

CITY OF ALBUQUERQUE



December 17, 2015

Fred Arfman, PE
ISAACSON & ARFMAN, P.A.
128 Monroe Street NE
Albuquerque, NM 87108

Richard J. Berry, Mayor

RE: Westgate Heights Park Addition, Unit 2 (File: M09D008B)
8810 Sonya Ave. SW
Grading Plan and Drainage Plan
Engineer's Stamp Date – 12/010/2015

Dear Mr. Arfman:

Based upon the information provided in your submittal received 12-10-15, the above referenced Grading Plan and Drainage Plan cannot be approved for Grading Permit and Paving Permit until the following comments are addressed.

- Provide spot and contour elevations on the Overall Grading and Drainage Plan sheet.
- Provide flow line elevations at the outfall for each proposed sidewalk culvert onsite.
- The total area for historic flows does not match the total area for developed flows in the Calculation section of the Overall Grading and Drainage Plan sheet. Review this information to ensure the total basin area for existing and proposed conditions match.
- The area of land treatment D used in the First Flush calculation shown appears to be based on information provided in the previous submittal. Update the First Flush calculation on the Grading General Notes and Details sheet to reflect the changes to the area of land treatment D shown in the Calculation section of the Overall Grading and Drainage Plan sheet.

PO Box 1293

Albuquerque

New Mexico 87103

If you have any questions, you can contact me at 924-3421.

www.cabq.gov

Sincerely,

Rudy Archuleta, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf Addressee via Email



City of Albuquerque

Planning Department
Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Westgate Heights Park Building Permit #: _____ City Drainage #: M09/D008B
DRB#: _____ EPC#: _____ Work Order#: _____
Legal Description: Westgate Heights Park Addition, Unit 2
City Address: 8810 Sonya Ave. SW - Albuquerque, NM

Engineering Firm: Isaacson & Arfman, P.A. Contact: Fred C. Arfman
Address: 128 Monroe Street NE - Albuquerque, NM 87108
Phone#: (505) 268-8828 Fax#: _____ E-mail: freda@iacivil.com

Owner: City of Albuquerque Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Architect: Morrow Reardon Wilkinson Miller, Ltd Contact: _____
Address: 210 La Veta Drive NE - Albuquerque, NM 87108
Phone#: (505) 268-2266 Fax#: _____ E-mail: _____

Other Contact: _____ Contact: _____
Address: _____
Phone#: _____ Fax#: _____ E-mail: _____

Check all that Apply:

DEPARTMENT:

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

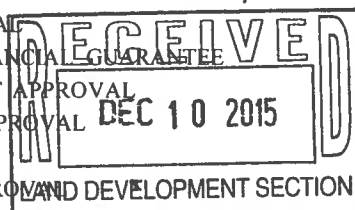
TYPE OF SUBMITTAL:

- ☐ 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) _____

IS THIS A RESUBMITTAL?: ☒ Yes ☐ No

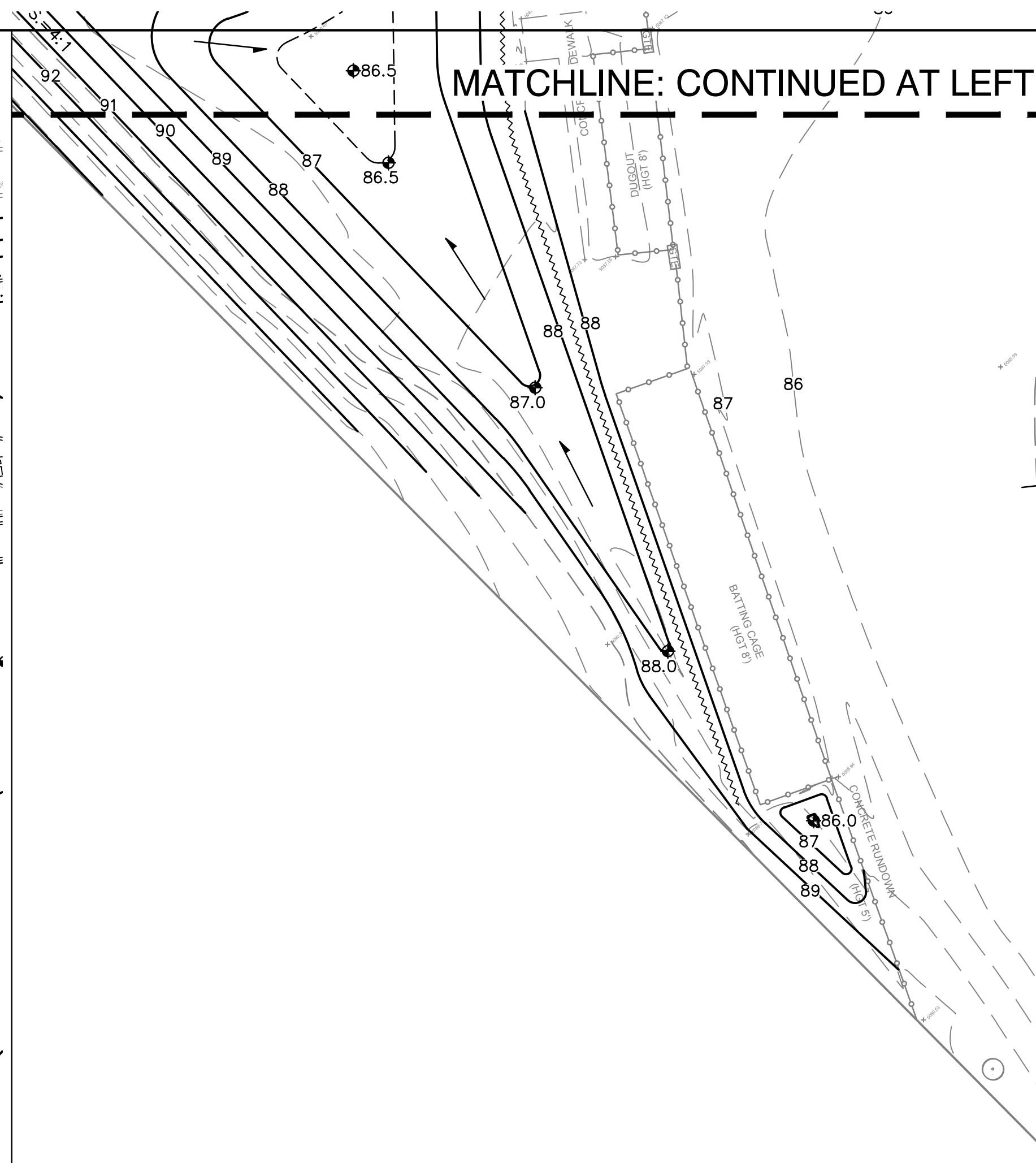
CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ 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
☐ PRE-DESIGN MEETING
☐ OTHER (SPECIFY) _____




DATE SUBMITTED: December 10, 2015 By: Fred C. Arfman

COA STAFF: _____ ELECTRONIC SUBMITTAL RECEIVED: _____




THESE KEYED NOTES ARE FOR USE ON GRADING AND DRAINAGE PLANS (NORTH AND SOUTH). NOT ALL NOTES ARE USED ON EACH SHEET. SEE CONSTRUCTION PLAN (SHEET 8) CONSTRUCTION DETAILS (SHEETS 10-13) AND LANDSCAPE PLAN (SHEET 16) FOR ADDITIONAL INFORMATION.

- | | | | | | | | |
|--|-----|--|--|--|--|--|--|
| ENGINEER'S SEAL | NO. | | | | | | |
|  <p><i>[Signature]</i>
12.09.15</p> | | | | | | | |

		REVISONS	
	NO.	DATE	REMARKS BY

DESIGNED BY:	BJB	DATE	12/09/15
DRAWN BY:	BJB	DATE	12/09/15
CHECKED BY:	FCA	DATE	12/09/15



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Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivill.com

2096 CG-101.dwg Dec 09, 2015

MRWM
LANDSCAPE ARCHITECTS
Morrow Reardon Wilkinson Miller, Ltd.
mrwmla.com 505 268 2266



