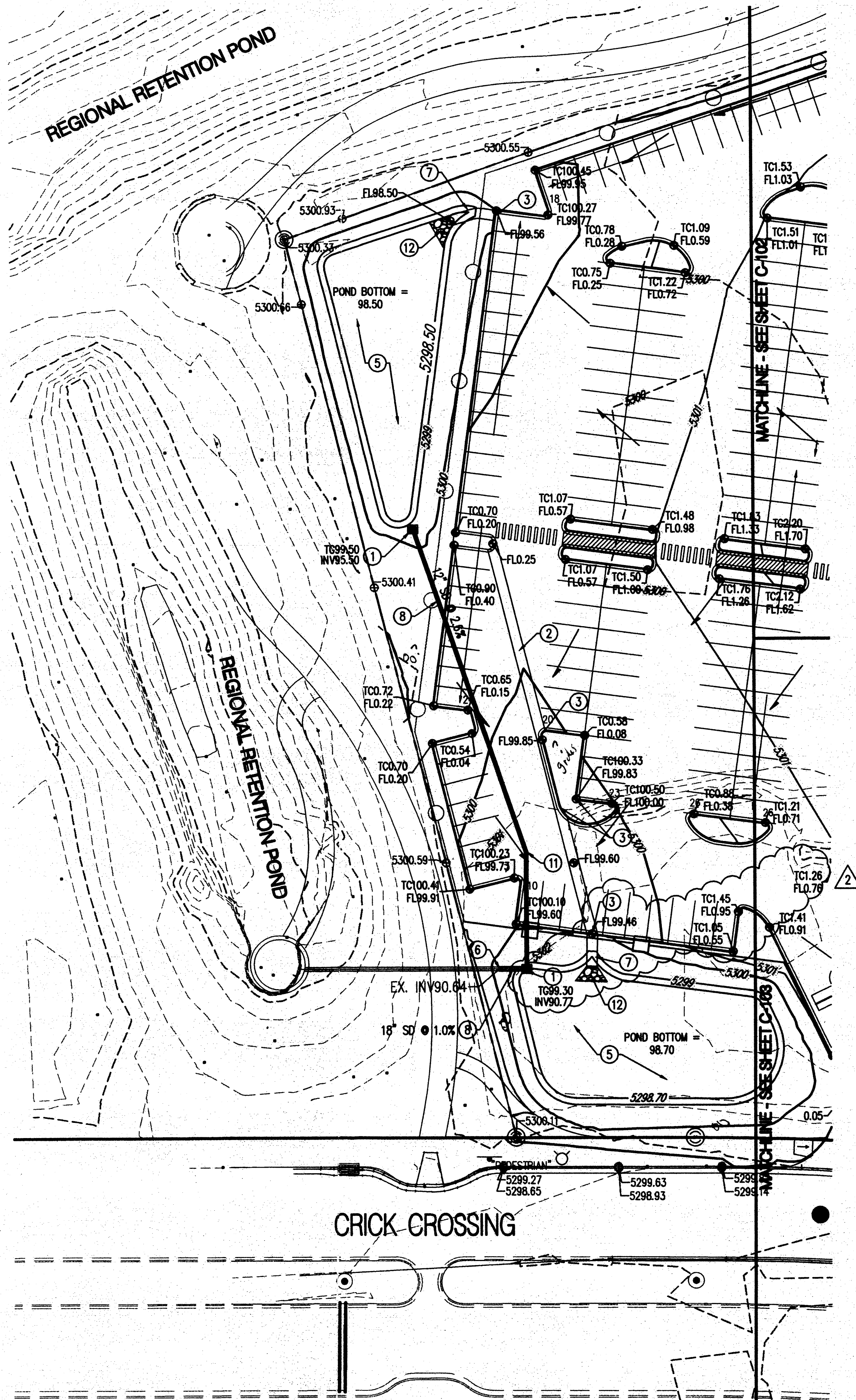
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PROJECT NUMBER	PROJECT ABBREVIATION
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FILE NAME	

C-103

DRAWING NUMBER

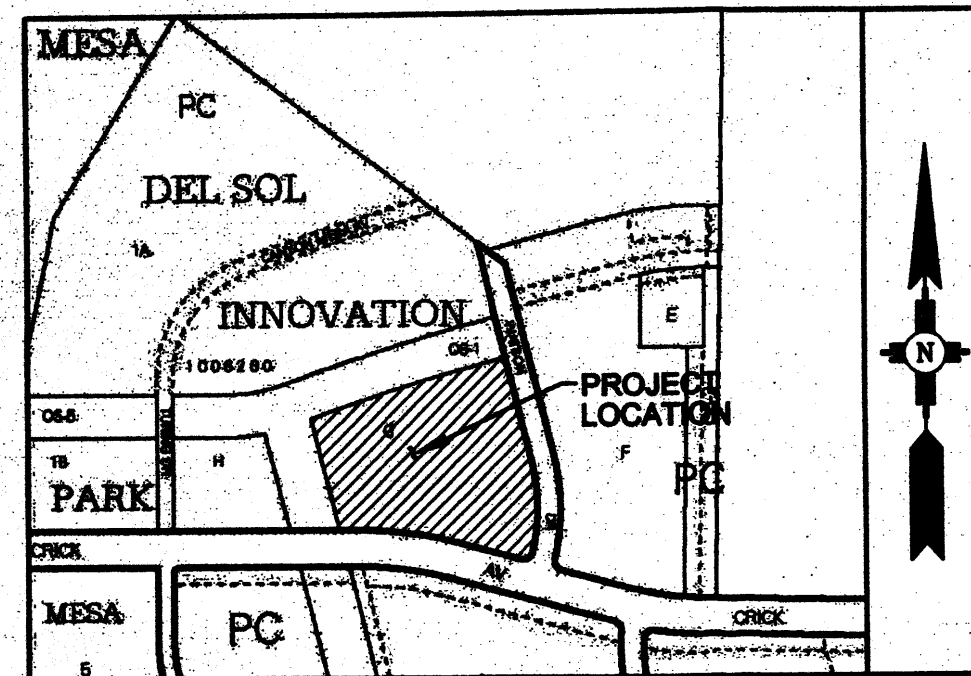


DEC 8 2010
FIVE O'CLOCK
STATION



○ GRADING KEYED NOTES

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2. INSTALL 4' WIDE CONCRETE VALLEY GUTTER PER DETAIL 4/C-300.
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14. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236



