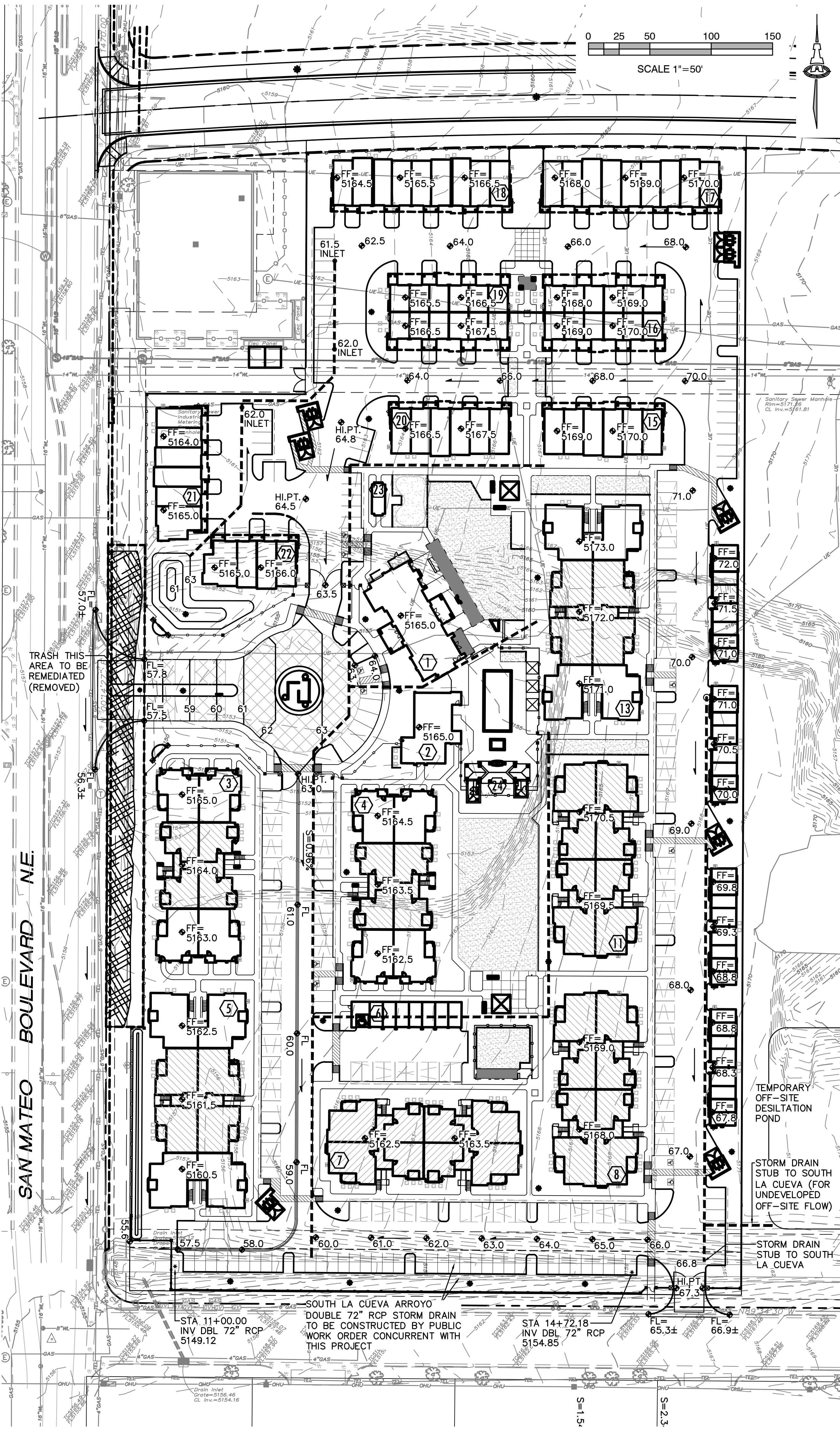


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DRAINAGE CONCEPT

PER THE AMENDED DRAINAGE MASTER PLAN (DMP) FOR NORTH I-25 CORPORATE CENTER (AKA NORTHPOINT 25) PREPARED BY ISAACSON AND ARFMAN, P.A. DATED NOVEMBER, 2015 (CURRENTLY UNDER REVIEW BY C.O.A. HYDROLOGY), THE OVERALL 59.66 ACRE TRACT WHICH THIS DEVELOPMENT IS A PART OF IS ALLOWED FREE DISCHARGE TO THE NORTH AND SOUTH LA CUEVA ARROYOS

