CITY OF ALBUQUERQUE

December 12, 2014



Jeffrey G. Mortensen, P.E. High Mesa Consulting Group 6010-B Midway Park Blvd NE Albuquerque, NM 87109

Re: Chaparral E.S. Grading and Drainage Plan, 3625 Milne Rd. NW

Engineer's Stamp dated 05-21-2013 (F-10/D005)

Engineer's Certification dated 12-12-14

Dear Mr. Mortensen,

Based upon the information provided in the submittal received 12-12-14, the above referenced Certification is acceptable for a release of a 90-Day Temporary Certificate of Occupancy by Hydrology.

If you have any questions, you can contact me at 924-3695.

PO Box 1293

Albuquerque

New Mexico 87103

C:

email, recipient

Rita Harmon, P.E.

Sincerely,

Senior Engineer, Planning Dept. Development and Building Services

www.cabq.gov

DUE TO THE INCREASE IN DEVELOPED RUNOFF, AS WELL AS THE CONCENTRATION OF FLOWS THAT FORMERLY SHEET FLOWED TO THE LADERA BASIN 16

THE EXISTING PAVED DROP—OFF LOOP AND SERVICE DRIVE IMMEDIATELY WEST OF THE EXISTING BUILDING WILL BE DEVELOPED UNDER A FUTURE PHASE TO BE CONSTRUCTED BY SEPARATE GRADING AND PAVING PERMIT SUBMITTAL. THE FUTURE DEVELOPMENT SHALL CONSIST OF MODIFYING THE EXISTING PAVING TO FACILITATE STUDENT ACCESS AND POTENTIAL PORTABLE CLASSROOM INSTALLATIONS. THE FUTURE MODIFICATIONS WILL CONTINUE TO DISCHARGE DEVELOPED

THE GRADING PLAN SHOWS 1.) EXISTING GRADES INDICATED BY SPOT ELEVATIONS AND CONTOUR AT 1'-0" INTERVALS AS TAKEN FROM THE ABOVE REFERENCED TOPOGRAPHIC SURVEY DATED 04/29/2010 (NMPS 11184) AND SUPPLEMENTED BY RECORD DRAWING DATA PREPARED BY HIGH MESA CONSULTING GROUP, 2.) PROPOSED GRADES INDICATED BY SPOT ELEVATIONS AND CONTOURS AT 1'-0" INTERVALS, 3.) THE LIMIT AND CHARACTER OF THE EXISTING IMPROVEMENTS TAKEN FROM THE ABOVE REFERENCED TOPOGRAPHIC SURVEY (NMPS 11184) AND SUPPLEMENTAL RECORD DATA (NMPE 8547), 4.) THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS, AND 5.) CONTINUITY BETWEEN EXISTING AND PROPOSED GRADES. AS SHOWN BY THIS PLAN, THE PROPOSED IMPROVEMENTS WILL CONSIST OF A NEW BUILDING ADDITION, PAVED SERVICE ROAD AND ENTRANCE, PAVED BUS AND PARENT DROP-OFF ROADS, NEW PLAY AREAS AND ASSOCIATED

THE CALCULATIONS THAT APPEAR HEREON ANALYZE THE EXISTING AND DEVELOPED CONDITIONS FOR THE 100-YEAR. 6-HOUR RAINFALL EVENT. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS, AS SET FORTH IN THE REVISION OF SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY, 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED BY THE PROPOSED DEVELOPMENT. CAPACITY CALCULATIONS FOR THE PROPOSED STORM DRAIN PIPES HAVE BEEN PERFORMED USING MANNING'S EQUATION. AS INDICATED BY THE APPROVED 1983 AND 2009 CHAPARRAL ELEMENTARY SCHOOL DRAINAGE PLANS. THE PROPOSED IMPROVEMENTS WILL RESULT IN A MINOR INCREASE IN PEAK PREVIOUSLY APPROVED MASTER DRAINAGE PLANS IS APPROPRIATE DUE TO THE CAPACITY OF THE SOUTH SUMP AND ITS IMMEDIATE PROXIMITY TO THE SITE. NO

THE CONTINUED FREE DISCHARGE OF RUNOFF FROM THIS SITE TO THE PUBLIC LADERA BASIN 16 SOUTH SUMP IS APPROPRIATE BASED UPON THE FOLLOWING

MODIFICATION TO AN EXISTING SITE WITHIN AN INFILL AREA.

- 2. THE PROPOSED IMPROVEMENTS ARE CONSISTENT WITH THE DRAINAGE CONCEPTS SET FORTH BY THE PREVIOUSLY APPROVED MDP'S REFERENCED 3. A NEW PRIVATE STORM DRAIN IN THE SOUTHEAST CORNER OF THE SCHOOL SITE WILL REQUIRE A NEW OUTFALL TO THE PUBLIC LADERA BASIN 16
- SOUTH SUMP AT THE EXTREME SOUTHWEST CORNER OF THE SUMP.
- 4. THE EXISTING 24" STORM DRAIN OUTFALL INTO THE PUBLIC LADERA BASIN 16 SOUTH SUMP WILL BE UPSIZED TO 30" DUE TO THE CONCENTRATION OF SITE RUNOFF FLOWS AT THE EAST END OF THE SITE.
- 5. THE CONCENTRATION OF RUNOFF FROM THE SITE TO TWO STORM DRAIN DISCHARGE POINTS WILL ALLEVIATE EROSION ALONG THE WEST SLOPE OF THE LADERA BASIN 16 SOUTH SLOPE ABUTTING THE PROJECT SITE.
- 6. THE PROPOSED IMPROVEMENTS WILL RESULT IN A MINOR INCREASE IN PEAK DISCHARGE OF RUNOFF LEAVING THE SITE. THIS MINOR INCREASE WILL HAVE NO ADVERSE IMPACT ON DOWNSTREAM PROPERTIES DUE TO THE DIRECT DISCHARGE OF RUNOFF VIA PRIVATE STORM DRAINS TO THE LADERA BASIN 16 SOUTH SUMP.
- 7. THE PROPOSED IMPROVEMENTS WILL RESULT IN A MINOR INCREASE IN VOLUME OF RUNOFF LEAVING THE SITE. THIS MINOR INCREASE WILL HAVE NO ADVERSE IMPACT ON DOWNSTREAM PROPERTIES DUE TO THE DIRECT DISCHARGE OF RUNOFF VIA PRIVATE STORM DRAINS TO THE LADERA BASIN 16
- SOUTH SUMP. 8. THE EXISTING AND APPROVED DRAINAGE PATTERN OF DIRECT FREE DISCHARGE FROM THE SITE TO LADERA BASIN 16 SOUTH SUMP WILL NOT BE ALTERED AND HENCE MAINTAINED.
- 9. THE FUTURE PHASE SHOWN HEREON WILL BE CONSTRUCTED UNDER SEPARATE GRADING AND PAVING PERMIT SUBMITTAL, TO BE COMMENCED UPON