VICINITY MAP
ZONE ATLAS PAGE Q-16-Z

GRADING NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMUS OR SILT FENCE AT THE PROPERTY LINES AND NETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
8. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDIAN AND ISLANDS.
10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION, SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E. BARRICADEING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADES AT THE END AND BEGINNING OF EACH DAY.
14. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

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REVISION HISTORY

2	CONSTRUCTION DOC. PACKAGE	12/07/2010
1	ADDENDUM NO. 1	11/23/2010
0	GRADING AND DRAINAGE PACKAGE	10/18/2010

REVISION	ISSUE NAME	ISSUE DATE
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PROFESSIONAL SEALS



GRADING AND DRAINAGE PLAN

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12/07/2010	CONSTRUCTION DOCS
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5441 WATSON DR
ALBUQUERQUE, NM

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GRADING AND DRAINAGE PACKAGE	10/18/2010

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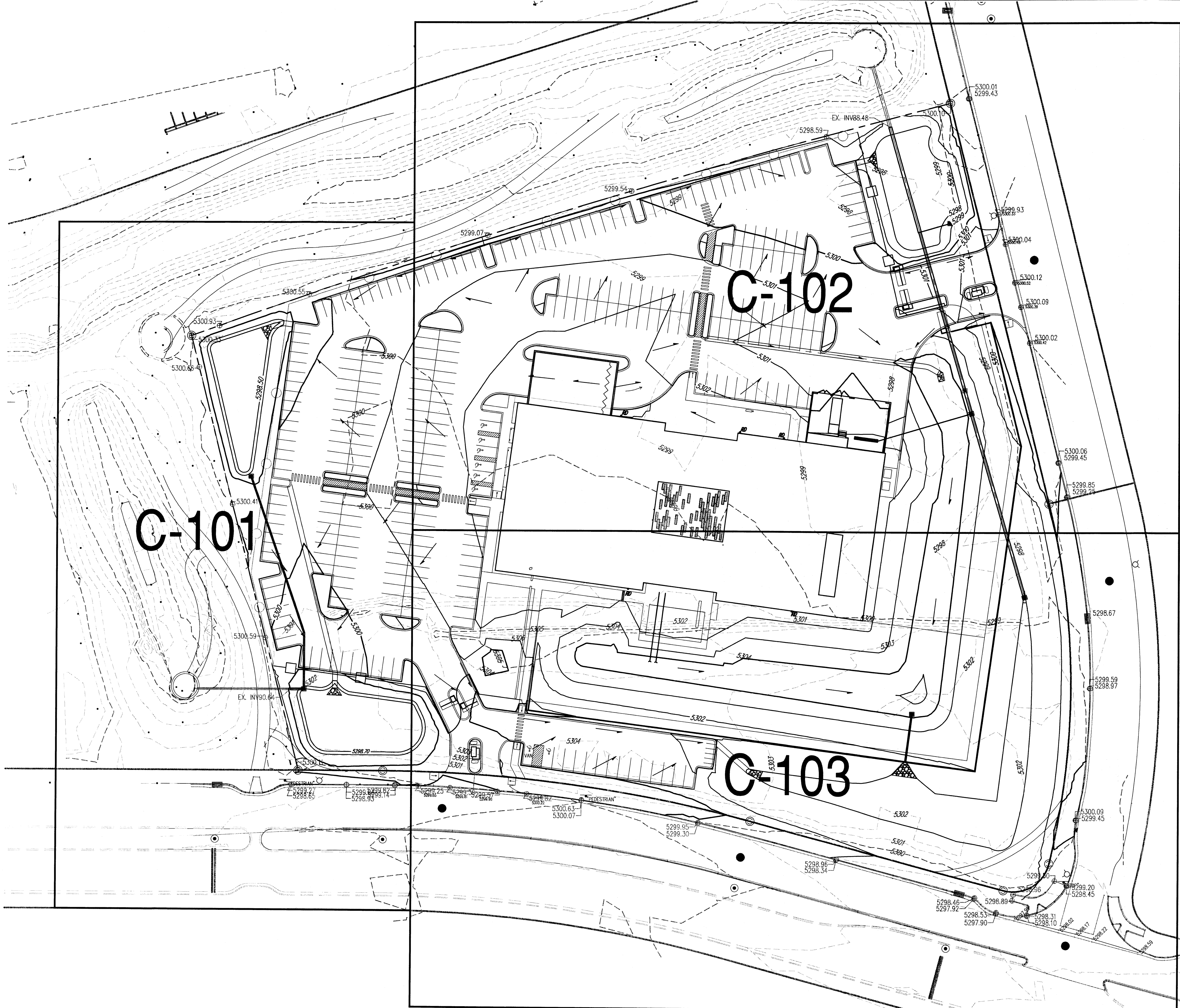
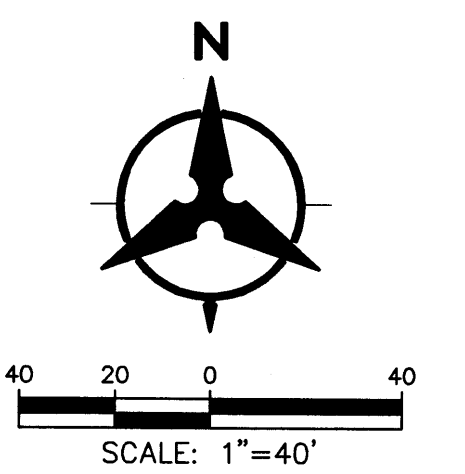
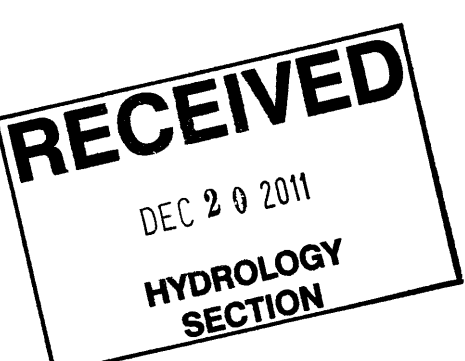


