

CITY OF ALBUQUERQUE



July 8, 2016

Richard J. Berry, Mayor

Glenn S. Broughton, P.E.
Bohannon Huston, Inc.
7500 Jefferson St NE Courtyard 1
Albuquerque, NM, 87109

**RE: Dennis Chavez Community Center Addition
Grading and Drainage Plan
Stamp Date 6-3-2016 (File: L14D013)**

Dear Mr. Broughton:

Based upon the information provided in your submittal received 6-7-2016, the above referenced Grading and Drainage Plan is approved for Building Permit.

PO Box 1293

Please ensure that all new roof drains on the addition route flows under the sidewalk (it appears that there is a roof drain on the existing building that will need to be extended to the new building face not called out).

Albuquerque

Please attach a copy of this approved plan in the construction sets when submitting for a building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

New Mexico 87103

If you have any questions, you can contact me at 924-3986.

Sincerely,

www.cabq.gov

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

Orig: Drainage file



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 10/2015)

Project Title: Dennis Chavez Community Center Building Permit #: _____ Hydrology File #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: _____

City Address: 715 Kathryn Ave. SE

Applicant: Bohannon Huston Contact: Glenn Broughton

Address: 7500 Jefferson NE Albuquerque, NM 87109

Phone#: 505-823-1000 Fax#: _____ E-mail: gbrought@bhinc.com

Other Contact: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

- HYDROLOGY/ DRAINAGE
- TRAFFIC/ TRANSPORTATION
- MS4/ EROSION & SEDIMENT CONTROL

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- BUILDING PERMIT APPROVAL
- CERTIFICATE OF OCCUPANCY
- PRELIMINARY PLAT APPROVAL
- SITE PLAN FOR SUB'D APPROVAL
- SITE PLAN FOR BLDG. PERMIT APPROVAL
- FINAL PLAT APPROVAL
- SIA/ RELEASE OF FINANCIAL GUARANTEE
- FOUNDATION PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- SO-19 APPROVAL
- PAVING PERMIT APPROVAL
- GRADING/ PAD CERTIFICATION
- WORK ORDER APPROVAL
- CLOMR/LOMR

TYPE OF SUBMITTAL:

- ENGINEER/ARCHITECT CERTIFICATION
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- DRAINAGE MASTER PLAN
- DRAINAGE REPORT
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- TRAFFIC IMPACT STUDY (TIS)
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- OTHER (SPECIFY) _____

