HYDROLOGY NOTES

THE PROJECT SITE IS LOCATED ON THE WEST SIDE OF ALBUQUERQUE, AND IS BOUNDED BY SNOW VISTA BLVD TO THE WEST AND SOUTH OF THE SAGE MARKET COMMERCIAL DEVELOPMENT. A DEVELOPED LOT TO THE EAST AND A CONCRETE DRAINAGE CHANNEL TO THE SOUTH. A 33–LOT SINGLE FAMILY RESIDENTIAL SUBDIVISION IS BEING PROPOSED TO BE CONSTRUCTED ON THE 3.76 ACRE PROPERTY. IT WILL HAVE ONE ACCESS ENTRANCE ROAD; ON THE WEST SIDE OF THE PROPERTY. the SITE IS SHOWN ON ZONE ATLAS PAGE M–9–Z.

THIS SITE IS PART OF THE OVERALL MASTER DRAINAGE PLAN FOR SAGE MARKET PLACE (BY TIERRA WEST STAMPED 9/2005). A PREVIOUS DRAINAGE REPORT WAS WRITTEN FOR THE SAGE RANCH SUBDIVISION (BY TIERRA WEST STAMPED 9/2006). THE SITE IS SUBJECT TO ALL RESTRICTIONS, CONDITIONS, AND REQUIREMENTS AS SET FORTH WITHIN THE PREVIOUSLY STATED DOCUMENTS.

THE SITE IS NOT LOCATED IN A 100YR FLOOD ZONE PER FEMA FIRM MAP 35001C0336H, AUGUST 2012.

EXISTING CONDITIONS:

THE 3.76 ACRE SITE IS CURRENTLY UNDEVELOPED AND THE FLOW PATTERN FOR THIS AREA IS IN A GENERAL WEST TO EAST DIRECTION. THE EXISTING CHANNEL ALONG THE EASTERN PROPERTY BOUNDARY WAS DESIGNED TO INTERCEPT RUNOFF FROM THE LOTS AND FROM THE CONTROLLED RELEASE POND WITHIN THE COMMERCIAL PROPERTY TO THE NORTH AT A RATE OF 17.49 cfs. THE RUNOFF GENERATED FOR THE 26–LOT RESIDENTIAL PROPERTY IN THE REPORT IS 8.92 cfs. THIS EXISTING CHANNEL CONVEYS ALL RUNOFF THROUGH A 20' DRAINAGE EASEMENT TO THE EXISTING SUN SAGE HILLS SUBDIVISION.

PROPOSED DEVELOPED CONDITIONS:

THE 100 YR PEAK DISCHARGE GENERATED BY THE SITE IS 15.24 CFS. THE SITE DOES NOT ACCEPT ANY OFFSITE FLOWS.

ALL DEVELOPED FLOWS FROM THE 32–LOT RESIDENTIAL SITE WILL DRAIN INTO SAGE RANCH COURT SW. ALL STREET FLOWS WILL BE COLLECTED BY A 8' CONCRETE RUNDOWN TO A FIRST FLUSH POND LOCATED IN TRACT A. THE POND WILL RESTRICT THE PEAK DISCHARGE TO 8.57 CFS BY 2–4" PVC PIPES TO AN EXISTING CONCRETE CHANNEL ON THE EASTERN PROPERTY LINE FOR THE SITE. THE 4" PIPES WILL DISCHARGE 5.32 CFS AT ELEVATION 25.14 AND THE OTHER PIPE WILL DISCHARGE 3.25 CFS AT ELEVATION 25.34. WITHIN THE EXISTING CHANNEL THE COMBINED FLOWS FROM THE COMMERCIAL POND AND THE RESIDENTIAL SITE WILL DRAIN TO JENNY COURT. FROM JENNY COURT THE RUNOFF DISCHARGES TO SAPHIRE STREET AT CORRIZ DRIVE. ALL RUNOFF IS THEN INTERCEPTED BY A SERIES OF SEVEN TYPE "C" INLETS AND A 40' WIDE TRANSVERSE DROP INLET.

THE HYDROLOGY WAS CALCULATED PER COA DPM USING AHYMO P_{6H}=2.60" FROM NOAA 14. THE RESULTS ARE SUMMARIZED IN THE HYDROLOGY TABLE ON THIS SHEET.