OVERALL GRADING AND DRAINAGE PLAN

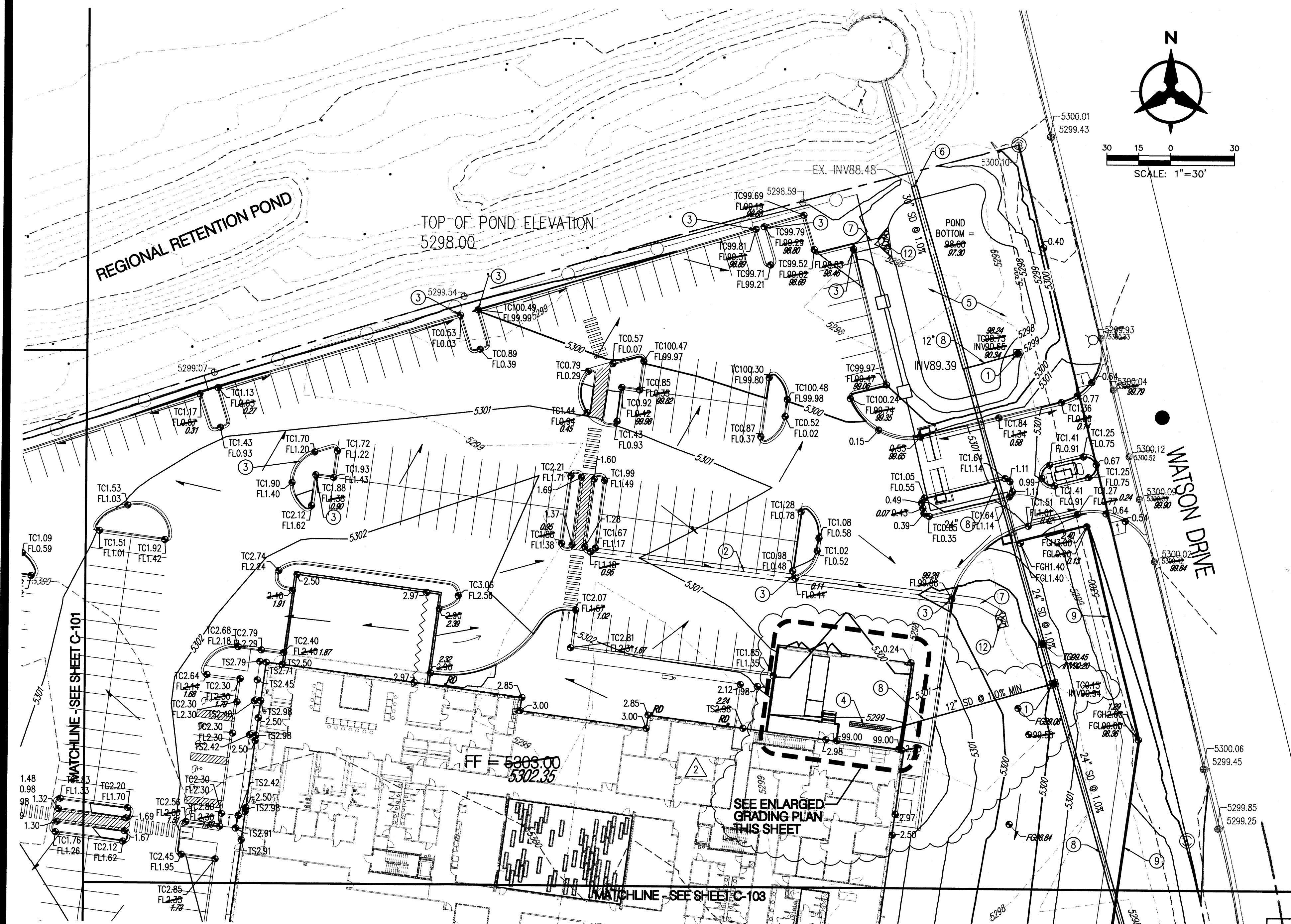
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12/07/2010		CONSTRUCTION DOCS	
FILE NAME			

C-100

DRAWING NUMBER



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- GRADING KEYED NOTES
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DRAINAGE CERTIFICATION

I, MICHAEL BALASKOVITS, NMPE 18187, OF THE FIRM BOHANNAN HUSTON 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 12/8/10. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ROBERT A. GROMATZKY, NMPS 16469, OF THE FIRM BOHANNAN HUSTON INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 12/19/11 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 A PERMANENT CERTIFICATE OF OCCUPANCY.

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.