	CULATION:			
	IARACTERISTICS RECIPITATION ZONE =	1		
	₁₀₀ = P ₃₆₀ =	2.20		
C. TO	TAL PROJECT AREA (A			
D. EX	ISTING (CURRENT) LANI	10.00 AC		
	PORTION OF BASIN 1		0.86 AC	
	TREATMENT B D	AREA (SF/AC) 13,200 / 0.30 24,200 / 0.56		% 35 65
2.	PORTION OF BASIN 3 TREATMENT C D	14,400 SF = AREA (SF/AC) 13,600 / 0.31 800 / 0.02	0.33 AC	% 94 6
3.	PORTION OF BASIN 4/ TREATMENT C D	A 30,100 SF = AREA (SF/AC) 3,010 / 0.07 27,090 / 0.62	0.69 AC	% 10 90
4.	BASIN 4-B TREATMENT C D	166,910 SF = AREA (SF/AC) 130,580 / 2.99 36,330 / 0.83	3.83 AC	
5.	BASIN 4-C TREATMENT B C	62,700 SF = AREA (SF/AC) 54,450 / 1.25 6,600 / 0.15	1.44 AC	% 87 10
6.	D BASIN 5 TREATMENT B C	1,650 / 0.04 124,300 SF = AREA (SF/AC) 7,700 / 0.18 30,160 / 0.69	2.85 AC	3 % 6 24
	D	86,440 / 1.98		70
	VELOPED LAND TREAT BASIN 1-A	MENT 34,600 SF =	0.70.40	
1.	TREATMENT B D	34,500 SF = AREA (SF/AC) 10,900 / 0.25 23,700 / 0.54	0.79 AC	% 32 68
2.	BASIN 4-A-1 TREATMENT B C D	61,300 SF = AREA (SF/AC) 15,800 / 0.36 4,400 / 0.10 41,100 / 0.94	1.40 AC	% 26 7 67
3.	BASIN 4-B TREATMENT B C D	144160 SF = AREA (SF/AC) 17,050 / 0.39 104,480 / 2.40 22,630 / 0.52	3.31 AC	% 12 72 16
4.	BASIN 5-A	73,900 SF = AREA (SF/AC) 29,600 / 0.68 44,300 / 1.02	1.70 AC	% 40 60
5.	BASIN 5-B-1 TREATMENT B C D	61,000 SF = AREA (SF/AC) 1,700 / 0.04 10,900 / 0.25 48,400 / 1.11	1.40 AC	% 3 18 79
6.	BASIN 5-B-2 TREATMENT B C	60,500 SF = AREA (SF/AC) 4,000 / 0.09 24,000 / 0.55	1.39 AC	% 7 40
I. <u>HYDROL</u>	D _OGY	32,500 / 0.75		54
	ING (CURRENT) CONDIT	TON		
1. PO	PRTION OF BASIN 1			
a.	VOLUME $E_W = (E_A A_A + E_B A_B + E_C A_B +$	· · · · · ·		1.51 IN 4,710 CF
b.	PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_P = Q_{100} = ((2.03*0.38))$			3.0 CFS
2. PO	PRTION OF BASIN 3			
a.	VOLUME $E_W = (E_A A_A + E_B A_B + E_C A_B +$) + (1.97*0.02)/0.33 =		1.04 IN
b.	PEAK DISCHARGE Q _P = Q _{PA} A _A + Q _{PB} A _B +			1,250 CF
3. PO	$Q_P = Q_{100} = (2.87*0.31)$ PRTION OF BASIN 4-A) + (4.37*0.02) =		1.0 CFS
	VOLUME			
		·: :		1.87 IN 4,690 CF
b.	PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B +$	0 4 +0 4		

B. DEVELOPED CONDITION

b. PEAK DISCHARGE

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 $E_{W} = (E_{A}A_{A} + E_{B}A_{B} + E_{C}A_{C} + E_{D}A_{D})/A_{T}$

 $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$

 $E_{W} = (E_{A}A_{A} + E_{B}A_{B} + E_{C}A_{C} + E_{D}A_{D})/A_{T}$

 $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$

c. 12" STORM DRAIN CAPACITY, S = 3.0%

 $Q_P = Q_{100} = ((2.03*0.68) + (4.37*1.02)) =$

 $Q_{CAP} = C_m/n*A*R^{2/3}*S^{1/2}$ (MANNING'S EQUATION)

n = 0.013 $P = 2 *_{\pi} * 0.75 FT = 4.71 FT$

((0.67*0.04) + (0.99*0.25) + (1.97*1.11))/1.40 =

 $V_{100} = (E_W/12)A_T = (1.76/12)1.40 = 0.2054 \text{ AC-FT} =$

 $Q_P = Q_{100} = ((2.03*0.04) + (2.87*0.25) + (4.37*1.11)) =$

 $Q_{CAP} = C_m/n*A*R^{2/3}*S^{1/2}$ (MANNING'S EQUATION)

 $C_m = 1.49$ A = 0.75 FT * π = 1.77 SF

 $Q_{CAP} = 1.49/0.013 * 1.77 * 0.375^{2/3} * 0.012^{1/2}$

 $Q_{CAP} = 11.6 \text{ CFS} > 2*Q_{5-B-1} = 11.4 \text{ CFS}; \text{ OK}$

n = 0.013 $P = 2 *_{\pi} * 0.75 FT = 4.71 FT$

 $E_W = ((0.67*0.09) + (0.99*0.55) + (1.97*0.75))/1.39 =$

 $V_{100} = (E_W/12)A_T = (1.50/12)1.39 = 0.1736 \text{ AC-FT} =$

 $Q_P = Q_{100} = ((2.03*0.09) + (2.87*0.55) + (4.37*0.75)) =$

c. EXISTING 24" STORM DRAIN TIE-IN CAPACITY, S = 0.4% (FROM 2009 CMP)

THEREFORE EXISTING 24" SD OUTFALL REQUIRES UPSIZING

 $Q_{30"CAP} = 26.0 CFS > Q_{EXIST} + Q_{5-B-1} + Q_{5-B-2} = 26.0 CFS$; OK

 $\Sigma V_{100} = 4,500 + 7,970 + 13,330 + 8,930 + 8,950 + 7,560$

 $\Sigma Q_{100} = 2.9 + 5.1 + 9.9 + 5.8 + 5.6 + 5.0$

 $\Sigma V_{100} = V_{100 \ 1-A} + V_{100 \ 4-A-1} + V_{100 \ 4-B} + V_{100 \ 5-A} + V_{100 \ 5-B-1} + V_{100 \ 5-B-2}$

 $\Sigma Q_{100} = Q_{100 \ 1-A} + Q_{100 \ 4-A-1} + Q_{100 \ 4-B} + Q_{100 \ 5-A} + Q_{100 \ 5-B-1} + Q_{100 \ 5-B-2}$

 $Q_{EXIST\ 24''\ CAP} = 20.7\ CFS > Q_{100\ EXIST\ 2009\ MDP} = 15.6\ CFS$; 5.1 CFS AVAILABLE.

