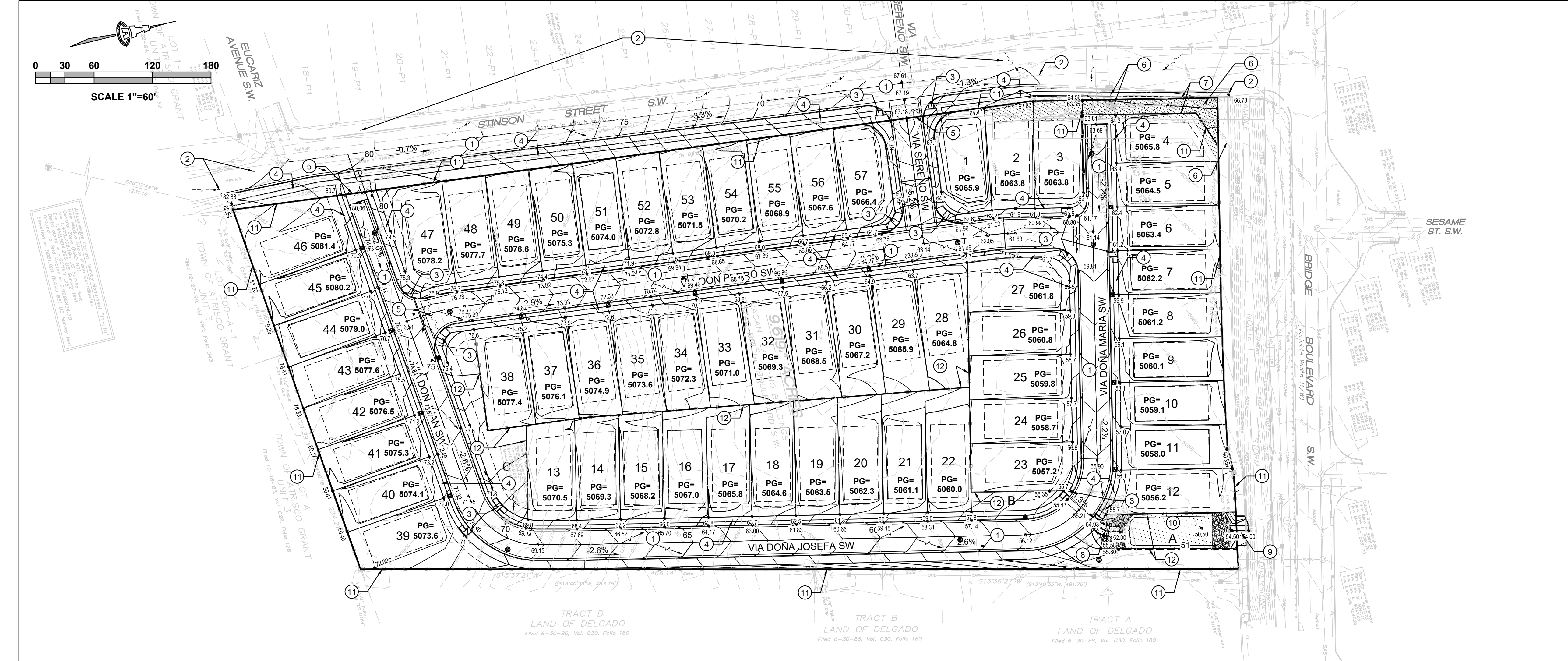




LAND TREATMENT CALCULATIONS						
Basin ID	Basin Area (Ac)	# of Lots	LAND TREATMENTS			
			%A	%B	%C	%D
PR-1	9.56	57	0	29	8	63
PR-2	0.06	N/A	0	0	100	0
PR-3	0.62	N/A	0	0	47	53

Storm Water Quality (SWQ) Requirement:		
Proposed Area %D On-Site	6.02	Ac
BERNCO New Development Multiplier	262,399.65	SF
SWQ Stored Volume Req	0.615	in
	13448	CF