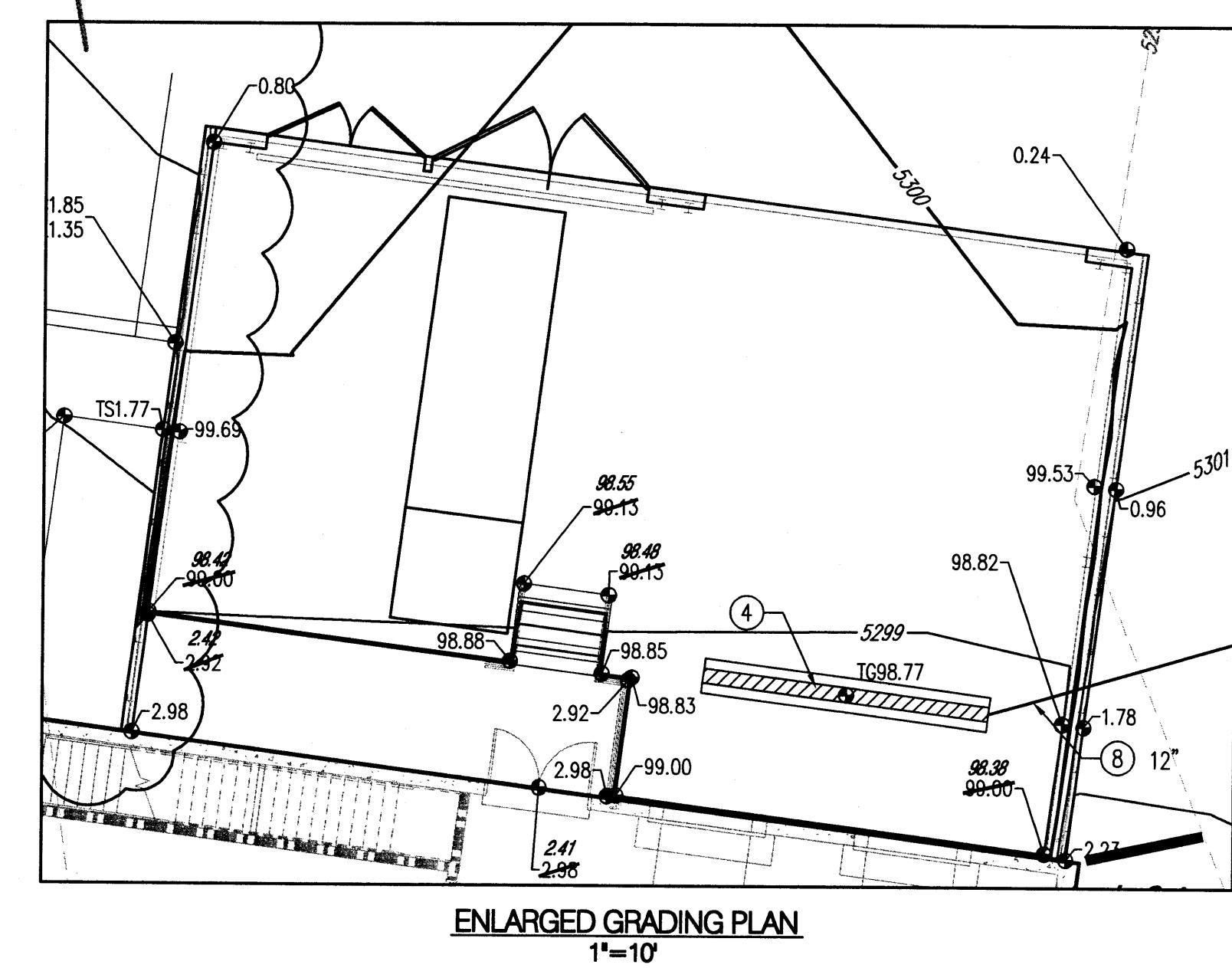
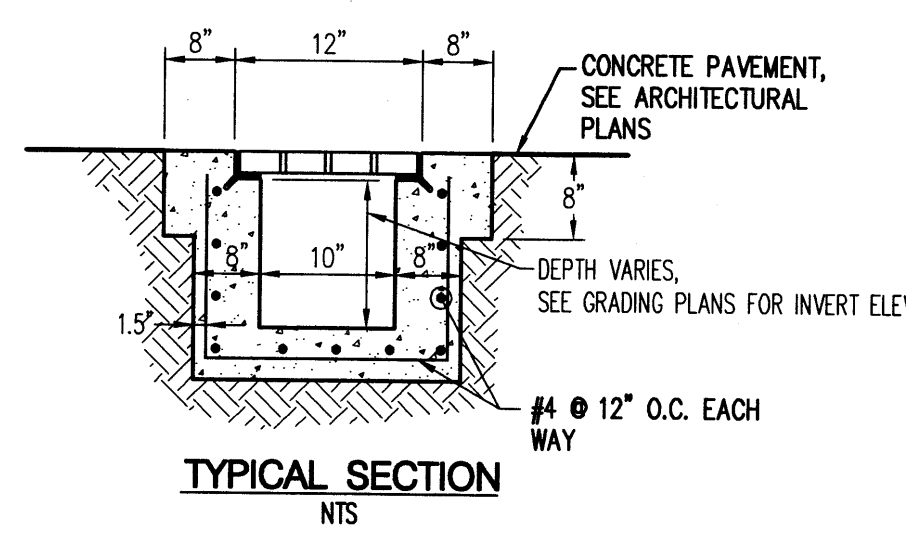
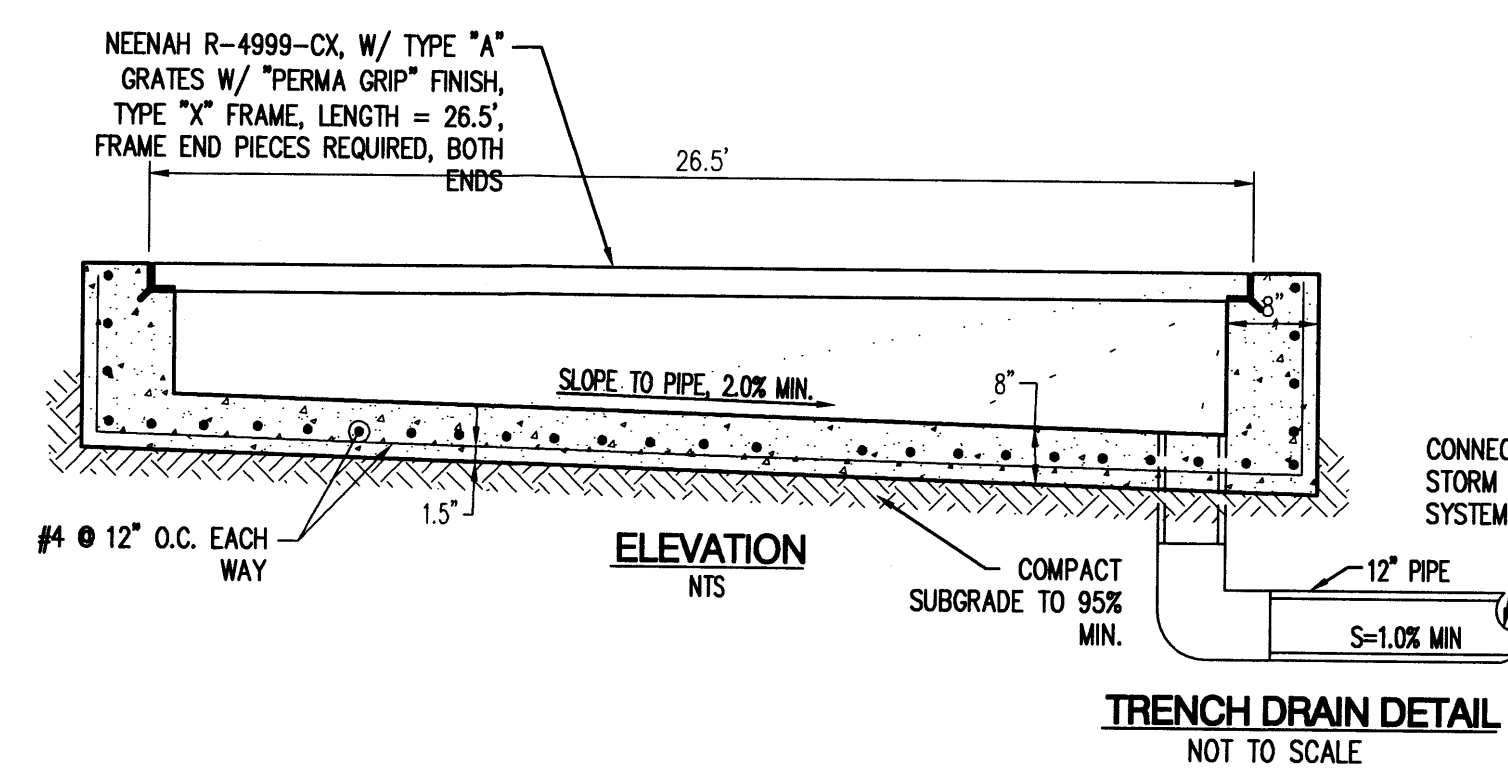
[Signature]
MICHAEL BALASKOVITS, NMPE 18187