 $Q_{EXIST 24" CAP} = 20.7 CFS < Q_{EXIST} + Q_{5-B-1} + Q_{5-B-2} = 15.6 + 5.6 + 4.8 CFS = 26.0 CFS$

 $C_m = 1.49$ A = 0.75 FT * π = 1.77 SF

 $Q_{CAP} = 1.49/0.013 * 0.79 * 0.25^{2/3} * 0.0300^{1/2}$

 $Q_{CAP} = 6.2 \text{ CFS} > Q_{5-A} = 5.8 \text{ CFS}$; OK

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

c. 18" STORM DRAIN CAPACITY, S = 1.2%

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$

 $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$

d. NEW 30" STORM DRAIN CAPACITY, S = 0.4%

 $Q_{CAP} = C_m/n*A*R^{2/3}*S^{1/2}$ (MANNING'S EQUATION)

 $C_m = 1.49$ A = $(1.25 \text{ FT})^2 *_{\pi} = 4.91 \text{ SF}$

n = 0.013 $P = 2 *_{\pi} * 1.25 FT = 7.85 FT$

 $Q_{CAP} = 1.49/0.013 * 4.91 * 0.625^{2/3} * 0.0040^{1/2}$

 $E_W = ((0.67*0.68) + (1.97*1.02))/1.70 =$

 $Q_P = Q_{100} = ((2.03*0.25) + (4.37*0.54)) =$

 $E_W = ((0.67*0.25) + (1.97*0.54))/0.79 =$

 $V_{100} = (E_W/12)A_T = (1.56/12)0.79 = 0.1033 \text{ AC-FT} =$

 $E_W = ((0.67*0.36) + (0.99*0.10) + (1.97*0.94))/1.41 =$

 $V_{100} = (E_W/12)A_T = (1.56/12)1.41 = 0.1829 AC-FT =$

 $Q_P = Q_{100} = ((2.03*0.36) + (2.87*0.10) + (4.37*0.94)) =$

 $E_W = ((0.67*0.39) + (0.99*2.40) + (1.97*0.52))/3.31 =$

 $V_{100} = (E_W/12)A_T = (1.11/12)3.31 = 0.3061 AC-FT =$

 $Q_P = Q_{100} = ((2.03*0.39) + (2.87*2.40) + (4.37*0.52)) =$

 $V_{100} = (E_W/12)A_T = (1.45/12)1.70 = 0.2050 \text{ AC-FT} =$

1.56 IN

4,500 CF

2.9 CFS

7,970 CF

5.1 CFS

1.11 IN

13,330 CF

9.9 CFS

8,930 CF

5.8 CFS

5.6 CFS

1.50 IN

7,560 CF

R = A/P = 0.625 FT

S = 0.0040 FT/FT

(INCREASE)

1.3 CFS (INCREASE)

R = A/P = 0.375 FT

S = 0.0120 FT/FT

R = A/P = 0.375 FT

S = 0.0120 FT/FT

1. BASIN 1-A

2. BASIN 4-A-1

3. BASIN 4-B

4. BASIN 5-A

a. VOLUME

5. BASIN 5-B-1

6. BASIN 5-B-2

a. VOLUME

b. PEAK DISCHARGE

7. TOTAL PROJECT SITE

 $\Sigma V_{100, DEV} = 51,230 CF$

 $\Sigma Q_{100, DEV} = 34.5 CFS$

a. VOLUME $(\Sigma V_{100, DEV} - \Sigma V_{100, EXIST})$

 $\Delta Q_{100} = 34.5-33.2 =$

 $\Delta V_{100} = 51,230 - 48,300 =$

b. PEAK DISCHARGE (ΣQ_{100, DEV} - ΣQ_{100, EXIST})

b. PEAK DISCHARGE

1. TOTAL PROJECT SITE

a. VOLUME

a. VOLUME

b. PEAK DISCHARGE

a. VOLUME

a. VOLUME

a. VOLUME

a. VOLUME $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$ $E_W = (0.99*2.99) + (1.97*0.83)/3.82 =$ 1.20 IN $V_{100} = (E_W/12)A_T = (1.20/12)3.82 = 0.3824 \text{ AC-FT} =$ 16,690 CF b. PEAK DISCHARGE $Q_{P} = Q_{PA}A_{A} + Q_{PB}A_{B} + Q_{PC}A_{C} + Q_{PD}A_{D}$ $Q_P = Q_{100} = (2.87*2.99) + (4.37*0.83) =$ 12.2 CFS

5. BASIN 4-C a. VOLUME

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$ ((0.67*1.25) + (0.99*0.15) + (1.97*0.04))/1.44 =0.74 IN $V_{100} = (E_W/12)A_T = (0.74/12)1.44 = 0.0887 \text{ AC-FT} =$ 3,870 CF b. PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$ $Q_P = Q_{100} = ((2.03*1.25) + (2.87*0.15) + (4.37*0.04)) =$ 3.1 CFS

6. BASIN 5 WITH PORTION OF 4-B

 $E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/A_T$ $E_W = ((0.67*0.18) + (0.99*0.69) + (1.97*1.98))/2.85 =$ $V_{100} = (E_W/12)A_T = (1.65/12)2.85 = 0.3920 \text{ AC-FT} =$ 17,090 CF b. PEAK DISCHARGE $Q_P = Q_{PA}A_A + Q_{PB}A_B + Q_{PC}A_C + Q_{PD}A_D$

 $Q_P = Q_{100} = ((2.03*0.18) + (2.87*0.69) + (4.37*1.98)) =$ 7. TOTAL PROJECT SITE

a. VOLUME ∑V₁₀₀ = V₁₀₀ BASIN 1 + V₁₀₀ BASIN 3 + V₁₀₀ BASIN 4-A + V₁₀₀ BASIN 4-B + V₁₀₀ BASIN 4-C + V₁₀₀ BASIN 3 + V₁₀₀ $\nabla V_{100} = 4.710 + 1.250 + 4.690 + 16.690 + 3.870 + 17.090$ $\Sigma V_{100, EXIST} = 48,300 CF$

11.0 CFS

b. PEAK DISCHARGE ΣQ100 = Q100 BASIN 1 + Q100 BASIN 3 + Q100 BASIN 4-A + Q100 BASIN 4-B + Q100 BASIN 4-C + Q100 BASIN 3 + Q 100 $\Sigma Q_{100} = 3.0 + 1.0 + 2.9 + 12.2 + 3.1 + 11.0$ $\Sigma Q_{100, EXIST} = 33.2 CFS$