HOA LOT A SWQ POND		
Contour	Area	Volume
5054.5	4,625	-
5054	4,389	2,254 CF
5053	3,960	4,174 CF
5052	3,595	3,777 CF
5051	2,686	3,140 CF
5050.5	2,254	1,235 CF
POND VOLUME = 14,580 CF		

$$\frac{V_{\text{provided}}}{14,580} > \frac{V_{\text{required}}}{13,448}$$

PROPOSED BASIN AREAS & FLOW SUMMARY (from AHYMO)						
BASIN	AREA (SF)	AREA (AC.)	AREA (SQ. MI.)	Q ₁₀₀ (CFS)	V ₁₀₀ (AC-FT)	TOTAL OUT Q ₁₀₀ (CFS)
PR-1	416,507	9.5617	0.01494	33.76	1.36960	22.09
PR-2	2,462	0.0565	0.00009	0.18	0.00480	0.18
PR-3	27,103	0.6222	0.00097	2.26	0.08620	2.26

NOTES/ COMMENTS

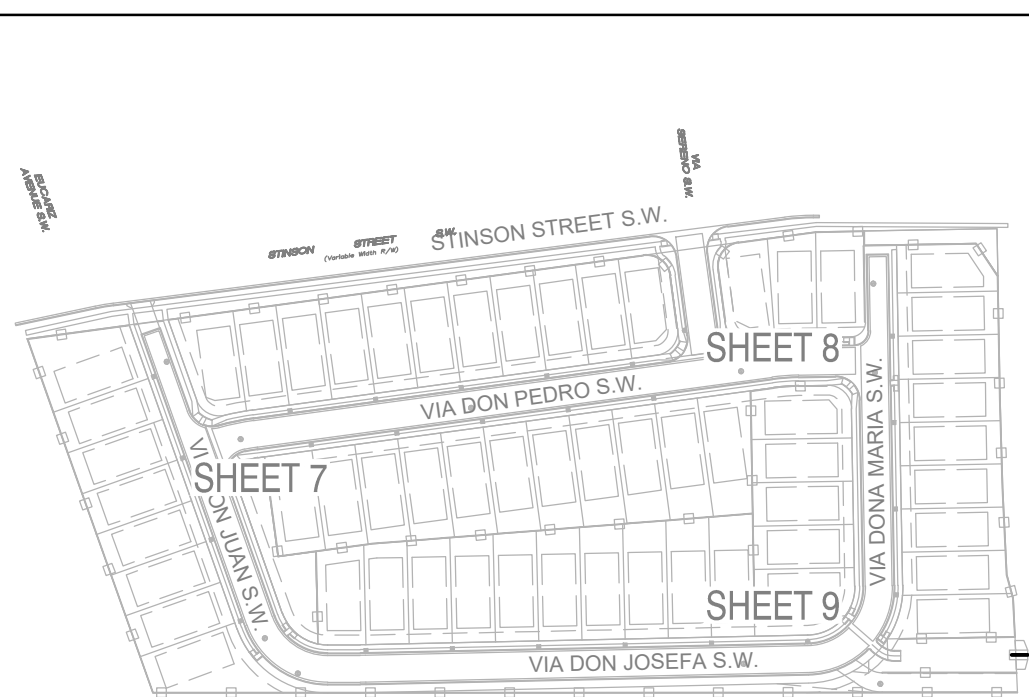
PR-1: Main drainage basin on site in the proposed condition. Runoff generated within this area is conveyed via overland lot swales and roadway gutters to the proposed drainage pond located at the NE corner of the site.

PR-2: Remaining portion of the public drainage easement at NW corner of the site. Runoff generated within this area will drain northward and enter the Amole Del Norte channel via overland flow

PR-3: Fully constructed eastern half of Stinson St SW drainage basin, enters existing inlet within Stinson St SW near the NW corner of the site. Runoff ultimately outfalls directly to Amole Del Norte channel via the existing drainage system located within the public drainage easement at the NW corner of the site