DMP DRAINAGE BASINS:

THE DMP BASED ALLOWABLE FREE DISCHARGE ON AN ASSUMED LAND TREATMENT RATIO OF 85% : 15% : 0% : 0%. BASED ON THIS RATIO, THE ALLOWABLE DISCHARGE PER ACRE IS 4.78 CFS/ACRE.

THE PROPERTY FALLS WITHIN DMP DRAINAGE BASINS (SEE DMP DRAINAGE BASIN EXHIBIT THIS SHEET):

- BASIN 3 ---> 28.0 CFS TO THE SOUTH LA CUEVA ARROYO.
- BASIN 4 ---> 16.0 CFS TO SAN MATEO BLVD. (OR MAY DRAIN TO EITHER THE NORTH OR SOUTH LA CUEVA ARROYO)
- BASIN 5 ---> 3.8 CFS TO THE NORTH LA CUEVA ARROYO.

PROPOSED DRAINAGE BASINS:

THE PROPOSED PROPERTY IS 9.99 ACRES. BASED ON THE DMP ALLOWABLE DISCHARGE RATE OF 4.78 CFS/ACRE, THE PROPERTY IS PERMITTED 47.8 CFS OF DISCHARGE DURING THE 100-YEAR 6-HOUR STORM.

BASED ON THE PROPOSED LAND TREATMENT RATIO OF 70% : 24% : 6% : 0%, THE SITE WILL GENERATE LESS THAN THE CALCULATED ALLOWABLE (45 CFS OR 4.5 CFS/ACRE) AND WILL DISCHARGE AS FOLLOWS:

- BASIN B1 ---> 15.0 CFS TO SAN MATEO BLVD.
- BASIN B2 ---> 30.0 CFS TO THE SOUTH LA CUEVA ARROYO.