CITY OF ALBUQUERQUE
STRATEGIC PLANNING AND DESIGN
PARKS AND RECREATION DEPARTMENT

WESTGATE HEIGHTS PARK

DRAINAGE AND GRADING PLAN 1 OF 2

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 632792		Zone Map No. M-9	Sheet 5 of 18	

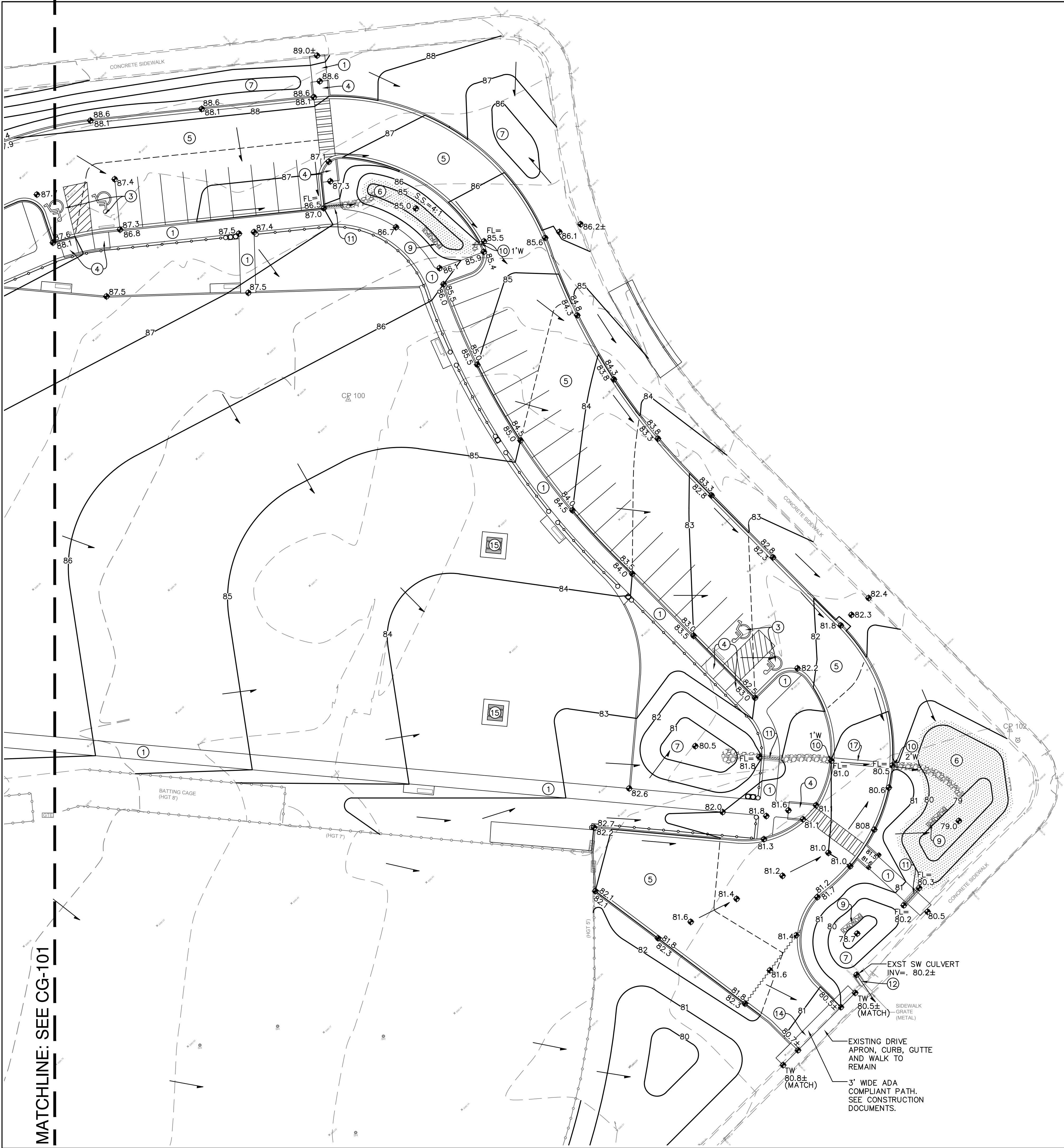
FOR REVIEW SUBMITTAL
DATE: DECEMBER 9, 2015