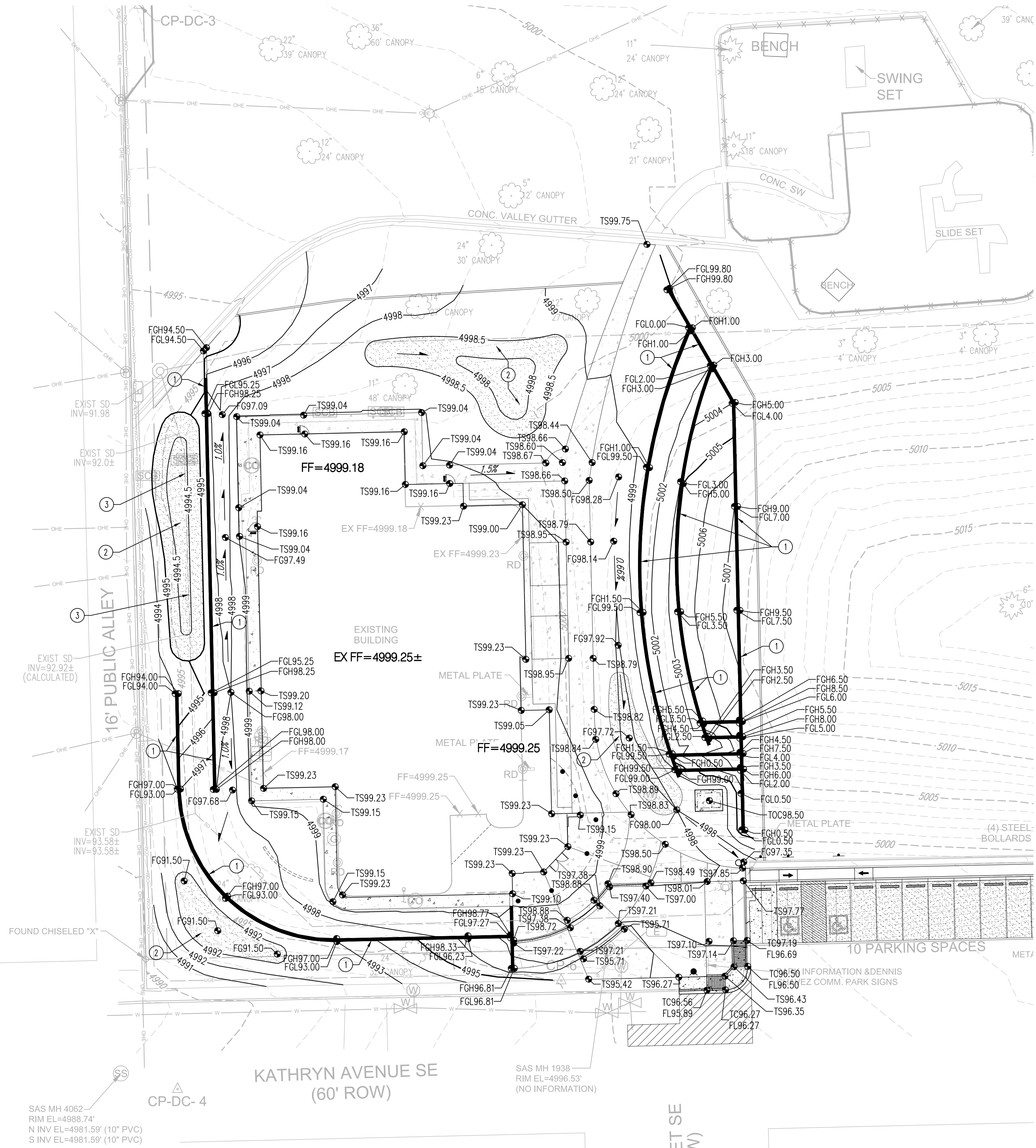
PRE-DESIGN MEETING?

____ OTHER (SPECIFY) _____

IS THIS A RESUBMITTAL?: Yes No

DATE SUBMITTED: 6/7/16 By: Glenn Broughton

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____



GENERAL NOTES

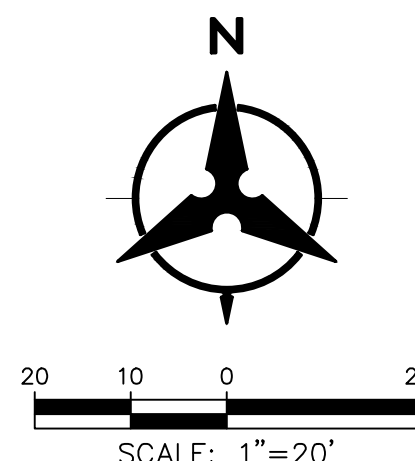
1. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE PUBLIC WORKS STANDARDS SHALL APPLY.
2. THE CONTRACTOR SHALL ABIDE BY ALL LOCAL, STATE, AND 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 ARCHITECT AND/OR THE CITY PROJECT MANAGER.
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 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.