G&D KEY MAP



KEYED NOTES

- NEW PAVING ELEVATIONS AND CONTOURS ARE SHOWN HERE FOR INFORMATION ONLY. REFER TO PUBLIC WORK ORDER PLANS FOR FINAL DETAILED GRADING AND NOTES.
- PROVIDE SMOOTH TRANSITION TO EXISTING PAVEMENT.
- ADA COMPLIANT 1:12 MAX. SLOPE HANDICAP ACCESS RAMP.
- ADA COMPLIANT PEDESTRIAN ACCESS WALK AT ELEVATIONS SHOWN. MAX. 5% SLOPE. MAX. 2% CROSS-SLOPE.
- HIGH POINT / GRADE BREAK LOCATION.
- EXISTING PUBLIC STORM DRAIN SYSTEM AND PUBLIC STORM DRAIN EASEMENT TO REMAIN
- EXISTING PUBLIC STORM DRAIN EASEMENT TO REMAIN
- 10-FT POND RUNDOWN / ACCESS RAMP (MAX. 10% SLOPE) PER COA STD DET. 2260 (TYPE B).
- POND OUTLET RUNDOWN TO AMOLE DEL NORTE CHANNEL. SEE DETAIL ON SHEET 11.
- STORM WATER QUALITY POND, LANDSCAPED SIDES TO HAVE A MAXIMUM 3:1 SLOPE.
- SUBDIVISION PERIMETER SCREENING / RETAINING WALL (WHERE NECESSARY) TO ACHIEVE REQUIRED GRADE DIFFERENCE. STRUCTURAL DESIGNS BY WALL CONTRACTOR (FOOTINGS, GUARDRAILS, REINFORCING, WATERPROOFING, WEEPHOLES, ETC.)
- INTERNAL RETAINING WALL TO ACHIEVE REQUIRED GRADE DIFFERENCE. STRUCTURAL DESIGNS BY WALL CONTRACTOR (FOOTINGS, GUARDRAILS, REINFORCING, WATERPROOFING, WEEPHOLES, ETC.)

PROJECT INFORMATION

PROPERTY: THE SITE IS AN UNDEVELOPED PROPERTY LOCATED WITHIN THE COUNTY OF BERNALILLO VICINITY MAP N-14, AND ZONED A-1. THE SITE IS BOUND TO THE EAST BY DEVELOPED INDUSTRIAL USE PROPERTY, TO THE WEST BY STINSON STREET SW, TO THE NORTH BY THE AMOLE DEL NORTE DRAINAGE CHANNEL AND BRIDGE BOULEVARD SW, AND TO THE SOUTH BY UNDEVELOPED PROPERTY.

PROPOSED IMPROVEMENTS: THE PROPOSED DEVELOPMENT IS A PLANNED RESIDENTIAL SUBDIVISION INTENDED FOR SINGLE-FAMILY RESIDENTIAL USE.

LEGAL: UNPLATTED LANDS OF BOARD OF EDUCATION, A.P.S. PROPERTY NO. 15 / UNDESIGNATED TRACT, TOWN OF ATRISCO GRANT, UNIT 6.

BENCHMARK: VERTICAL DATUM IS BASED ON THE ALBUQUERQUE CONTROL SURVEY BENCHMARK "11-L-10" HAVING A PUBLISHED ELEVATION OF 5081.821' (NAVD 1988).

OFF-SITE FLOW: PER THE DRAINAGE REPORT FOR ENCANTO VILLAGE PREPARED BY MARK GOODWIN & ASSOCIATES, DATED 3/30/99, AND THE APPROVED PUBLIC WORK ORDER PLANS FOR THE AMOLE DEL NORTE STORM DIVERSION FACILITIES - PHASE III TIERRA BAYITA DRAINAGE FACILITIES, APPROXIMATELY 10.32 CFS OF FULLY DEVELOPED OFF-SITE RUNOFF ENTERS THE SUBJECT SITE VIA OVERLAND FLOW FROM STINSON STREET. ONCE ON PROPERTY, THERE IS A TEMPORARY LANDSCAPE SWALE WHICH CONVEYS THE RUNOFF TO AN EXISTING PUBLIC STORM SYSTEM LOCATED AT THE NORTHWEST CORNER OF THE PROPERTY. THE PUBLIC STORM SYSTEM IS LOCATED WITHIN A VARIABLE WIDTH PUBLIC STORM DRAIN EASEMENT. THE PUBLIC STORM SYSTEM COLLECTS RUNOFF GENERATED FROM EUCARIZ STREET, STINSON STREET, AND THE SUBJECT PROPERTY, AND ULTIMATELY OUTFALLS DIRECTLY TO THE AMOLE DEL NORTE DRAINAGE CHANNEL.