WESTGATE HEIGHTS PARK

PROJECT# 632792

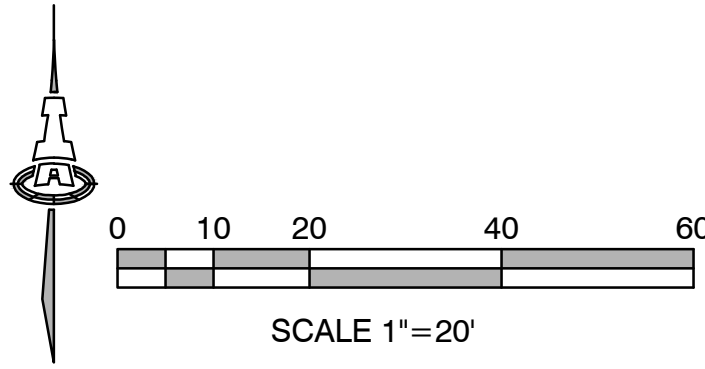
RECORD DRAWINGS
DATE: XX/XX/2015

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KEYED NOTES

- THESE KEYED NOTES ARE FOR USE ON GRADING AND DRAINAGE PLANS (NORTH AND SOUTH). NOT ALL NOTES ARE USED ON EACH SHEET. SEE CONSTRUCTION PLAN (SHEET 8) CONSTRUCTION DETAILS (SHEETS 10-13) AND LANDSCAPE PLAN (SHEET 16) FOR ADDITIONAL INFORMATION.
1. CONSTRUCT PEDESTRIAN WALK AT ELEVATIONS SHOWN. ALL WALKS TO BE ADA ACCESSIBLE (5% MAX. SLOPE, 2% MAX. CROSS-SLOPE) UNLESS NOTED.
 2. STEPS WITHIN WALK REQUIRED TO ACHIEVE GRADE DIFFERENCE SHOWN.
 3. SLOPES WITHIN HANDICAP PARKING AREA TO MEET ADA REQUIREMENTS. MAX. SLOPE = 2% IN ANY DIRECTION.
 4. CONSTRUCT ADA COMPLIANT RAMP. MAX. 1:12 SLOPE, 2% MAX. CROSS-SLOPE.
 5. NEW ASPHALT PAVEMENT WITH CONCRETE CURB AND GUTTER AT ELEVATIONS SHOWN.
 6. CONSTRUCT FIRST FLUSH RETENTION POND AT ELEVATIONS SHOWN. INSTALL ANGULAR ROCK TO DEFINE PERIMETER. SEE SHEET 7 OF 15 FOR ADDITIONAL INFORMATION.
 7. GRADE LANDSCAPING TO ELEVATIONS SHOWN FOR WATER HARVESTING.
 8. TRANSITION SLOPES TO ACHIEVE GRADE DIFFERENCES SHOWN. MAXIMUM SLOPE = 4:1.
 9. INSTALL PERCOLATION TRENCH WITHIN EACH FIRST FLUSH RETENTION POND. SEE 7 OF 15 FOR DETAIL.
 10. CONSTRUCT CURB OPENING TO PASS CONCENTRATED FLOW. SEE PLAN FOR WIDTH. SEE SHEET 7 OF 15 FOR DETAIL.
 11. CONSTRUCT 1.0' WIDE CONCRETE SIDEWALK CULVERT AT RIM/FLOWLINE ELEVATIONS SHOWN PER C.O.A. STD. DWG. 2236. SEE SHEET 7 OF 15 FOR MODIFIED SECTION B-B FROM C.O.A. STD. DWG. #2236.
 12. CONTRACTOR TO CLEAN / REPAIR EXISTING COVERED SIDEWALK CULVERT.
 13. CONSTRUCT NEW ENTRANCE DRIVE WITH ADA ACCESSIBLE CROSSING. SEE CONSTRUCTION PLAN SHEET 8 FOR ADDITIONAL INFORMATION REGARDING IMPROVEMENTS WITHIN THE R.O.W.
 14. NEW ADA ACCESSIBLE CROSSING ADJACENT TO EXISTING DRIVE PAD.
 15. CONSTRUCT CONCRETE PADS WITH 1% SLOPE TO DRAIN (TYPICAL ALL BENCHES, TABLES).
 16. CONSTRUCT RAMP TO PLAY AREA.
 17. OWNER'S OPTION: CONSTRUCT 2' WIDE CONCRETE ALLEY GUTTER PER C.O.A. STD. DWG. #2415A.