GRADING NOTES

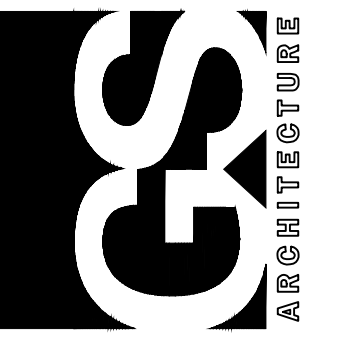
1. EXCEPT AS PROVIDED HEREIN, GRADING SHALL BE PERFORMED AT THE ELEVATIONS AND IN ACCORDANCE WITH THE DETAILS SHOWN ON THIS PLAN.
2. THE COST FOR REQUIRED CONSTRUCTION DUST AND EROSION CONTROL MEASURES SHALL BE INCIDENTAL TO THE PROJECT COST.
3. ALL WORK RELATIVE TO FOUNDATION CONSTRUCTION, SITE PREPARATION, AND PAVEMENT INSTALLATION, AS SHOWN ON THIS PLAN, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "GEOTECHNICAL INVESTIGATION". 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. THE CONTRACTOR IS TO ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO ADJACENT PROPERTY OR PUBLIC RIGHT-OF-WAY.
6. 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.
7. PAVING AND ROADWAY GRADES SHALL BE +/- 0.1' FROM PLAN ELEVATIONS. PAD ELEVATION SHALL BE +/- 0.05' FROM BUILDING PLAN ELEVATION.
8. VERIFY ALL ELEVATIONS SHOWN ON PLAN FROM BASIS OF ELEVATION CONTROL STATION PRIOR TO BEGINNING CONSTRUCTION.
9. ALL UTILITY MANHOLES, WATER VALVES AND JUNCTION BOXES WITHIN THE PROJECT LIMITS SHALL BE ADJUSTED TO FINISHED GRADE.

KEYED NOTES

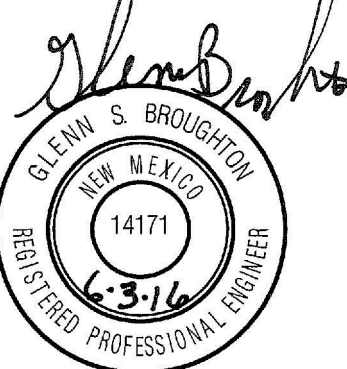
1. CONSTRUCT SEGMENTAL RETAINING WALL. SEE 1/C301 FOR TYPICAL SECTION.
2. WATER HARVESTING AREA.
3. EXISTING CISTERN COLLECTION LINE. CONTRACTOR TO VERIFY LOCATION AND ELEVATION PRIOR TO ROUGH GRADING. LOCATION AND INVERT ELEVATIONS ARE BASED ON RECORD DRAWINGS.



GREER STAFFORD/SICF ARCHITECTURE, INC.
 1717 LOUISIANA NE, SUITE 205
 ALBUQUERQUE, NM 87110-7027
 (505) 881-0825 • FAX: (505) 881-0848
 3005 NORTHBRIDGE DR, SUITE F
 FARMINGTON, NM 87401-8085
 (505) 882-7475 • FAX: (505) 882-6464