12/20/11

LEGEND

- FL70.22 DESIGN GRADE
- FL70.22/70.16 AS-BUILT GRADE

[Professional Seal]



Artesia Development

ICE Albuquerque

5441 WATSON DR
ALBUQUERQUE, NM

REVISION HISTORY

2	ISSUED FOR CONSTRUCTION	1/07/2010
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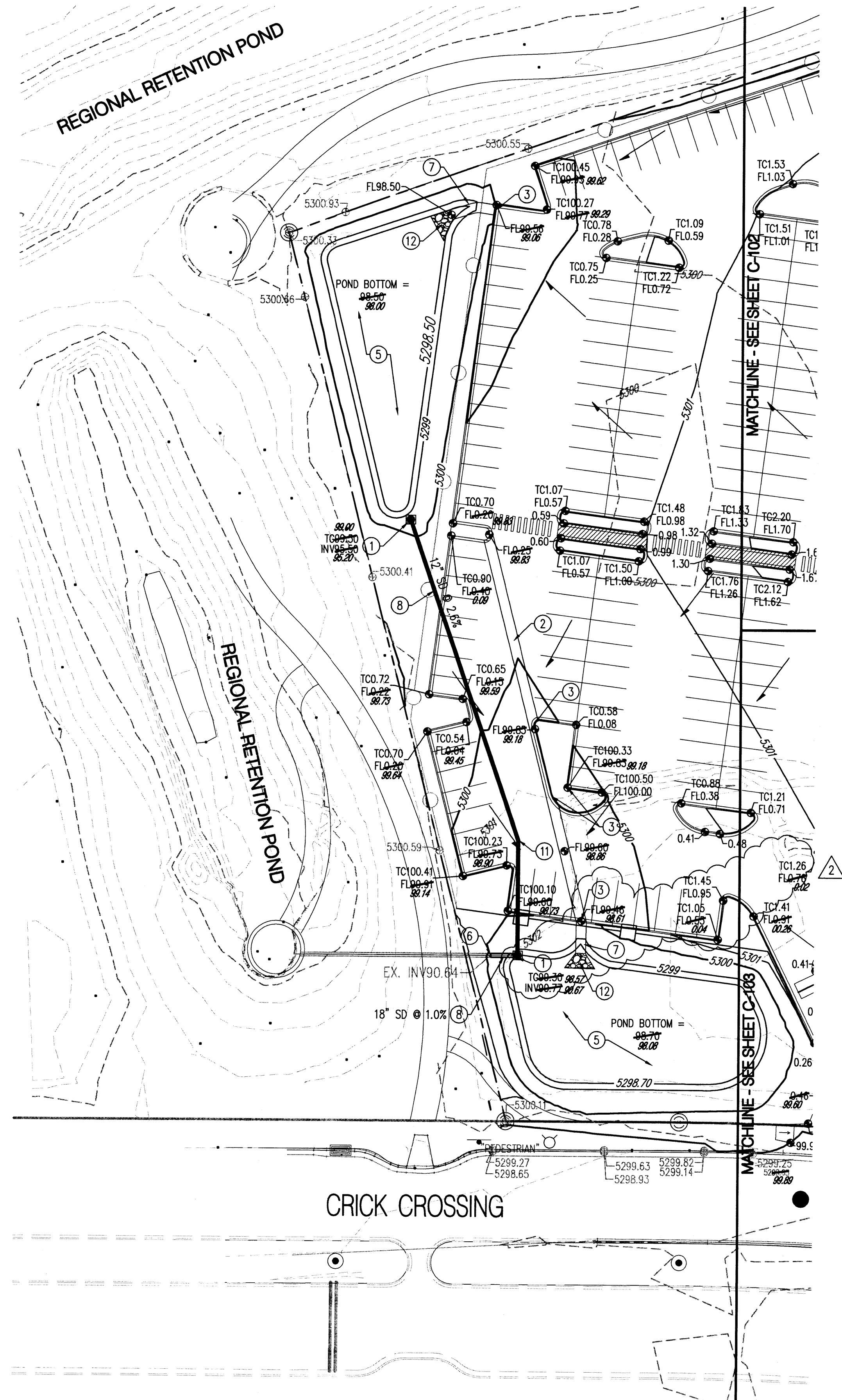
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GRADING AND DRAINAGE PLAN