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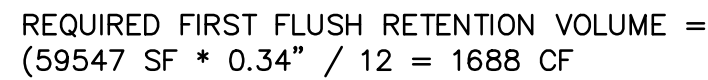
WESTGATE HEIGHTS PARK
DRAINAGE AND GRADING PLAN 2 OF 2

Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.

City Project No. 632792 Zone Map No. M-9 Sheet 6 of 18

ENGINEER'S SEAL		REVISIONS		SURVEY INFORMATION		BENCH MARKS		AS-BUILT INFORMATION	
						"ACS 8.49"		CONTRACTOR	
				NO.		BY		DATE	
								DATE	
								INSPECTOR'S ACCEPTANCE BY	
								DATE	
								VERIFICATION BY	
								DATE	
								DRAWINGS PREPARED BY	
								DATE	
								MICRO-FILM INFORMATION	
								RECORDED BY	
								DATE	
								NO.	

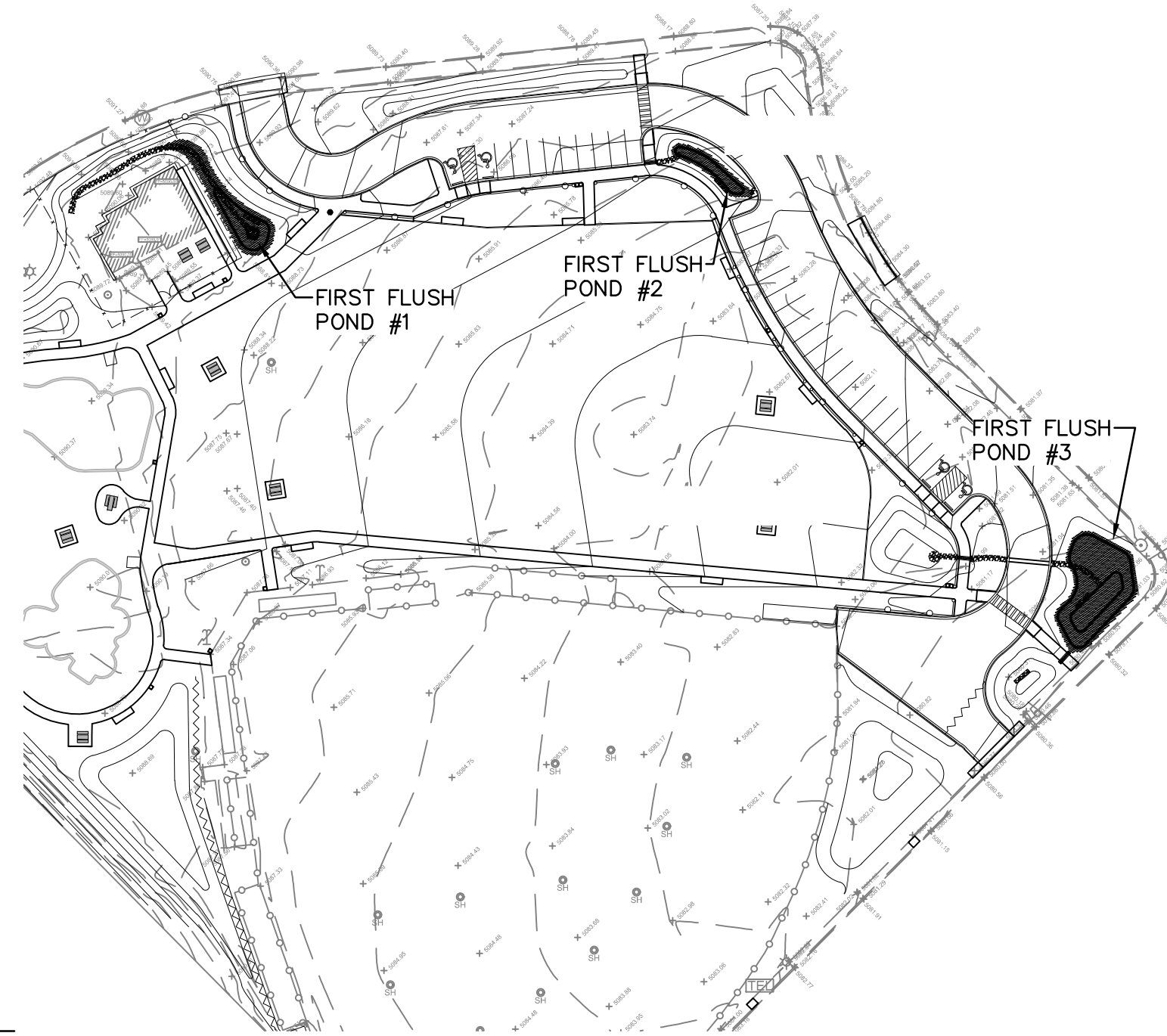
<p>A. ALL WORK DETAILED ON THESE PLANS AND PERFORMED UNDER THIS CONTRACT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROJECT GEOTECHNICAL REPORT. WHERE APPLICABLE, CITY OF ALBUQUERQUE STANDARDS APPLY.</p> <p>B. THE CONTRACTOR SHALL ABIDE BY ALL STATE, LOCAL, AND FEDERAL LAWS, CODES, RULES AND REGULATIONS WHICH APPLY TO THE CONSTRUCTION OF THESE IMPROVEMENTS, INCLUDING EPA AND ADA REQUIREMENTS.</p> <p>C. ALL SUBGRADE, OVEREXCAVATION, BACKFILL, AND FILL SHALL BE PLACED AND / OR COMPACTED PER THE GEOTECHNICAL REPORT AND CITY OF ALBUQUERQUE SPECIFICATIONS.</p> <p>D. COORDINATE WORK WITH SITE PLAN, PAVING PLAN, DEMOLITION PLAN, AND LANDSCAPE PLAN.</p> <p>E. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY HORIZONTAL AND VERTICAL OBSTRUCTIONS AND ADJUSTMENTS IN ACCORDANCE WITH ALL EXISTING INFRASTRUCTURE PRIOR TO CONSTRUCTION. REPORT ALL DISCREPANCIES TO THE LANDSCAPE ARCHITECT AND VERIFY THE INTENT BEFORE PROCEEDING.</p> <p>F. CONTRACTOR SHALL OBTAIN ALL REQUIRED INSPECTIONS OF THE WORK.</p> <p>G. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE PROPERTY AND/OR PROJECT LIMITS. ANY DAMAGE TO ADJACENT STRUCTURES RESULTING FROM THE CONSTRUCTION PROCESS SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE. CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING EXISTING CONDITIONS PRIOR TO CONSTRUCTION.