FLOOD HAZARD: THE SUBJECT PROPERTY LIES WITHIN "ZONE X" (0.2% ANNUAL CHANCE FLOOD HAZARD, AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE) AS SHOWN ON NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAPS 35001C0329H, MAP EFFECTIVE AUGUST 16, 2012.

STORMWATER QUALITY CONTROL: STORMWATER RETENTION FOR THE 90TH PERCENTILE STORM HAS BEEN PROVIDED WITHIN THE PROPOSED NORTHEAST POND. THE POND IS SIZED ONLY TO RETAIN THE REQUIRED STORMWATER QUALITY VOLUME, AND WILL FREELY RELEASE THE SITE'S POST DEVELOPMENT RUNOFF DIRECTLY TO THE AMOLE DEL NORTE CHANNEL PER MARK GOODWIN & ASSOCIATES, P.A. LETTER TO COA HYDROLOGY DATED 7/5/05.

DRAINAGE PLAN CONCEPT

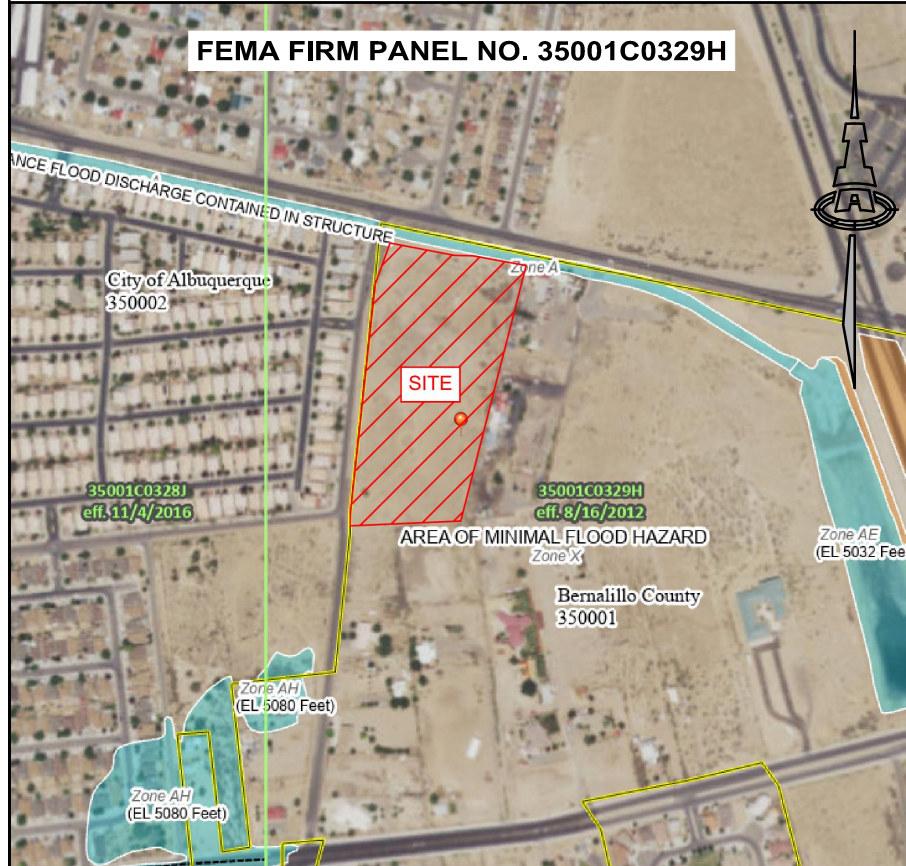
THE EXISTING PUBLIC STORM DRAIN SYSTEM AT THE NORTHWEST CORNER OF THE SITE WILL REMAIN IN PLACE. THE SYSTEM WILL CONTINUE TO COLLECT PUBLIC RUNOFF GENERATED WITHIN EUCARIZ AVENUE AND STINSON STREET. THE EXISTING LANDSCAPE SWALE WILL BE REMOVED AND REPLACED WITH THE FULL CONSTRUCTION OF STINSON STREET TO A 36-FT FACE TO FACE PUBLIC ROADWAY. THE PUBLIC RUNOFF WILL BE ROUTED ALONG THE PROPOSED ROADWAY CURB TO THE ROADWAYS EXISTING LOW POINT CURB INLET. THIS WILL MAINTAIN THE CURRENT DRAINAGE DESIGN FOR THE PUBLIC 42-INCH STORM SYSTEM CONTAINED WITHIN THE NORTHWEST PUBLIC DRAINAGE EASEMENT.