RECORD DRAWING FOR CERTIFICATION, SEE SHEET C-103

2,930 CF

EXISTING LEGEND ASBESTOS CONCRETE PIPE ASPHALT PATH WATER AIR RELEASE VALVE ASPH BREAKER BOX BASKETBALL GOAL POST BRICK COLUMN **BUILDING OVERHANG** BIKE RACK BACKSTOP BRICK WALL COMMUNICATION CURB AND GUTTER COMMUNICATION BY PAINT MARK COMMUNICATION BOX CONCRETE CURB COMMUNICATION CONDUIT CONCRETE GUARD POST CONCRETE HEADER WALL CONCRETE ISLAND CENTERLINE CENTERLINE OF DOOR CENTERLINE OF DOUBLE DOOR CHAINLINK FENCE CORRUGATED METAL PIPE CONCRETE MOW STRIP CONCRETE MASONRY UNIT SANITARY SEWER CLEANOUT CONC COP CONCRETE CURB OPENING CONCRETE PAD CONCRETE RAMP CONCRETE RUNDOWN CONCRETE SIDEWALK CONCRETE WALL DOUBLE SANITARY SEWER CLEANOUT DOUBLE GATE LECTRIC BY PAINT MARK LECTRIC BY RECORD DRAWING EDGE OF ASPHALT LECTRIC BOX EDGE OF CONCRETE LECTRIC CABINET ELECTRIC CONDUIT ELECTRIC METER LECTRIC OUTLET LECTRIC PANEL LECTRIC PULLBOX LECTRIC TRANSFORMER EXISTING FINISH FLOOR FLICKER BALL GOAL POST FIRE HYDRAN LOWLINE FIRELINE CONNECTION GAS BY PAINT MARK GAS METER GAS PRESSURE REGULATOR GAS SERVICE GREASE TRAP **GUY WIRE** HCS HANDICAP SIGN HORNO HEATER INVERT ELEVATION IRRIGATION LADDER BARS METER CAN WITH BIBVALVE MCG MEDIAN CURB AND GUTTER MHB WATER METER CAN WITH HOSE BIB METAL LIGHT POLE WITH CONCRETE BASE MPP METAL POWER POLE MRS METAL RAMP WITH STEPS METAL SIGN OUT OF SERVICE OVERHEAD COMMUNICATION (# OF LINES) OVERHEAD ELECTRIC (# OF LINES) OVE**RHEAD ELECTRIC** ÄAST PARKING BUMPER PLAYGROUND EQUIPMENT PAINTED ISLAND PLASTIC BENCH PORTABLE PIER PARKING STRIPE POLYVINYL CHLORIDE REINFORCED CONCRETE PIPE ROOF DRAIN ROW OF PARKING BUMPERS RIP-RAP EROSION PROTECTION SANITARY SEWER SANITARY SEWER BY RECORD DRAWING SPEED BUMP SPRINKLER CONTROL TIMER SPRINKLER CONTROL VALVE TORM DRAIN STORM DRAIN BY PAINT MARK SD'/RCD STORM DRAIN BY RECORD DRAWING SERVICE DROP POLE WITH CONDUIT STEEL GUARD POST ORM DRAIN INLET STEEL POLE WITH SUPPORT BRACKET FOR ELECTRIC BOXES SCHOOL SIGN TANDARD SPRINKLER VALVE BOX

SEWER VENT PIPE SIDEWALK SIDEWALK CULVERT ELEPHONE BY PAINT MARK TOP OF ASPHALT TETHER BALL POST TRAFFIC CONTROL BOX TOP OF CONCRETE RASH ENCLOSURE ELEPHONE TOP OF GRATE

ELEPHONE RISER TRASH CAN TRAFFIC SIGN TRAFFIC SIGNAL TRAFFIC SIGNAL TRIP PERIMETER TELEPHONE VAULT TREE WELL VALLEY GUTTER VITRIFIED CLAY PIPE VERTICAL RAILROAD TIES WOOD BENCH

WHEELCHAIR RAMP WOOD FENCE WATER FOUNTAIN WOOD GUARD POST

WPP/CM

X-WALK

1.5'ø

WSP

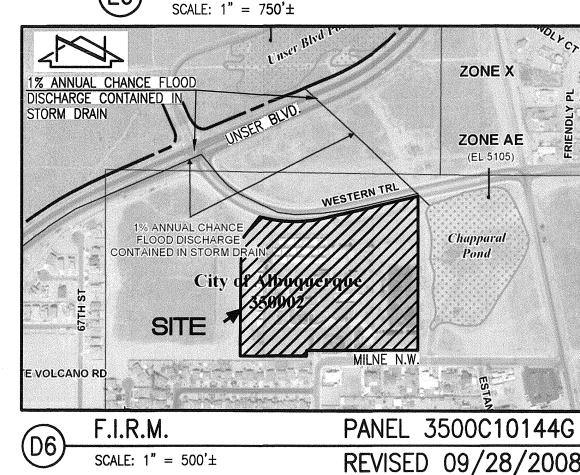
WATERLINE HOTBOX WATERI INF WATERLINE BY PAINT MARK WATERLINE BY RECORD DRAWING WATER METER BOX WATER METER CAN WOOD AND METAL STEPS WOOD POWER POLE WOOD POWER POLE WITH CONDUIT

WOOD POWER POLE WITH CONDUIT AND STREET LIGHT WOOD POWER POLE WITH CAMERA WATER AIR RELEASE VALVE WOOD STEPS WOOD SIGN WOOD SERVICE POLE WATER VAULT WATER VALVE BOX PAINTED CROSSWALK

DIAMETER OF TREE CONIFEROUS TREE DECIDUOUS TREE

PAINTED UTILITY MARKER

PART PART



TRACTS A AND B. CHAPARRAL ELEMENTARY SCHOOL, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JANUARY 11, 2000, BOOK 2000C, PAGE

ELEVATION = 5110.03 FEET (NAVD 88)

PROJECT BENCHMARK CITY OF ALBUQUERQUE SURVEY CONTROL 1 3/4" METALLIC DISK STAMPED "ACS BM. 15-F11". EPOXIED TO TOP OF CURB 5.20 FEET SOUTH OF THE SSE CURB RETURN OF ATRISCO ROAD N.W. AND WESTERN TRAIL N.W.

A SPIKE WITH JMA CONTROL CAP STAMPED "NMPS #11184", AS SHOWN ON SHEET C-102. ELEVATION = 5113.74 FEET (NAVD 88)

A CHISELED "+" LOCATED AT THE SE PROPERTY CORNER, AS SHOWN ON SHEET C-102. ELEVATION = 5109.70 FEET (NAVD 88)

BOUNDARY TABLES

DIRECTION DISTANCE L1 S 00°03'53" W 30.00' CURVE RADIUS LENGTH CHORD BEARING DELTA C1 643.00' 313.14' 310.06' S 88°25'57" E 27°54'11"

EASEMENT KEYED NOTES

EASEMENTS (A) 10' P.N.M. AND M.S.T.&T. EASEMENT GRANTED BY DOCUMENT EXECUTED 11-15-1983

2000C-9 TO SERVE TRACT B. ULTIMATE ALIGNMENT TO BE DETERMINED IN

(UNRECORDED) (B) 30' WATER AND SANITARY SEWER EASEMENT GRANTED BY PLAT C20-172 (C) APPROXIMATE LOCATION OF FUTURE PRIVATE ACCESS AND PUBLIC UTILITY EASEMENT (WATER, SANITARY SEWER, ELECTRIC, COMMUNICATION AND GAS) GRANTED BY PLAT

SHALL BE THE RESPONSIBILITY OF THE OWNER OF TRACT A. (D) PUBLIC STORM DRAIN EASEMENT GRANTED BY DOCUMENT FILED 05-22-2001,