FIRST FLUSH

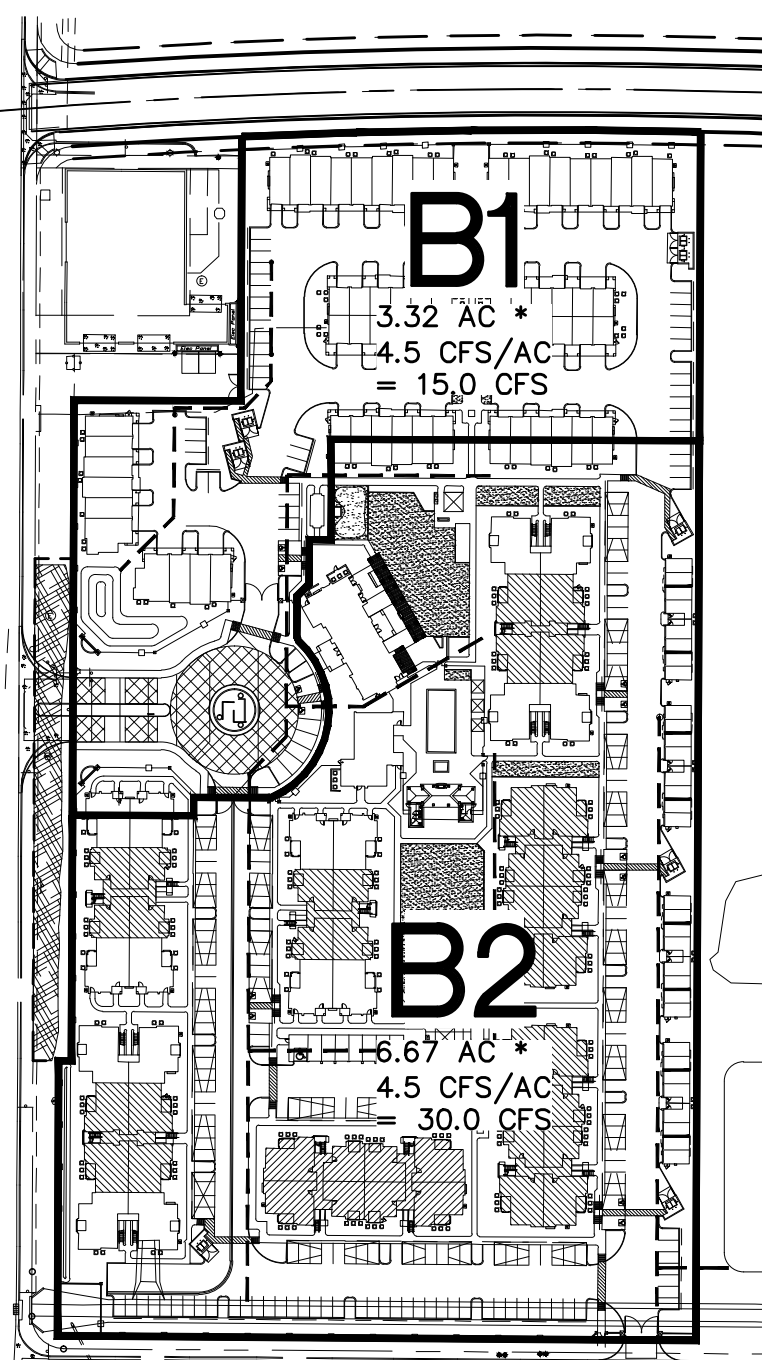
STORMWATER CONTROL MEASURES ARE REQUIRED TO PROVIDE MANAGEMENT OF 'FIRST FLUSH' (DEFINED AS THE 90TH PERCENTILE STORM EVENT OR 0.34" [0.44" LESS 0.1" FOR INITIAL ABSTRACTION] OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).