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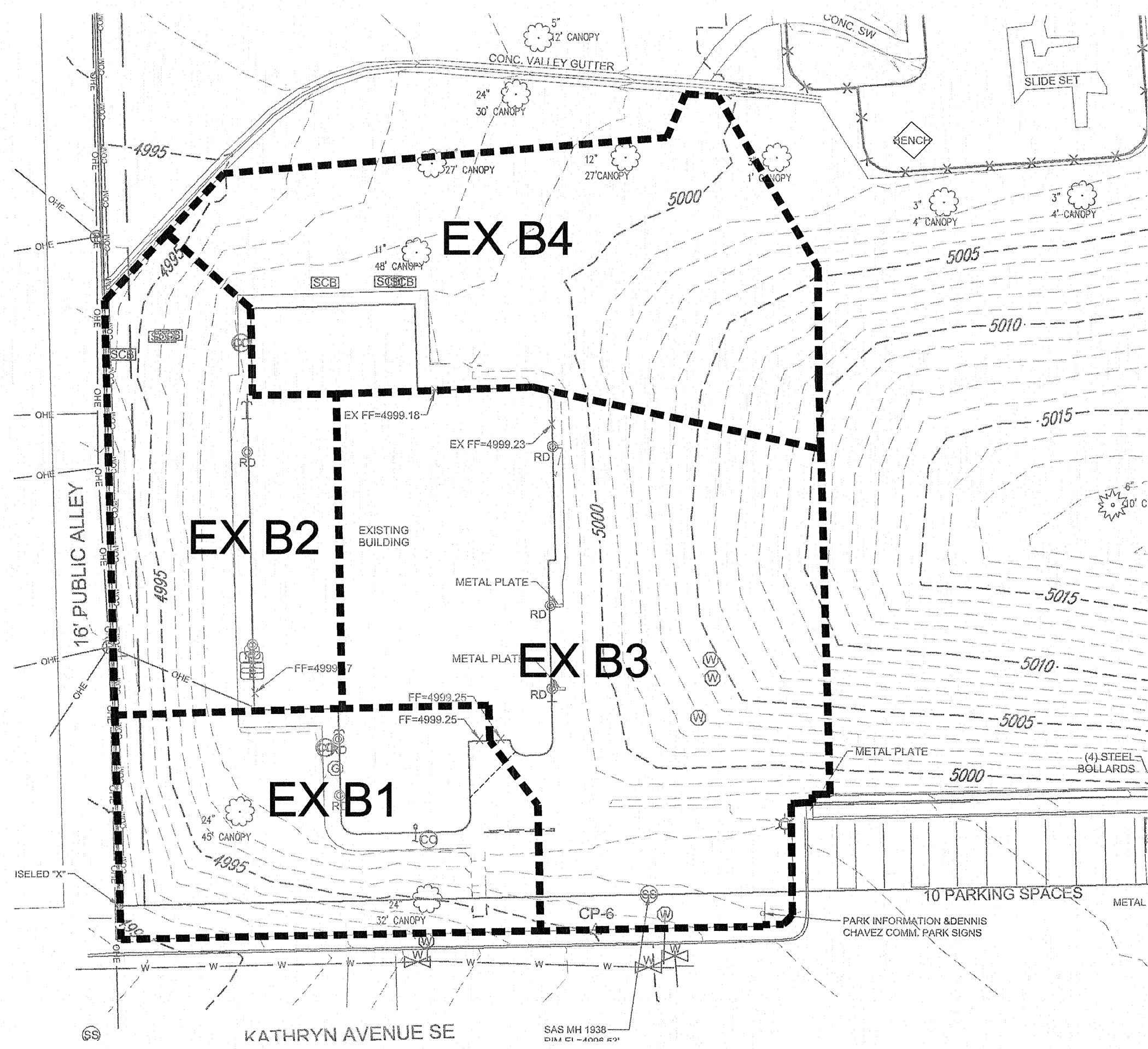