ACCORDING TO THE SAGE MARKET PLACE DRAINAGE REPORT ALL FLOWS FROM BOTH THE COMMERCIAL AND RESIDENTIAL SITE ARE RESTRICTD TO 17.49 cfs. THE DISCHARGE FROM THE POND ON THE COMMERCIAL SITE IS RESTRICTED TO AN ORIFACE PLATE THAT WAS PREVIOUSLY CONSTRUCTED WITH THE POND. THE DISCHARGE FROM THE RESIDENTIAL PROPERTY WILL BE RESTRICTED TO RELEASE AT 8.57 CFS TO JENNY COURT VIA THE EXISTING 12' CONCRETE CHANNEL. THE TOTAL DISCHARGE OF ALL COMBINED FLOWS FOR THE RESIDENTIAL AND COMMERCIAL SITE'S WILL STILL REMAIN LESS THAN THE ALLOWABLE 17.49 cfs.

BASIN DATA

BASIN ID	%% D	%% C	AREA	Q(100)	VOLUME
100	77.0	23.0	3.76 AC.	15.24 cfs	.6407 AC–FT

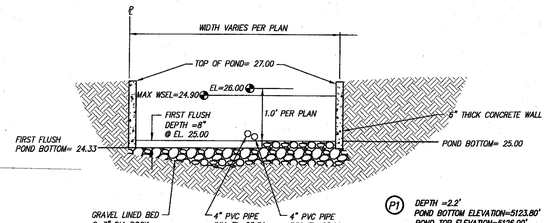
THE INTENT OF THIS PLAN IS TO PROVIDE COMPLETE DETENTION OF THE DEVELOPED, 100 YEAR, 24 HR. STORM.

FIRST FLUSH

THE "FIRST FLUSH" IS BEING ACCOMPLISHED THROUGH THE DETENTION POND ONSITE.

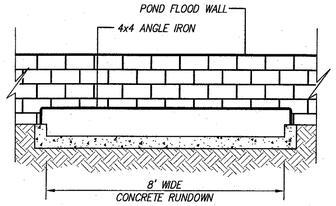
REQUIRED VOLUME = 0.34" X IMPERVIOUS AREA
= 0.34"/12 X (125888 SF)
= .08 AC–FT

PROVIDED VOLUME = 3777 CF



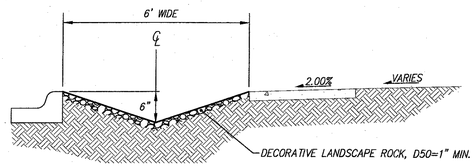
FIRST FLUSH POND

N.T.S.



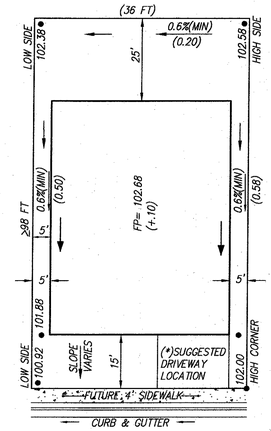
WALL OPENING DETAIL

N.T.S.



SECTION A-A

N.T.S. DEPRESSED LANDSCAPED DETAIL (TYP.)