THE ESTIMATED PONDING VOLUME REQUIRED IS 0.34" * TYPE 'D' AREA: 0.34/12 * 7.0 AC * 43560 = 8,640 CF

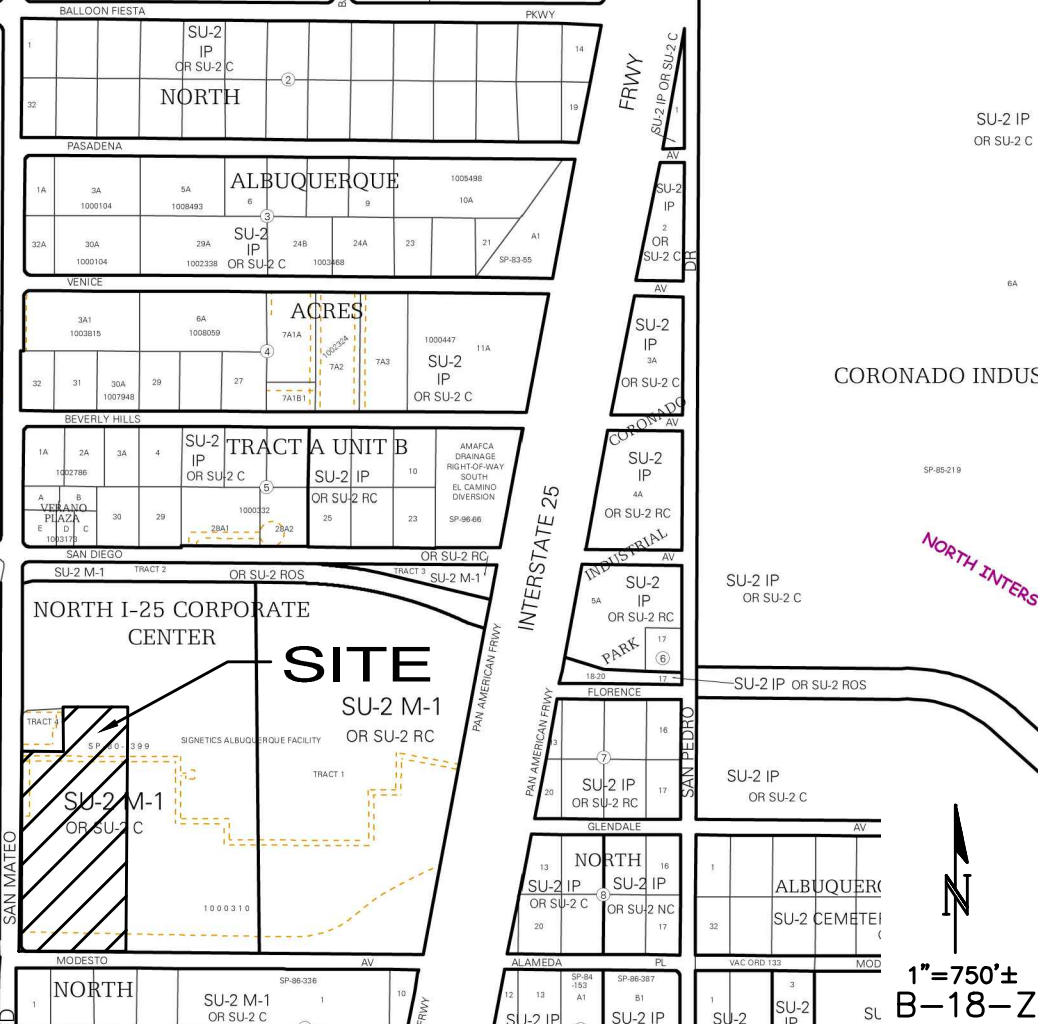
THERE ARE POTENTIAL 'FIRST FLUSH' RETENTION BASIN AREAS THROUGHOUT THE SITE (●). STORM WATER FROM THE IMPERVIOUS AREAS SHALL BE DIRECTED TO THESE BASINS VIA CURB OPENINGS. IF NECESSARY, UNDERGROUND FIRST FLUSH RETENTION WILL BE PROVIDED.

THE 'FIRST FLUSH' BASIN VOLUMES SHALL BE ANALYZED AND SIZED AS PART OF THE BUILDING PERMIT PLAN SUBMITTAL. CURB OPENING LOCATIONS ARE SHOWN CONCEPTUALLY AND SHALL BE LOCATED AND SIZED WITH FINAL DESIGN.

PROPOSED DRAINAGE BASINS



VICINITY MAP



PHASING NOTE

CONSTRUCTION OF BUILDINGS WILL BE PHASED. ALL STORM DRAIN TRUNK LINES SHALL BE CONSTRUCTED PRIOR TO START OF BUILDING CONSTRUCTION. ALL OTHER DRAINAGE IMPROVEMENTS (AREA INLETS, SIDEWALK CULVERTS, SIDEWALK DRAIN PIPES) SHALL BE CONSTRUCTED WITH EACH BUILDING PHASE PRIOR TO CERTIFICATION. CONSTRUCTION SEQUENCE OF BUILDINGS WILL BE DENOTED ON BUILDING PERMIT SET.

PROJECT INFORMATION

PROPERTY: THE SITE IS A PREVIOUSLY DEVELOPED PROPERTY LOCATED WITHIN C.O.A. VICINITY MAP B-18. THE SITE IS BOUND TO THE SOUTH BY 'SOUTH LA CUEVA ARROYO' AND MODESTO ROAD NE, TO THE NORTH AND EAST BY FULLY DEVELOPED COMMERCIAL PROPERTY (TO BE REDEVELOPED AS NORTHPOINT 25), AND TO THE WEST BY SAN MATEO BLVD. NE.