INTERNALLY, THE INDIVIDUAL LOT RUNOFF WILL BE CONVEYED FROM THE BACK OF EACH LOT TO THE FRONT VIA LOT SWALES. ONCE RUNOFF HAS ENTERED THE PUBLIC ROADWAY, THE RUNOFF WILL BE DIRECTED VIA OVERLAND FLOW TO THE NORTHEAST CORNER OF THE PROPERTY, FOLLOWING THE HISTORICAL DRAINAGE PATTERN OF THE SITE. THE SITE RUNOFF WILL THEN ENTER THE PROPOSED STORM WATER QUALITY POND WITHIN HOA LOT A VIA A POND RUNDOWN. THE POND RUNDOWN WILL ALSO ACT AS THE POND ACCESS RAMP (MAX. 10% SLOPE) FOR MAINTENANCE. THE PROPOSED DRAINAGE POND IS SIZED TO CONTAIN THE STORM WATER QUALITY VOLUME WHILE ALLOWING FOR A FREE DISCHARGE OF THE SITE GENERATED RUNOFF TO THE AMOLE DEL NORTE CHANNEL, PER MARK GOODWIN & ASSOCIATES, P.A. LETTER TO COA HYDROLOGY DATED 7/5/05. THE FREE DISCHARGE TO THE AMOLE DEL NORTE CHANNEL WILL OCCUR VIA THE PROPOSED POND OUTLET RUNDOWN, MATCHING THE EXISTING UPSTREAM CHANNEL RUNDOWNS FROM UPSTREAM SUBDIVISIONS TO THE AMOLE DEL NORTE CHANNEL. REFER TO THE PROJECT'S DRAINAGE REPORT FOR FURTHER SITE DRAINAGE ANALYSIS DETAIL.

VICINITY MAP



FLOODPLAIN INFORMATION



LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED CONTOUR (1' INCREMENT)
- PROPOSED SPOT ELEVATION
- FLOW ARROW
- EXISTING FLOW ARROW
- EROSION PROTECTION
- GRADE BREAK
- PROPOSED WALL
- PROPOSED DRAINAGE BASIN

STORM WATER QUALITY

FOR NEW DEVELOPMENT, THE BERNALILLO COUNTY STORM WATER QUALITY (SWQ) VOLUME IS BASED ON THE 90TH PERCENTILE STORM EVENT 0.615" FOR ALL IMPERVIOUS AREAS. THEREFORE THE RETENTION VOLUME REQUIRED ON SITE (BASED ON BASIN PR-1) IS CALCULATED AS:

LAND TREATMENT D; 63% = 262,400 SF @ 0.615" = 13,448 CF.

THE PROPOSED HOA LOT A SWQ POND WILL PROVIDE 14,580 CF OF STORAGE AT A DEPTH OF 4-FT > 13,448 CF.

COUNTY OF BERNALILLO PUBLIC WORKS DIVISION

TITLE: OVERALL GRADING & DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
COUNTY PROJECT NO. XXXXXXX	CITY PROJECT NO. 633982	MAP NO. L-10	SHEET 6	OF XX	