BOOK A19, PAGE 6814, DOC. #2001058400 (J) 10' PNM ELECTRIC AND GAS EASEMENT GRANTED BY DOCUMENT EXECUTED 08-25-2006 (K) 10' PNM ELECTRIC AND GAS EASEMENT GRANTED BY DOCUMENT EXECUTED 08-25-2006 (M) 10' PNM ELECTRIC AND GAS EASEMENT GRANTED BY DOCUMENT FILED 10-12-2007,

CONJUNCTION WITH SUBSEQUENT PLATTING/DEVELOPMENT OF TRACT A. MAINTENANCE

DOC#2007144467, RECORDS OF BERNALILLO COUNTY, NEW MEXICO (N) 10' PNM ELECTRIC AND GAS EASEMENT GRANTED BY DOCUMENT FILED 10-12-2007, DOC#2007144466, RECORDS OF BERNALILLO COUNTY, NEW MEXICO

EASEMENTS - OFFSITE

(E) 7' PUBLIC UTILITY EASEMENT GRANTED BY PLAT C19-131

(1) A.M.A.F.C.A. FLOODWAY AND STORM DRAINAGE WORKS EASEMENT GRANTED BY DOCUMENT FILED 06-15-1983, DOC. #1983038900 (L) 10' PNM ELECTRIC AND GAS EASEMENT GRANTED BY DOCUMENT EXECUTED 08-25-2006

PHASING PLAN

THIS PROJECT WILL BE IMPLEMENTED IN PHASES PER THE PHASING KEY MAP SHEET C-103 TO FACILITATE THE OPERATION OF THE SCHOOL THROUGHOUT THE

CONSTRUCTION PROCESS: PHASE 1 CONSISTS OF THE CAFETERIA/KITCHEN AND GYM (STORAGE) ADDITIONS. THESE ADDITIONS MUST BE OCCUPIED IN ADVANCE OF THE LARGER KINDERGARTEN CLASSROOM WING IN ORDER TO PROVIDE MUST NEEDED SERVICE TO THE STUDENTS. BECAUSE THESE SMALL ADDITIONS MUCH MATCH EXISTING FINISHED FLOOR ELEVATIONS, DRAINAGE CERTIFICATION FOR PERMANENT CERTIFICATE OF OCCUPANCY WILL NOT BE REQUIRED AND HENCE

DEFERRED TO PHASE 2. PHASE 2 CONSISTS OF THE KINDERGARTEN CLASSROOM WING ADDITION, VISITOR PARKING, SPECIAL ED BUS LOOP, AND KINDERGARTEN PARENT DROP-OFF LOOP. THESE IMPROVEMENTS REQUIRE OCCUPANCY UPON COMPLETION SO THAT THE STUDENTS CURRENTLY ATTENDING CLASSES IN THE PORTABLE CLASSROOMS AT THE NORTHWEST CORNER OF THE SITE CAN BE RELOCATED IN ADVANCE OF THE PLAYGROUND CONSTRUCTION. A DRAINAGE CERTIFICATION IS REQUIRED FOR THIS PHASE FOR PERMANENT

CERTIFICATE OF OCCUPANCY PHASE 3 CONSISTS OF THE RELOCATION OF PORTABLE CLASSROOM BUILDINGS FOLLOWED BY THE CONSTRUCTION OF THE NEW SERVICE AREA AND PLAYGROUND. THE PORTABLE BUILDINGS CAN NOT BE RELOCATED FROM THE SITE UNTIL SUCH TIME AS THE STUDENTS CAN BE MOVED INTO THE NEW BUILDING. DRAINAGE CERTIFICATION OF PHASE 3 WILL BE REQUIRED FOR PROJECT CLOSEOUT.

> HIGH\ Consulting Group **6010-B MIDWAY PARK BLVD. NE**

> > ALBUQUERQUE, NEW MEXICO 87109

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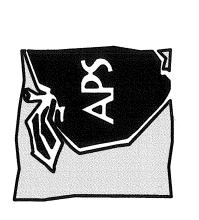
F-10

CHERRY/SEE/REAMES

ARCHITECTS, LLF

220 gold avenue sw albuquerque, nm 87102

505 - 842 - 1278 fax 505 - 766 - 9269



KEY PLAN NOT REQUIRED

05-2014 REC. DNG & CER PHASE 2 *05–2014* 4/1/2013 100% CD SUBMITTA 9/28/2012 50% CD SUBMITTA 6/11/2010 100% CD SUBMITT 3/22/2010 95% CD SUBMITT 12/18/2009 50% CD SUBMITT 9/30/2009 DD SUBMITTA 6/15/2009 | SD SUBMITTAI DATE DESCRIPTION ISSUE:

MANAGEMENT BLOCK

PROJECT NO: CHAPARRAL

CAD DWG FILE: 2009.004.7/2009.004.8 DRAWN BY: CFA/BLE/JDS CHECKED BY: J.G.M.

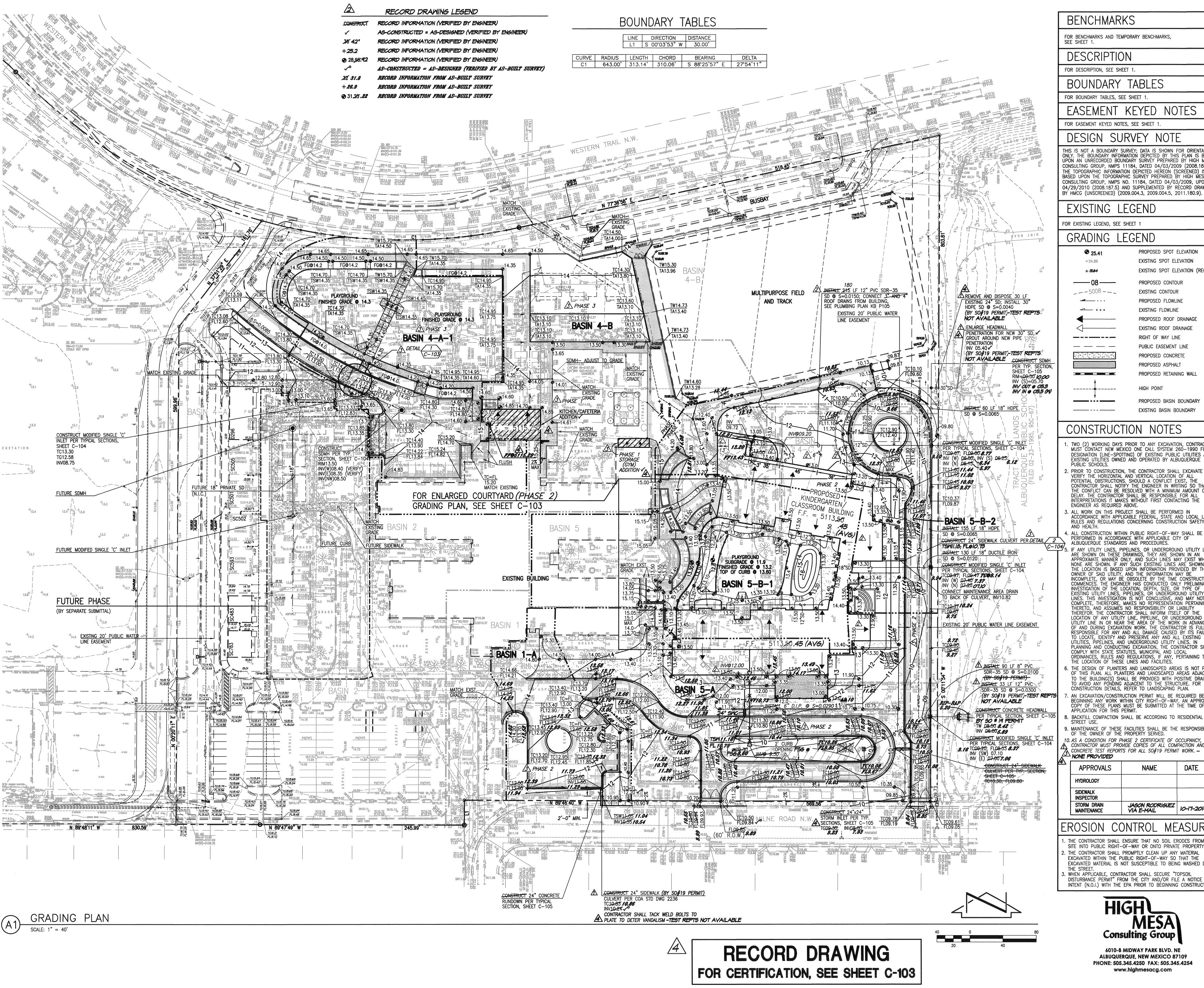
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TITLE OF SHEET Drainage Plan AND