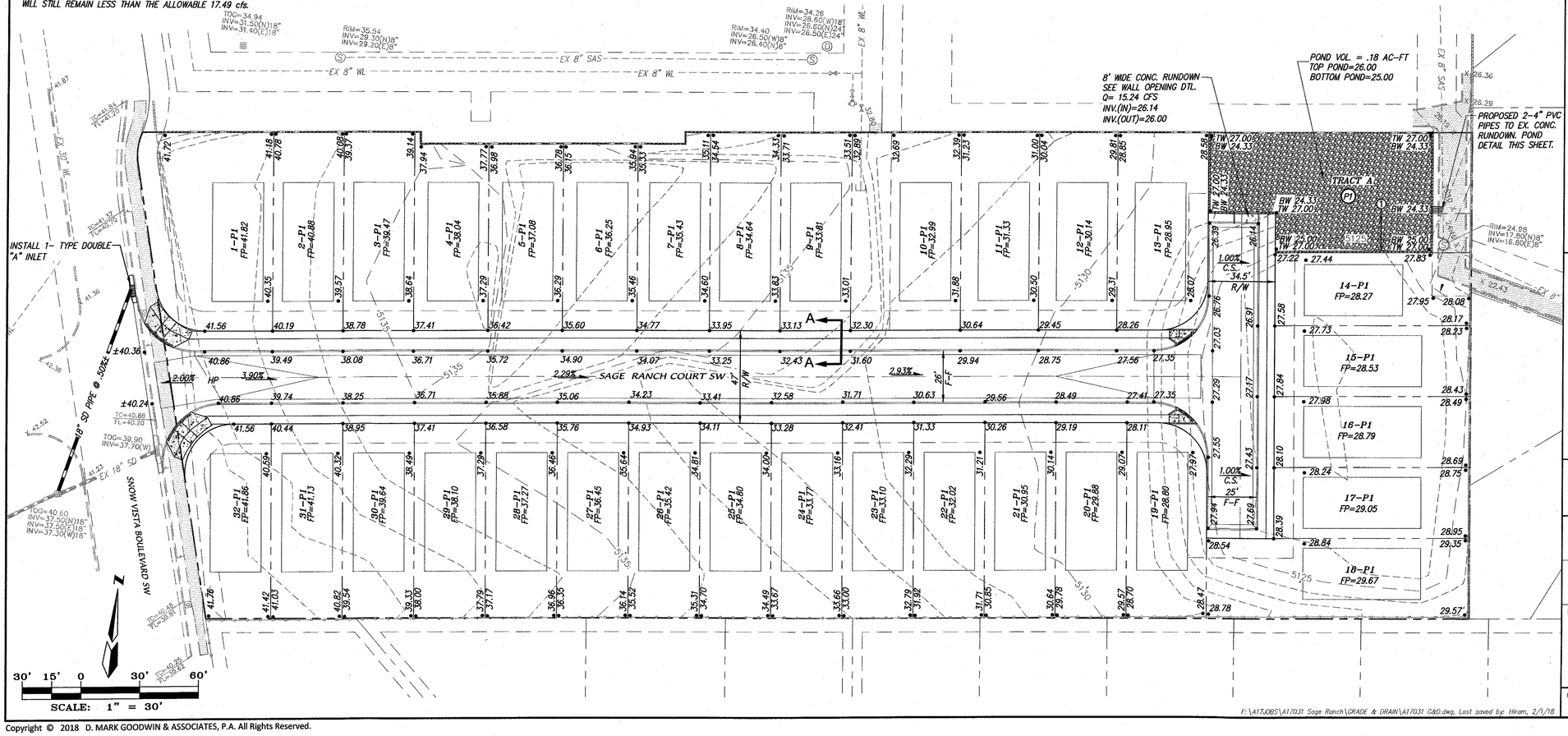


TYPICAL LOT LAYOUT PLAN

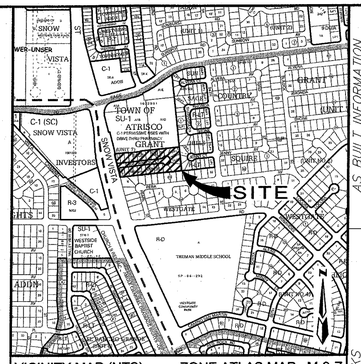
SCALE: 1"=20' (FOR LOTS 1–P1 THRU 33–P1)

(*) SPECIAL NOTE FOR DRIVEWAYS

ON ALL LOTS WHERE FINISHED PAD IS > 2.0 FEET HIGHER THAN LOW CORNER OF LOT, DRIVEWAY SHOULD BE CONSTRUCTED ON HIGH SIDE OF PAD/LOT. THIS WILL HELP MINIMIZE THE STEEPNESS OF DRIVEWAY SLOPE.