DENNIS CHAVEZ COMMUNITY CENTER
CITY OF ALBUQUERQUE DMD
 715 KATHRYN AVENUE, SE ALBUQUERQUE, NM 87102

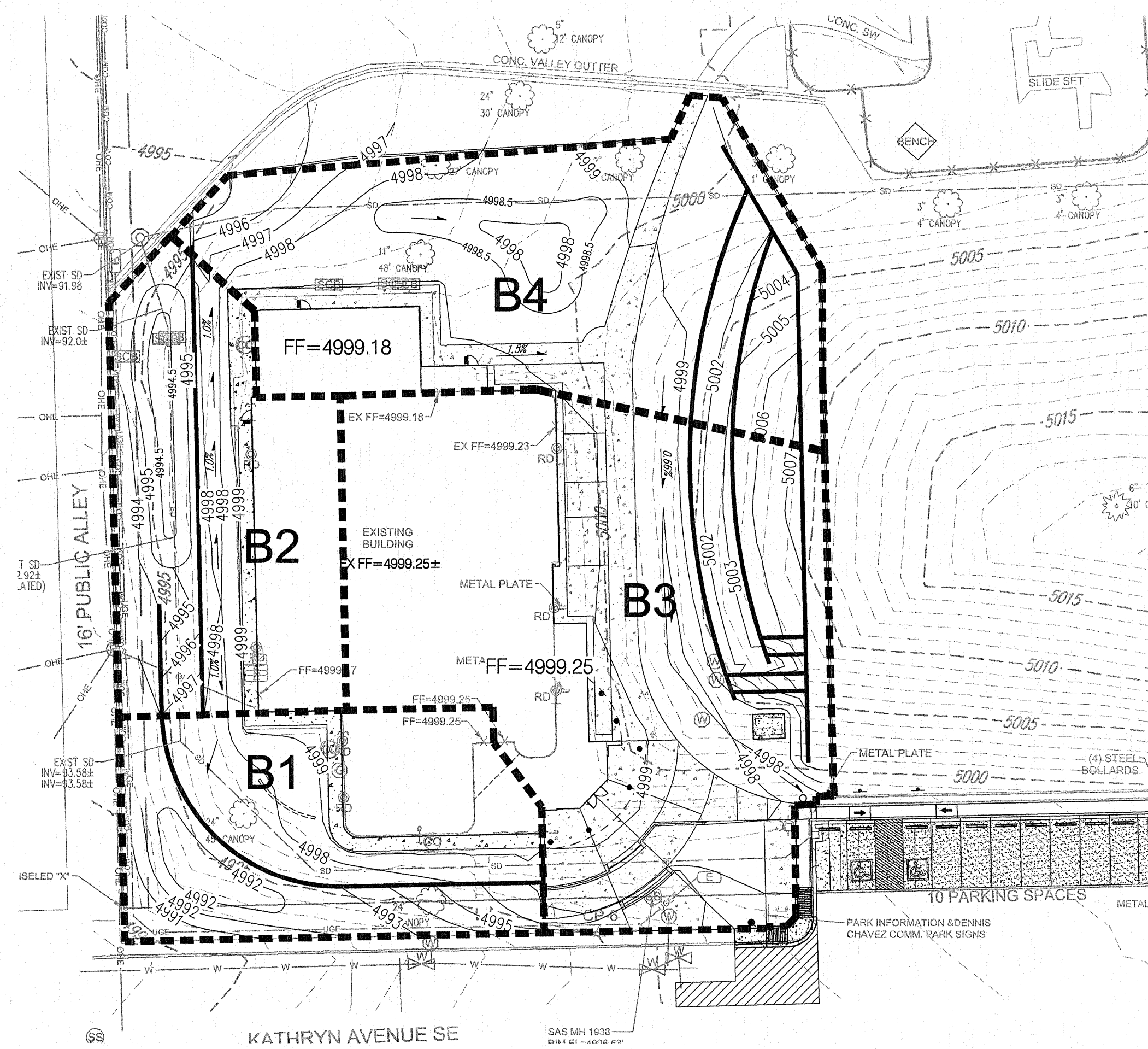
PROJECT NO: 5239.02
DRAWN BY: BO
CHECKED BY: GSB
GREER STAFFORD/SICF ARCHITECTURE
SHEET TITLE
GRADING PLAN
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EXISTING DRAINAGE MANAGEMENT PLAN



PROPOSED DRAINAGE MANAGEMENT PLAN

INTRODUCTION:

DENNIS CHAVEZ COMMUNITY CENTER IS LOCATED AT THE NORTHEAST CORNER OF KATHRYN AVE NE AND THE PUBLIC ALLEY EAST OF WALTER ST NE. THIS SITE IS NOT WITHIN A DEFINED FLOOD ZONE AS SHOWN ON FIRM MAP NUMBER 35001C0334G. THE PURPOSE OF THIS SUBMITTAL IS TO PROVIDE A DRAINAGE MANAGEMENT PLAN FOR THE DEVELOPMENT OF A BUILDING ADDITION TO THE DENNIS CHAVEZ COMMUNITY CENTER AND REQUEST BUILDING PERMIT APPROVAL.

EXISTING CONDITIONS:

THE 1.0 ACRE SITE IS CURRENTLY DEVELOPED WITH THE EXISTING COMMUNITY CENTER. A NEW ADDITION IS PROPOSED ON THE SOUTH AND EAST SIDES OF THE BUILDING. THE SITE SLOPES GENERALLY TO THE WEST AND FREE DISCHARGES INTO THE PUBLIC ALLEY AND KATHRYN AVE.

METHODOLOGY:

THE HYDROLOGIC ANALYSIS PROVIDED WITH THIS DRAINAGE MANAGEMENT PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 22.2 OF THE DPM. THE SITE IS LOCATED EAST OF THE RIO GRANDE WITHIN PRECIPITATION ZONE 2. LAND TREATMENT PERCENTAGES WERE CALCULATED BASED ON THE EXISTING AND PROPOSED CONDITIONS IN EACH ONSITE BASIN. THIS IS SUMMARIZED IN THE EXISTING AND PROPOSED BASIN DATA TABLES (THIS SHEET).