CALCULATIONS

SHEET NUMBER C-101

SHEET OF



BENCHMARKS FOR BENCHMARKS AND TEMPORARY BENCHMARKS, **DESCRIPTION** FOR DESCRIPTION, SEE SHEET 1

BOUNDARY TABLES FOR BOUNDARY TABLES, SEE SHEET 1

EASEMENT KEYED NOTES FOR EASEMENT KEYED NOTES, SEE SHEET 1.

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON AN UNRECORDED BOUNDARY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 04/03/2009 (2008.187.5) THE TOPOGRAPHIC INFORMATION DEPICTED HEREON (SCREENED) IS BASED UPON THE TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS NO. 11184, DATED 04/03/2009, UPDATED 04/29/2010 (2008.187.5) AND SUPPLEMENTED BY RECORD DRAWINGS

EXISTING LEGEND

FOR EXISTING LEGEND, SEE SHEET 1

GRADING LEGEND

20.TI	
+24.86	EXISTING SPOT ELEVATION
- 15.64	EXISTING SPOT ELEVATION (REC
 08- 	PROPOSED CONTOUR
5008	EXISTING CONTOUR
• • • •	PROPOSED FLOWLINE
000	EXISTING FLOWLINE
————	PROPOSED ROOF DRAINAGE
√ ——	EXISTING ROOF DRAINAGE
	RIGHT OF WAY LINE
· · · · · · · · · · · · · · · · · · ·	PUBLIC EASEMENT LINE
	PROPOSED CONCRETE
	PROPOSED ASPHALT
	PROPOSED RETAINING WALL
	HIGH POINT
	PROPOSED BASIN BOUNDARY

PROPOSED SPOT ELEVATION

TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE . PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE

3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY

4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY
THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE
LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND
UTILITY DIVISION OF NOR THE AREA OF THE WORKER

OF THE WORK THE AREA OF THE WORK THE AREA OF THE WORKER OF THE WORK THE AREA OF THE WORK T OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING TILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL DRDINANCES, RULES AND REGÚLATIONS, IF ANY, PERTAINING TO LOCATION OF THESE LINES AND FACILITIES.

THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT.

9. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED. 10. AS A CONDITION FOR PHASE 2 CERTIFICATE OF OCCUPANCY, CONTRACTOR MUST PROVIDE COPIES OF ALL COMPACTION AND CONCRETE TEST REPORTS FOR ALL SO#19 PERMIT WORK. -

IZA .	A 1900		
741	APPROVALS	NAME	DATE
	HYDROLOGY		
	SIDEWALK INSPECTOR		
	STORM DRAIN MAINTENANCE	JASON RODRIGUEZ VIA E-MAIL	10-17-20
ł			

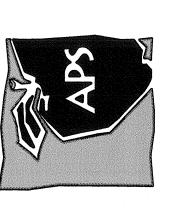
EROSION CONTROL MEASURES

. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN 5. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BÉGINNING CONSTRUCTION.



6010-B MIDWAY PARK BLVD. NE **ALBUQUERQUE, NEW MEXICO 87109** PHONE: 505.345.4250 FAX: 505.345.4254 CHERRY/SEE/REAMES ARCHITECTS, LLP 220 gold avenue sw albuquerque, nm 87102 505 - 842 - 1278 fax 505 - 766 - 9269

12-12-2014



KEY PLAN **NOT REQUIRED**

05-2014 REC. DING & CERT PHASE 2 05-2014 | PHASING & X-WALK 4/1/2013 100% CD SUBMITTA 6/11/2010 100% CD SUBMITTA 12/18/2009 50% CD SUBMIT 9/30/2009 DD SUBMITTA SD SUBMITTAL

DESCRIPTION

MANAGEMENT BLOCK PROJECT NO: CHAPPARAL

DATE

MARK

CAD DWG FILE: 2009.004.7*/2009.004.* DRAWN BY: JLP/CFA/BLE/E.J.S./J.Y.R.

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TITLE OF SHEET

GRADING PLAN

SHEET NUMBER

C-102 SHEET OF

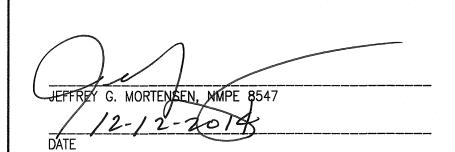
ENGINEER'S DRAINAGE CERTIFICATION FOR PHASE 2 TEMPORARY C.O.

I, JEFFREY G. MORTENSEN, NMPE 8547, OF THE FIRM HIGH MESA CONSULTING GROUP, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND DRAINED IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 03-28-2013 (REVISED 04-25-2013 FOR SO#19 CRITERIA AND REVISED 05-21-2014 FOR PHASING) WITH EXCEPTIONS AS NOTED BELOW. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS EITHER BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AS SUPPLEMENTAL SITE DATA COMBINED WITH RECORD INFORMATION OBTAINED FROM THE VERIFICATION SURVEY CONDUCTED 12-03-2014 UNDER THE DIRECT SUPERVISION OF CHARLES G. CALA, JR., NMPS 11184, OF THE FIRM HIGH MESA CONSULTING GROUP, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR TEMPORARY CERTIFICATE OF OCCUPANCY.