F:\A17JOBS\A17031 Sage Ranch\GRADE & DRAIN\A17031 G&D.dwg, Last saved by: Hiram, 2/1/18



VICINITY MAP (NTS) ZONE ATLAS MAP: M-9-Z

LEGAL DESCRIPTION

A TRACT OF LAND SITUATE WITHIN THE TOWN OF ATRISCO GRANT, PROJECTED SECTION 33, TOWNSHIP 10 NORTH, RANGE 2 EAST, NEW MEXICO PRINCIPAL MERIDIAN, CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO BEING ALL OF LOTS 1–P1 THROUGH 33–P1, TOGETHER WITH SAGE RANCH COURT RIGHT–OF–WAY OF SAGE RANCH SUBDIVISION AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAGE RANCH, FILED FOR RECORD IN THE OFFICE OF THE BERNALILLO COUNTY CLERK ON OCTOBER 31, 2006, IN VOLUME 2006C, PAGE 337 BEING 3.76 ACRES MORE OR LESS.

GENERAL NOTES

1. CONTRACTOR MUST OBTAIN A TOPSOIL DISTURBANCE PERMIT FROM THE ENVIRONMENTAL HEALTH DIVISION PRIOR TO CONSTRUCTION.
2. CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION SHALL GOVERN ALL WORK.
3. THE CONTRACTOR SHALL CONFORM TO ALL CITY, COUNTY, STATE AND FEDERAL DUST CONTROL MEASURES AND REQUIREMENTS AND WILL BE RESPONSIBLE FOR PREPARING AND OBTAINING ALL NECESSARY APPLICATIONS AND APPROVALS.
4. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE LOTS INTO PUBLIC RIGHT–OF–WAY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
5. THE EARTHWORK CONTRACTOR SHALL STOCKPILE ENOUGH MATERIAL ADJACENT TO RETAINING WALL LOCATIONS TO BE UTILIZED FOR WALL BACKFILL.

CAUTION:
NOTE THAT ALL EXISTING UTILITIES MAY NOT BE SHOWN. ALL EXISTING SERVICE CONNECTIONS ARE NOT SHOWN. ANY EXISTING UTILITIES THAT ARE SHOWN ARE APPROXIMATE LOCATION ONLY. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT ALL THE UTILITY OWNERS AND TO CONDUCT ALL NECESSARY FIELD INVESTIGATIONS PRIOR TO ANY EXCAVATIONS TO DETERMINE THE ACTUAL LOCATION OF UTILITIES AND OTHER IMPROVEMENTS.

CERTIFICATE OF SUBSTANTIAL COMPLIANCE

KEYED NOTES

① NEW 20' PUBLIC SANITARY SEWER EASEMENT GRANTED TO A.B.C.W.U.A.

dmg MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
OFFICE (505) 828–2200, FAX (505) 797–9539

BENCH MARKS
AGRS Aluminum Cap stamped "11–M9 2002"
From the intersection of Central Avenue & 98th Street SW travel south on 98th Street 1.4 miles to the intersection of 98th Street & Bencivides Road. The station is in the north median & is an aluminum cap set on top of the southeast corner of a drop inlet.
Geographic Position, in feet (NAD83)
N.M. State Plane Coordinates (Central Zone)
N=1474735.361, E=1403878.618, C–G=0.999682709, DA=–0°16'52.37"
Elevation, in feet (NAVD88) = 5139.276

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE

AS BUILT INFORMATION
CONTRACTOR
WORK STARTED BY DATE
INSPECTORS FIELD DISTANCE BY DATE
VERIFICATION BY DATE
AS BUILT CORRECTED BY DATE
MICRO–FILM INFORMATION
RECORDED BY DATE
NO.

ENGINEER'S SEAL
NEW MEXICO D. MARK GOODWIN 9648 REGISTERED PROFESSIONAL ENGINEER
1/18/18

NO.	REMARKS	BY	DATE
	REVISIONS		
	DESIGN		
DESIGNED BY	HLC		01/18
DRAWN BY	SPS		01/18
CHECKED BY	DMG		01/18

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: SAGE RANCH SUBDIVISION
GRADING & DRAINAGE PLAN

DESIGN REVIEW COMMITTEE	CITY ENGINEER APPROVAL	LAST DESIGN UPDATE	MO./DAY/YR.	MO./DAY/YR.

CITY PROJECT NO. | ZONE MAP NO. M-9-Z | SHEET 1 OF 1

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