</p>	<p>H. CONSTRUCTION EQUIPMENT SHALL NOT OBSTRUCT DRIVEWAYS. EQUIPMENT SHALL ONLY OBSTRUCT DESIGNATED TRAFFIC LANES IF APPROPRIATE BARRICADING PERMITS HAVE BEEN OBTAINED.</p> <p>I. THE CONTRACTOR SHALL MAINTAIN ALL BARRICADING AND CONSTRUCTION SIGNING AT ALL TIMES. THE CONTRACTOR SHALL VERIFY THE PROPER LOCATION OF ALL BARRICADING AT THE END AND BEGINNING OF EACH DAY.</p> <p>J. PAVEMENT GRADES IN MARKED HANDICAPPED PARKING AREAS MAY NOT EXCEED 2.0% IN ANY DIRECTION. FOR ADA ACCESSIBILITY, MAXIMUM ALLOWABLE CROSS SLOPE IS 2.0% AND MAXIMUM LONGITUDINAL SLOPE WITHOUT RAMP IS 5.0%. FOLLOW ALL ADA ACCESSIBILITY GUIDELINES OR CITY CODES, WHICHEVER IS MORE STRINGENT.</p> <p>K. ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OF OFFSITE.</p> <p>L. PROPOSED SPOT AND CONTOUR ELEVATIONS SHOWN REPRESENT TOP OF FINISH MATERIAL (I.E. TOP OF CONCRETE, TOP OF CONCRETE BUILDING PAD, TOP OF PAVEMENT MATERIAL, TOP OF LANDSCAPING MATERIAL, ETC.). CONTRACTOR SHALL GRADE, COMPACT SUBGRADE AND DETERMINE EARTHWORK ESTIMATES BASED ON ELEVATIONS SHOWN MINUS FINISH MATERIAL THICKNESSES.</p> <p>M. MAXIMUM UNPROTECTED SLOPES SHALL BE 4:1.</p> <p>N. EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. CONTRACTOR SHALL CONTACT CITY 311 FOR UTILITY LINE SPOTS TWO WORKING DAYS PRIOR TO CONDUCTING SITE FIELD WORK.</p>	<p>O. CONTRACTOR SHALL FIELD VERIFY AND LOCATE ALL UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF NECESSARY DRY UTILITY ADJUSTMENTS.</p> <p>P. A CURRENT STORMWATER CONTROL PERMIT, INCLUDING AN EROSION SEDIMENT CONTROL PLAN (E.S.C.) FOR EROSION AND SEDIMENT CONTROL IS REQUIRED FOR ALL CONSTRUCTION, DEMOLITION CLEARING, AND GRADING OPERATIONS THAT DISTURB THE SOIL ON ONE ACRE OR MORE OF LAND. OWNER WILL COORDINATE.