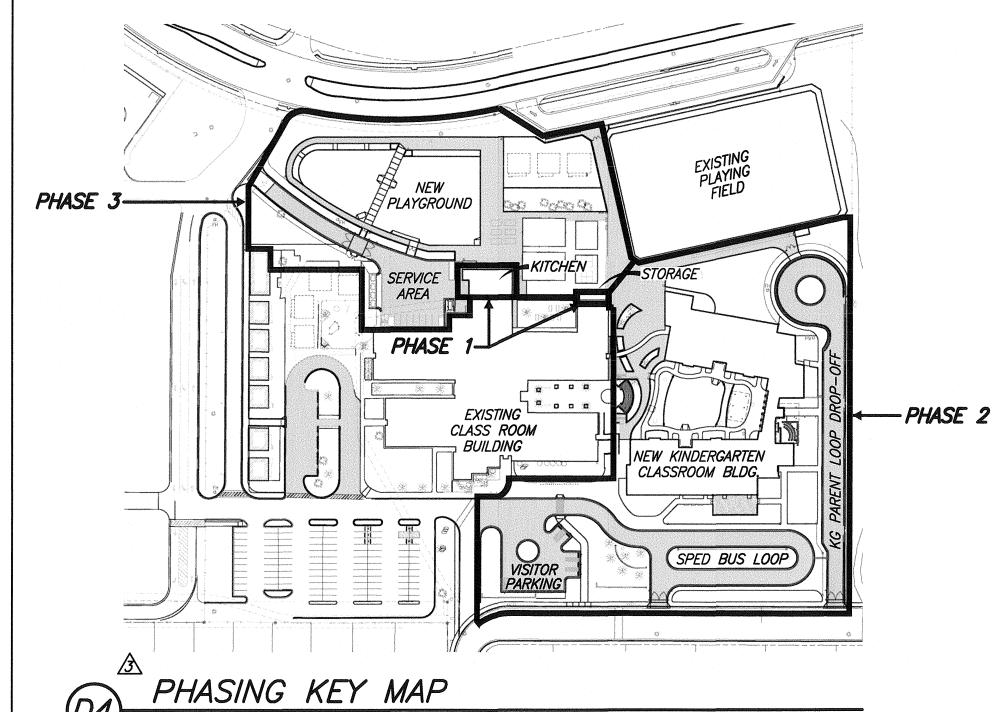
THE FOLLOWING EXCEPTIONS ARE NOTED:

1. REVISED COMPACTION AND CONCRETE TEST REPORTS FOR THE SO#19 PERMIT SCOPE OF WORK ARE PROVIDED AS A SEPARATE ATTACHMENT. 2. MANY OF THE AS-BUILT ELEVATIONS DEVIATE BEYOND INDUSTRY STANDARDS, HOWEVER, IT APPEARS THAT THE DESIGN INTENT IS ACHIEVED DESPITE SUCH DEVIATIONS. 3. LANDSCAPING IMPROVEMENTS (A SEPARATE CONTRACT) ARE IN PROGRESS WITH COMPLETION PENDING THEREBY DEFERRING FINAL STABILIZATION OF THE PHASE 2 PORTION OF THE SITE. 4. FINISHED SUBGRADE ELEVATIONS AT THE FACE OF BUILDING IN THE COURTYARD MATCH AS-DESIGNED FINISHED GRADE ELEVATIONS WITHIN REASONABLE TOLERANCE. THIS WILL CAUSE THE ACTUAL FINISHED GRADE ELEVATIONS TO EXCEED THE AS-APPROVED FINISHED GRADE UPON COMPLETION OF THE LANDSCAPING PHASE (SEPARATE CONTRACT) OF THE PROJECT. THIS ISSUE MUST BE RESOLVED TO THE SATISFACTION OF THE OWNER AND THE ARCHITECT PRIOR TO FINAL ACCEPTANCE OF THE PROJECT, HOWEVER, SHOULD HAVE LITTLE TO NO IMPACT ON ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTAINTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THIS CERTIFICATION DOES NOT ADDRESS ADA COMPLIANCE WHICH IS BEYOND THE SCOPE OF GRADING AND DRAINAGE. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE. A SEPARATE CERTIFICATION IS REQUIRED TO SUPPORT A REQUEST FOR PERMANENT CERTIFICATE OF OCCUPANCY.







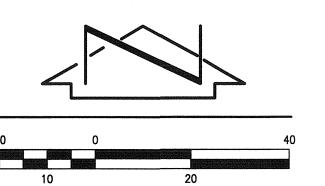
RECORD DRAWING LEGEND RECORD INFORMATION (VERIFIED BY ENGINEER) AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY ENGINEER) RECORD INFORMATION (VERIFIED BY ENGINEER) RECORD INFORMATION (VERIFIED BY ENGINEER) RECORD INFORMATION (VERIFIED BY ENGINEER) AS-CONSTRUCTED = AS-DESIGNED (VERIFIED BY AS-BUILT SURVEY) RECORD INFORMATION FROM AS-BUILT SURVEY RECORD INFORMATION FROM AS-BUILT SURVEY

RECORD INFORMATION FROM AS-BUILT SURVEY

INV19:25 10.28 **PROPOSED** KINDERGARTEN/ CLASSROOM BUILDING F.F. = 5113.5045(AVG)PLAYGROUND TOP OF CONTAINMENT 09,20.14 FINISHED GRADE • 13.2 SECTION, SHEET STG13.00; 13.14 PER TYPICAL SECTION SHEET 5 F. = 5113.50.45 (AYG) 14.9 13.50 8/ TOO13.38 TOO14.6 13.40 13 9 2 13.30 CONSTRUCT 24" BEEHIVE INLET (TYPICAL OF 7)
PER TYPICAL SECTION, SHEET 5
TG12-80 12.76
INV10-00 10.07

COURTYARD GRADING PLAN – PHASE 2

SCALE: 1" = 20'



DESCRIPTION

TRACTS A AND B, CHAPPARRAL ELEMENTARY SCHOOL, ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JANUARY 11, 2000, BOOK 2000C, PAGE 9

DESIGN SURVEY NOTE

THIS IS NOT A BOUNDARY SURVEY; DATA IS SHOWN FOR ORIENTATION ONLY. THE BOUNDARY INFORMATION DEPICTED BY THIS PLAN IS BASED UPON AN UNRECORDED BOUNDARY SURVEY PREPARED BY HIGH MESA CONSULTING GROUP, NMPS 11184, DATED 04/03/2009 (2008.187.5) THE TOPOGRAPHIC INFORMATION DEPICTED HEREON IS BASED UPON TH TOPOGRAPHIC SURVEY PREPARED BY HIGH MESA CONSULTING GROUP. NMPS NO. 11184, DATED 04/03/2009 AND UPDATED 04/29/2010 (2008.187.5).

EXISTING LEGEND

FOR EXISTING LEGEND, SEE SHEET C-101

GRADING LEGEND

25.41	PROPOSE
+24.86	EXISTING
 80	PROPOSE
5008	EXISTING
	PROPOSE
	EXISTING
	PROPOSE
\triangleleft	EXISTING
	RIGHT OF
	PUBLIC E
	PROPOSE
	PROPOSE
	PROPOSE

PROPOSED SPOT ELEVATION FLOWLINE ELEVATION SED CONTOUR CONTOUR ED FLOWLINE FLOWLINE ED ROOF DRAINAGE ROOF DRAINAGE WAY LINE

EASEMENT LINE ED CONCRETE SED ASPHALT PROPOSED RETAINING WALL

PROPOSED BASIN BOUNDARY

EXISTING BASIN BOUNDARY

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM 260-1990 FOR DESIGNATION (LINE-SPOTTING) OF EXISTING PUBLIC UTILITIES AND EXISTING UTILITIES OWNED AND OPERATED BY ALBUQUERQUE PUBLIC SCHOOLS.