PROPOSED CONDITIONS:

THIS DRAINAGE MANAGEMENT PLAN WAS BASED ON A FULLY DEVELOPED SITE. IT WAS DETERMINED THAT THE MAXIMUM PEAK DISCHARGE FROM THE SITE IS APPROXIMATELY 3.9 CFS.

THE SITE IS DIVIDED INTO FOUR SMALL DRAINAGE BASINS. BASIN 1 FLOWS SOUTHWEST INTO THE ALLEY AND KATHRYN BASIN 2 FLOW WEST INTO THE ALLEY. BASIN 3 DRAINS SOUTH INTO KATHRYN VIA A SIDEWALK CULVERT AND LOW FLOWS ARE INTERCEPTED IN A STORM DRAIN INLET. THIS INLET DRAINS TO A CISTERN SYSTEM INSTALLED BY THE PARKS DEPARTMENT. BASIN 4 DRAINS WEST TO THE PUBLIC ALLEY.

THE PROPOSED DRAINAGE BASIN BOUNDARIES ARE THE SAME IN THE EXISTING AND PROPOSED CONDITIONS, BUT THE LAND TREATMENT INCREASES THE IMPERVIOUS AREA SLIGHTLY AND ELIMINATES SOME TURF AREA. THE OVERALL PEAK DISCHARGE INCREASES FROM 3.2 CFS TO 3.9 CFS.

FIRST FLUSH CALCULATIONS:

STORM RUNOFF FROM THE SITE IS CONVEYED TO SHALLOW DEPRESSED AREAS IN THE LANDSCAPE. THESE WATER HARVESTING AREAS RETAIN RUNOFF FROM THE "FIRST FLUSH" STORM. BASIN 1 IS PRIMARILY LANDSCAPE AND INCLUDES A SMALL PORTION OF THE EXISTING ROOF. THIS BASIN DRAINS TO A SMALL RETENTION AREA WITH A VOLUME OF 96 CUBIC FEET. THE REQUIRED RETENTION VOLUME IS 81 CUBIC FEET. BASIN 2 DRAINS TO A SMALL RETENTION AREA WITH A VOLUME OF 344 CUBIC FEET. THE REQUIRED RETENTION VOLUME IS 116 CUBIC FEET. BASIN 3 DRAINS TO A RETENTION AREA WITH A VOLUME OF 80 CUBIC FEET. THE REQUIRED VOLUME IS 313 CUBIC FEET. THE AVAILABLE VOLUME OF THIS BASIN IS LIMITED BY ITS PROXIMITY TO THE BUILDING AND SITE RETAINING WALLS. DRAINAGE FROM THIS BASIN WILL OVERFLOW THE RETENTION POND AND DRAIN TO THE STORM WATER CISTERN SYSTEM DESCRIBED ABOVE. BASIN 4 ALSO DRAINS TO A RETENTION AREA WITH A VOLUME OF 288 CUBIC FEET. THE REQUIRED VOLUME IS 70 CUBIC FEET. BASINS B1, B2 AND B4 HAVE ONSITE RETENTION PONDS WITH A VOLUMES THAT EXCEED THE REQUIRED VOLUME. THE VOLUME OF THE RETENTION POND IN BASIN 3 IS LESS THAN WOULD TECHNICALLY BE REQUIRED; HOWEVER THE EXCESS RUNOFF WILL BE INTERCEPTED AND CONVEYED TO A WATER HARVESTING CISTERN OPERATED AND MAINTAINED BY THE PARKS DEPARTMENT. ONSITE RETENTION VOLUME FOR BASIN 3 IS SLIGHTLY LESS THAN THE REQUIRED VOLUME, BUT DUE TO SITE CONSTRAINTS THE VOLUME PROVIDED WAS MAXIMIZED TO THE EXTENT TECHNICALLY FEASIBLE.