DRAWN BY	MJB	CHECKED BY	
PROJECT NUMBER	109036	PROJECT ABBREVIATION	ICEalb
ORIGINAL ISSUE	12/07/2010	CURRENT DOCUMENTATION STAGE	CONSTRUCTION DOCS
FILE NAME			

C-102

DRAWING NUMBER



○ GRADING KEYED NOTES

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13. OUTFALL 4" COURTYARD STORM DRAINS INTO WATER HARVESTING AREA SEE PLAN FOR SLOPE AND INVERT.
14. INSTALL 12" SIDEWALK CULVERT PER COA STD DWG 2236

DRAINAGE CERTIFICATION

I, MICHAEL BALASKOVITS, NMPE 18187, OF THE FIRM BOHANNAN HUSTON 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 12/8/10. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ROBERT A. GROMATZKY, NMPS 16489, OF THE FIRM BOHANNAN HUSTON INC. I FURTHER CERTIFY THAT I HAVE PERSONALLY VISITED THE PROJECT SITE ON 12/19/11 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 A PERMANENT CERTIFICATE OF OCCUPANCY.

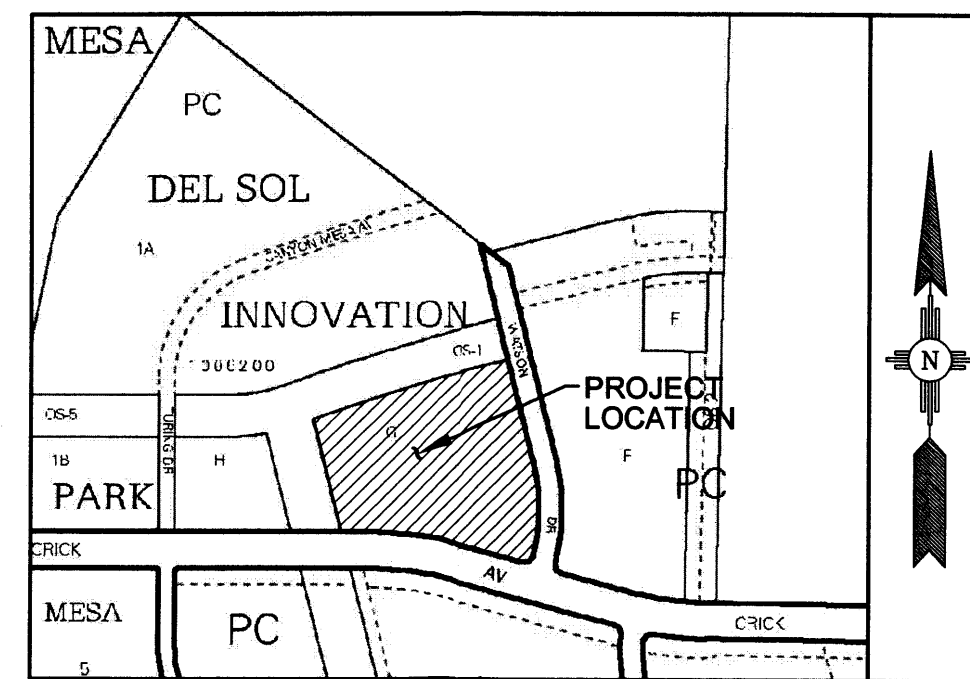
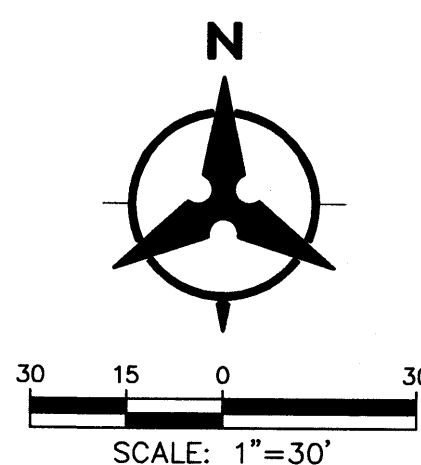
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Michael Balaskovits
MICHAEL BALASKOVITS, NMPE 18187