PROPOSED IMPROVEMENTS: THE PROPOSED IMPROVEMENTS INCLUDE A 23 BUILDING APARTMENT COMPLEX (INCLUDING GARAGE / CARRIAGE UNITS, OFFICE BLDG., HEALTH FACILITY AND RAMADA) WITH ASSOCIATED PAVED DRIVES, PARKING, PEDESTRIAN WALKS AND LANDSCAPING.

LEGAL: (EXISTING) A PORTION OF TRACT 1, NORTH I-25 CORPORATE CENTER, CITY OF ALBUQUERQUE, NM.

AREA: 9.9924 ACRES

BENCHMARK: VERTICAL DATUM IS BASED ON THE ALBUQUERQUE CONTROL SURVEY/NEW MEXICO STATE HIGHWAY COMMISSION MONUMENT "125-11", HAVING A PUBLISHED ELEVATION OF 5209.617' (NAVD 1988).

OFF-SITE: DRAINAGE FROM THE PROPERTY TO THE EAST PREVIOUSLY IMPACTING THIS PROPERTY WILL BE COLLECTED WITHIN A TEMPORARY DESILTATION POND AT THE SOUTHEAST CORNER OF THE PROPOSED DEVELOPMENT. 100% FREE DISCHARGE OF EXCESS FLOW WILL PASS TO THE OPEN PORTION OF THE SOUTH LA CUEVA ARROYO AND WILL CONTINUE WEST WITHIN THE PROPOSED DOUBLE 72" STORM DRAINS.

FLOOD HAZARD: THE MAJORITY OF THE PROPERTY LIES WITHIN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE 0.2% ANNUAL CHANCE FLOOD PLAIN). A PORTION OF THE PROPERTY ALONG THE SOUTH BOUNDARY LIE WITHIN A ZONE "A" (NO BASE FLOOD ELEVATIONS DETERMINED, 1% ANNUAL CHANCE FLOOD DISCHARGE CONTAINED IN CHANNEL) IN ACCORDANCE WITH THE NATIONAL FLOOD INSURANCE PROGRAM RATE MAP NO. 35001C012 H, EFFECTIVE DATE 8/16/2012.

SURVEYOR: RUSS P. HUGG, SURV-TEK, INC., (505)897-3366, ALBUQUERQUE, NEW MEXICO.

CIVIL ENGINEER: FRED C. ARFMAN, ISAACSON & ARFMAN, P.A., (505)268-8828, ALBUQUERQUE, NEW MEXICO.

CALCULATIONS

CALCULATIONS: NORTHPOINT TOWNHOMES : December 1, 2015									
Based on Drainage Design Criteria for City of Albuquerque Section 22.2, DPM, Vol 2, dated Jan., 1993									
ON-SITE									
AREA OF SITE:		435600		SF		=		10.0 Acres	
		100-year, 6-hour							
HISTORIC FLOWS:		Treatment SF		%		DEVELOPED FLOWS:		Treatment SF	
		%						%	
Area A =		0		0%		Area A =		0	
Area B =		0		0%		Area B =		26136	
Area C =		65340		15%		Area C =		104544	
Area D =		370260		85%		Area D =		304920	
Total Area =		435600		100%		Total Area =		435600	

LEGEND

- 79— PROPOSED CONTOUR
- ◆78.3 PROPOSED SPOT ELEVATION
- FLOW ARROW
- FF=XXXX.XX FINISH FLOOR ELEVATION
- FIRST FLUSH RETENTION POND LOCATION

NORTHPOINT TOWNHOMES

NWC SAN MATEO AND MODESTO NE Albuquerque, New Mexico



WorldHQ@ORBArch.com

PRELIMINARY NOT FOR CONSTRUCTION



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REVISIONS

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DATE: DECEMBER 2, 2015 ORB # 15-212

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CONCEPTUAL GRADING AND DRAINAGE PLAN

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com
2129 CG-101.dwg Dec. 02.2015