CONCLUSION:

THE PEAK DISCHARGE FROM THE SITE WAS CALCULATED TO BE 3.9 CFS, WHICH IS SLIGHTLY GREATER THAN IN THE EXISTING CONDITION. STORM WATER FROM THE FIRST FLUSH IS PASSIVELY TREATED WITHIN THE EXISTING LANDSCAPE AREAS. THE DESIGN INTENT IS IN CONFORMANCE WITH CITY OF ALBUQUERQUE HYDROLOGY REQUIREMENTS AND WE REQUEST BUILDING PERMIT APPROVAL.

DENNIS CHAVEZ COMMUNITY CENTER

Existing 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(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100-24hr) CF
			A	B	C	D				
EXB1	7482	0.17	0.0%	45.0%	20.0%	35.0%	3.30	0.6	1.32	910
EXB2	7435	0.17	0.0%	40.0%	20.0%	40.0%	3.42	0.6	1.39	958
EXB3	17015	0.39	0.0%	60.0%	10.0%	30.0%	3.09	1.2	1.22	1896
EXB4	12276	0.28	0.0%	70.0%	5.0%	25.0%	2.93	0.8	1.13	1261

DENNIS CHAVEZ COMMUNITY CENTER

Proposed Conditions Basin Data Table

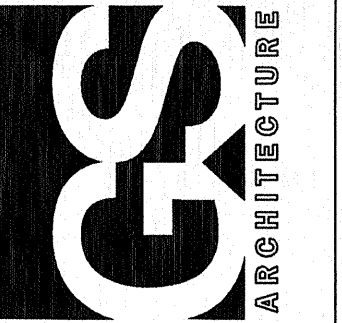
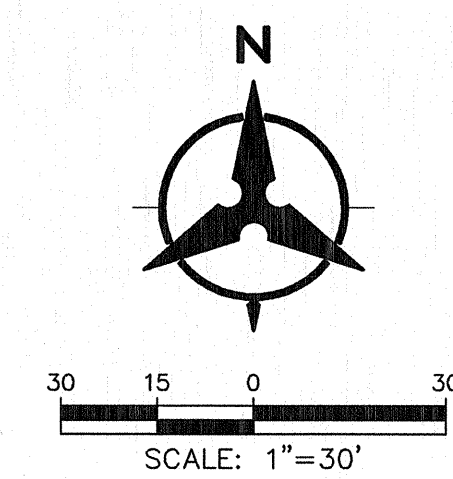
This table is based on the DPM Section 22.2, Zone: 2

Basin ID	Area (SQ. FT)	Area (AC.)	Land Treatment Percentages				Q(100) (cfs/ac.)	Q(100) (CFS)	WT E (inches)	V(100-24hr) CF	V(First Flush) CF
			A	B	C	D					
B1	7482	0.17	0.0%	0.0%	62.0%	38.0%	3.73	0.6	1.51	1034	81
B2	7435	0.17	0.0%	0.0%	45.0%	55.0%	4.00	0.7	1.67	1174	116
B3	17015	0.39	0.0%	0.0%	35.0%	65.0%	4.15	1.6	1.77	2883	313
B4	12276	0.28	0.0%	0.0%	80.0%	20.0%	3.45	1.0	1.33	1440	70

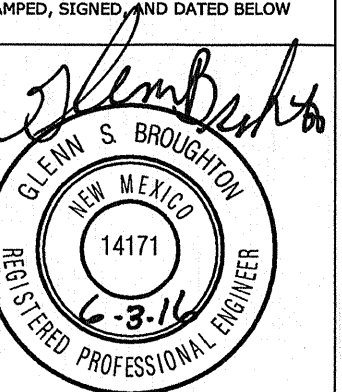
* "First Flush" volume is based on a precipitation depth of 0.34" which allows for a 0.1" initial abstraction. Volume calculation is based on impervious area only.

LEGEND

--- DRAINAGE BASIN BOUNDARY



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DENNIS CHAVEZ COMMUNITY CENTER
CITY OF ALBUQUERQUE DMD
715 KATHRYN AVENUE, SE ALBUQUERQUE, NM 87102

ISSUE:

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