12/19/11

LEGEND

- FL70.22 DESIGN GRADE
- FL70.22 AS-BUILT GRADE



VICINITY MAP
ZONE ATLAS PAGE Q-16-Z

GRADING NOTES

1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION," AS PROVIDED BY THE ARCHITECT OR OWNER. ALL OTHER WORK SHALL, UNLESS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT, (FIRST PRIORITY) SPECIFICATIONS, AND/OR THE CITY OF ALBUQUERQUE (COA) STANDARD SPECIFICATIONS FOR PUBLIC WORKS (SECOND PRIORITY).
4. EARTH SLOPES SHALL NOT EXCEED 3 HORIZONTAL TO 1 VERTICAL UNLESS SHOWN OTHERWISE.
5. IT IS THE INTENT OF THESE PLANS THAT THIS CONTRACTOR SHALL NOT PERFORM ANY WORK OUTSIDE OF THE PROPERTY BOUNDARIES EXCEPT AS REQUIRED BY THIS PLAN.
6. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY. THIS SHOULD BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS OR SILT FENCE AT THE PROPERTY LINES AND WETTING THE SOIL TO PROTECT IT FROM WIND EROSION.
7. A DISPOSAL SITE FOR ANY & ALL EXCESS EXCAVATION MATERIAL, AND UNSUITABLE MATERIAL AND/OR A BORROW SITE CONTAINING ACCEPTABLE FILL MATERIAL SHALL BE OBTAINED BY THE CONTRACTOR IN COMPLIANCE WITH APPLICABLE ENVIRONMENTAL REGULATIONS AND APPROVED BY THE OBSERVER. ALL COSTS INCURRED IN OBTAINING A DISPOSAL OR BORROW SITE AND HAUL TO OR FROM SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT AND NO SEPARATE MEASUREMENT OR PAYMENT SHALL BE MADE.
8. PAWING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
9. ALL PROPOSED CONTOURS REFLECT TOP OF PAVEMENT ELEVATIONS IN THE PARKING AREA AND MUST BE ADJUSTED FOR MEDANS AND ISLANDS.
10. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.

GENERAL NOTES

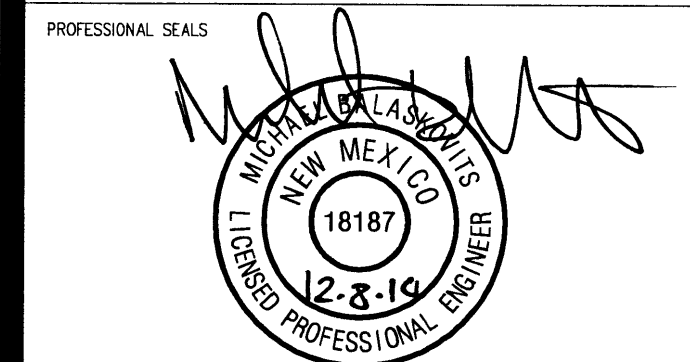
1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND FEDERAL LAWS, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA REQUIREMENTS WITH RESPECT TO STORM WATER DISCHARGE.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL POTENTIAL OBSTRUCTIONS INCLUDING ALL UNDERGROUND UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION OBSERVER OR ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR SHALL CONTACT LINE LOCATING SERVICE FOR LOCATION OF EXISTING UTILITIES.
5. ALL ELECTRICAL, TELEPHONE, CABLE TV, GAS AND OTHER UTILITY LINES, CABLES, AND APPURTENANCES ENCOUNTERED DURING CONSTRUCTION THAT REQUIRE RELOCATION SHALL BE COORDINATED WITH THAT UTILITY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF ALL NECESSARY UTILITY ADJUSTMENTS. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCES CAUSED BY UTILITY COMPANY WORK CREWS. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE HIS ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ANY DAMAGE TO EXISTING FACILITIES CAUSED BY CONSTRUCTION ACTIVITY SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE AND APPROVED BY THE CONSTRUCTION OBSERVER.
7. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT PROPERTIES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
8. OVERNIGHT PARKING OF CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS OR DESIGNATED TRAFFIC LANES. THE CONTRACTOR SHALL NOT STORE ANY EQUIPMENT OR MATERIAL WITHIN THE PUBLIC RIGHT-OF-WAY.
9. THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY PERMITS FOR THE PROJECT PRIOR TO COMMENCING CONSTRUCTION (I.E., BARRICADING, TOPSOIL DISTURBANCE, EXCAVATION PERMITS, EPA STORM WATER PERMITS, ETC.).
10. ALL PROPERTY CORNERS DESTROYED DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ALL PROPERTY CORNERS MUST BE RESET BY A REGISTERED LAND SURVEYOR.
11. THE CONTRACTOR SHALL PREPARE A CONSTRUCTION TRAFFIC CONTROL AND SIGNING PLAN AND OBTAIN APPROVAL OF SUCH PLAN FROM THE CITY OF ALBUQUERQUE, TRAFFIC ENGINEERING DEPARTMENT, PRIOR TO BEGINNING ANY CONSTRUCTION WORK ON OR ADJACENT TO EXISTING STREETS.
12. ALL BARRICADES AND CONSTRUCTION SIGNING SHALL CONFORM TO APPLICABLE SECTIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), US DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
13. THE CONTRACTOR SHALL MAINTAIN ALL CONSTRUCTION BARRICADES AND SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.
14. THE CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO CONFORM WITH EPA REQUIREMENTS, INCLUDING COMPLIANCE WITH NPDES PHASE 2 REQUIREMENTS.

Bohannon & Huston
Consulting Engineers
7000 Jefferson St. NE Albuquerque, NM 87110-0505
ENGINEERING • SPATIAL DATA • ADVANCED TECHNOLOGIES

Artesia Development ICE Albuquerque 5441 WATSON DR ALBUQUERQUE, NM

REVISION HISTORY

REVISION	LEVEL	ISSUE NAME	ISSUE DATE
2	ISSUED FOR CONSTRUCTION		1/07/2010
1	ADDENDUM NO. 1		11/23/2010
0	GRADING AND DRAINAGE PACKAGE		10/18/2010