</p> <p>Q. POST-CONSTRUCTION MAINTENANCE FOR STORMWATER FACILITIES WILL BE THE RESPONSIBILITY OF THE FACILITIES OWNER. PERIODIC INSPECTION AND CERTIFICATIONS OF THE FACILITIES MAY BE REQUIRED BY THE CITY ENGINEER.</p> <p>R. STORMWATER CONTROL MEASURES SHOWN ON THIS PLAN ARE REQUIRED TO PROVIDE MANAGEMENT OF "FIRST FLUSH" (DEFINED AS THE 90TH PERCENTILE STORM EVENT OF 0.4" OF STORMWATER WHICH DISCHARGES DIRECTLY TO A PUBLIC STORM DRAINAGE SYSTEM).</p> <p>S. ADJUST ANY RIMS OF EXISTING UTILITY FEATURES AS NECESSARY TO MATCH NEW GRADES. UTILITIES IN PAVED AREAS SHALL BE HS-25 TRAFFIC RATED.</p> <p>T. PAVING AND ROADWAY GRADES SHALL BE $\pm 0.1'$ FROM PLAN ELEVATIONS.</p> <p>U. WHERE GRADES BETWEEN NEW AND EXISTING ARE SHOWN AS "MATCH" OR "\pm", TRANSITIONS SHALL BE SMOOTH.</p>	<p>V. ALL EROSION PROTECTION TO BE FRACTURED FACE ROCK (F.F. ROCK) DEFINED AS 6" AVG. DIA. ANGULAR FACED ROCK PLACED OVER GEOTEX 501 NON-WOVEN GEOTEXTILE (O.E.). NOTE: IF OWNER DOES NOT WANT LOOSE ROCK, GROUTED ROCK OR WIRE ENCLOSED ROCK MAY BE SUBSTITUTED AT ALL AREAS REFERENCING F.F. ROCK EROSION PROTECTION. OWNER'S OPTION.</p> <p>W. CONTRACTOR SHALL COMPLY WITH LOCAL REGULATIONS FOR RESEEDING OF DISTURBED AREAS. RESEEDING INSPECTION IS NOT INCLUDED AS PART OF ENGINEER'S CERTIFICATION OF SUBSTANTIAL COMPLIANCE.</p> <p>X. POND AND STORM DRAIN DESIGN PARAMETERS (TOP OF POND, BOTTOM OF POND, RIMS, INVERTS, PIPE SIZES, AREA OF POND, ETC.) TO BE STRICTLY ADHERED TO.</p> <p>Y. ENGINEER RECOMMENDS THAT OWNER MAINTAIN EROSION PROTECTION ELEMENTS. ENGINEER RECOMMENDS THAT OWNER INSPECT AND REPAIR AFTER EACH RAINFALL TO IDENTIFY NEW AREAS OF EROSION AND INSTALL ADDITIONAL EROSION PROTECTION AS NEEDED BASED ON ACTUAL OCCURRENCES.</p> <p>Z. MEASURES REQUIRED FOR EROSION AND SEDIMENT CONTROL SHALL BE INCIDENTAL TO THE PROJECT COST.</p>
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FIRST FLUSH POND #1		
Contour	Area	Volume
5088.50	1051	
5087.00	30	811 CF
TOTAL VOL.		811 CF