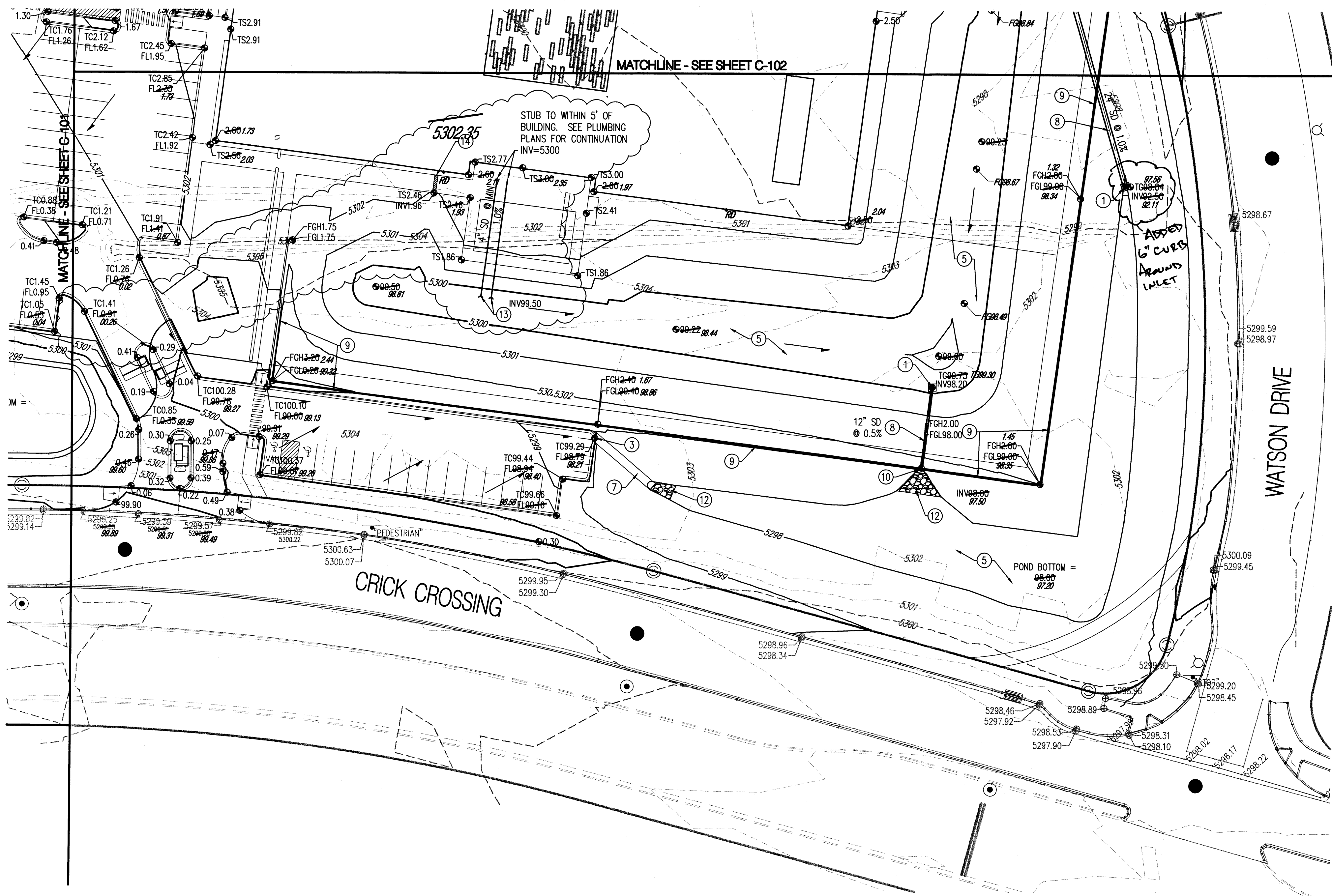


GRADING AND DRAINAGE PLAN

DRAWN BY	CMB	CHECKED BY	MJB
PROJECT NUMBER	109036	PROJECT ABBREVIATION	ICEAIB
ORIGINAL ISSUE	12/07/2010	CURRENT DOCUMENTATION STAGE	CONSTRUCTION DOCS
FILE NAME			

C-101

DRAWING NUMBER



- GRADING KEYED NOTES
1. INSTALL STORM DRAIN INLET TYPE 'D' INLET PER NM COA STD DWG 2206 OR APPROVED NYLOPLAST INLET WITH SAME CAPACITY.
 2. INSTALL 4' WIDE CONCRETE VALLEY GUTTER PER DETAIL 4/C-300.
 3. INSTALL 3' WIDE CURB OPENING PER DETAIL 3/C-300.
 4. INSTALL TRENCH DRAIN PER DETAIL SHEET C-102 OR APPROVED EQUAL.
 5. WATER HARVESTING AREA, SEE LANDSCAPE PLAN FOR DETAILS AND EROSION PROTECTION.
 6. CONNECT TO EXISTING STORM DRAIN STUB OUT. CONTRACTOR SHALL VERIFY INVERT AND CONTACT ENGINEER OF ANY DISCREPANCIES.
 7. INSTALL CONCRETE RUNDOWN PER DETAIL 2/C-300.
 8. INSTALL HDPE (N-12 OR APPROVED EQUAL) STORM DRAIN, SEE PLAN FOR SIZE.
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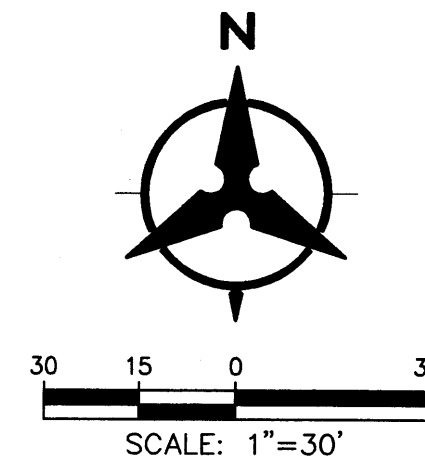
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[Signature]
MICHAEL BALASKOVITS, NMPE 18187
12/20/11

LEGEND

- FL70.22 DESIGN GRADE
- FL70.22 AS-BUILT GRADE



Artesia Development ICE Albuquerque 5441 WATSON DR ALBUQUERQUE, NM

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PROFESSIONAL SEALS		
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DRAWN BY	CHECKED BY	
	MJB	
PROJECT NUMBER	PROJECT ABBREVIATION	ICEAIB
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