FIRST FLUSH POND #2		
Contour	Area	Volume
5085.50	445	
5085.00	94	135 CF
TOTAL VOL.		135 CF

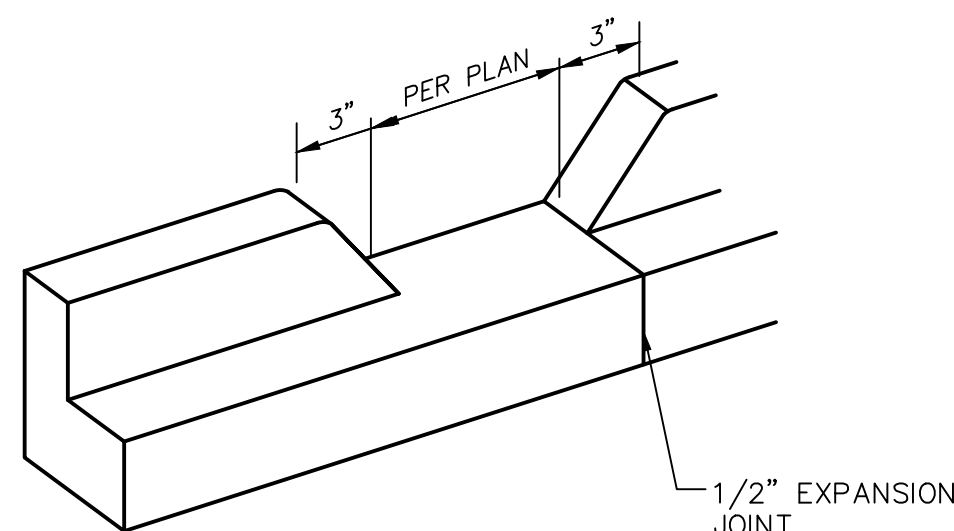
FIRST FLUSH POND #3		
Contour	Area	Volume
5080.30	1965	
5079.00	381	1525 CF
TOTAL VOL.		1525 CF



SCALE: N.T.S.

REQUIRED FIRST FLUSH RETENTION POND VOLUME = 1688 CF
PROVIDED FIRST FLUSH RETENTION POND VOLUME = 2471 CF

SCALE: N.T.S.



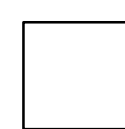
GENERAL NOTES

1. EDGES NOT SPECIFICALLY DIMENSIONED SHALL BE SHAPED WITH A 3/8" EDGING TOOL.

SCALE: N.T.S.



SCALE: N.T.S.



SCALE: N.T.S.




 CITY OF ALBUQUERQUE
 STRATEGIC PLANNING AND DESIGN
 PARKS AND RECREATION DEPARTMENT

WESTGATE HEIGHTS PARK
GRADING GENERAL NOTES AND DETAILS

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
City Project No. 632792		Zone Map No. M-9	Sheet 7 of 18	

FOR REVIEW SUBMITTAL
DATE: DECEMBER 9, 2015

WESTGATE HEIGHTS PARK

PROJECT# 632792

RECORD DRAWINGS
DATE: XX/XX/2015