- 2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INTERPRETATIONS IT MAKES WITHOUT FIRST CONTACTING THE ENGINEER AS REQUIRED ABOVE. I. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH. 4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICALBLE CITY OF
- ALBUQUERQUE STANDARDS AND PROCEDURES. 5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF TH LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES. 3. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO
- THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN. '. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF
- APPLICATION FOR THIS PERMIT. 8. BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL STREET USE.
- 9. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED. 10. AS A CONDITION FOR PHASE 2 CERTIFICATE OF OCCUPANCY, CONTRACTOR MUST PROVIDE COPIES OF ALL COMPACTION AND CONCRETE TEST REPORTS FOR ALL SO#19 PERMIT WORK. - NONE PROVIDED

APPROVALS	NAME	DATE
HYDROLOGY		
SIDEWALK INSPECTOR		
STORM DRAIN MAINTENANCE	JASON RODRIGUEZ VIA E-MAIL	10-17-2014

EROSION CONTROL **MEASURES**

THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. . THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN 3. WHEN APPLICABLE, CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM THE CITY AND/OR FILE A NOTICE OF INTENT (N.O.I.) WITH THE EPA PRIOR TO BÉGINNING CONSTRUCTION



RECORD DRAWING



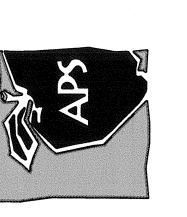
6010-B MIDWAY PARK BLVD. NE **ALBUQUERQUE, NEW MEXICO 87109** PHONE: 505.345.4250 FAX: 505.345.4254 www.highmesacg.com

CHERRY/SEE/REAMES ARCHITECTS, LLP

220 gold avenue sw albuquerque, nm 87102

505 - 842 - 1278 fax 505 - 766 - 9269





KEY PLAN NOT REQUIRED

NOT KLQOKLD			
A	05-2014	REC. DWG & CERT. PHASE 2	
<i>3</i> \	05-2014	PHASING	
	4/1/2013	100% CD SUBMITTAL	
	9/28/2012	50% CD SUBMITTAL	
	6/11/2010	100% CD SUBMITTAL	
	3/22/2010	95% CD SUBMITTAL	
	12/18/2009	50% CD SUBMITTAL	
	9/30/2009	DD SUBMITTAL	
	6/15/2009	SD SUBMITTAL	
MARK	DATE	DESCRIPTION	
	· · · · · · · · · · · · · · · · · · ·		

MANAGEMENT BLOCK

PROJECT NO: CHAPPARAL CAD DWG FILE: 2009.004.7/2009.004.8 DRAWN BY: JLP/CFA/BLE/JDS

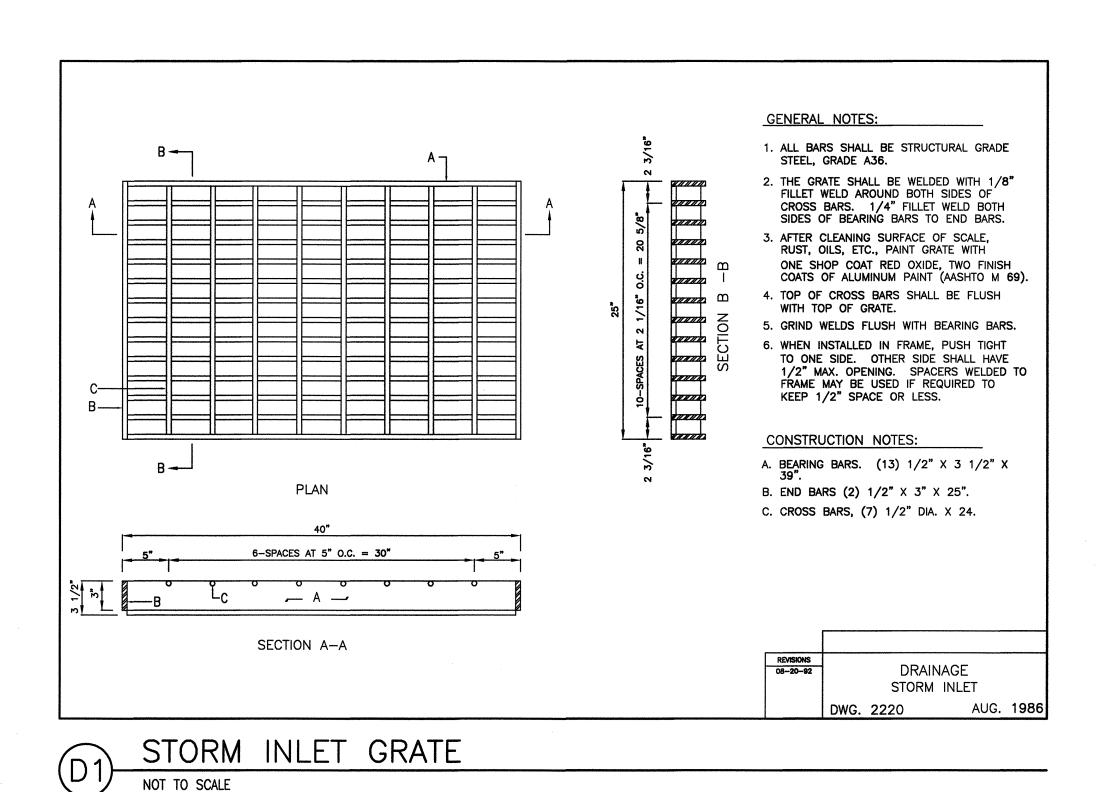
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TITLE OF SHEET

COURTYARD GRADING PLAN

SHEET NUMBER

C-103 SHEET OF



8" 2'-1 1/2"

3'-5 1/2"

SECTION B-B

4'-3 3/8"

2'-11 3/8"

SECTION A-A

NOT TO SCALE

SINGLE "D" STORM INLET

3000 P.S.I. CONCRETE

MECHANICAL ENCLOSURE WALL

GENERAL NOTES:

REQUIREMENT.

2220 **& 2221**.

A. FRAME & GRATE

G. INVERT PER DESIGN.

12-21-92

CONSTRUCTION NOTES:

B. CENTER SUPPORT ASSEMBLY

BAR MAX. AT PIPE OPENING. D. NO. 4 BARS AT 6" O.C. EACH WAY.

DWG 2215.

1. FOR SINGLE GRATE TYPE STORM INLET

2. STORM INLET GUTTER TRANSITION WILL

4. FOR FRAME & GRATING, SEE DWG 2216,

5. FOR CENTER SUPPORT ASSEMBLY. SEE

C. CUT ONE HORIZONTAL AND ONE VERTICAL

E. USE STANDARD STEPS. SEE DWG 2229.

F. CONC. FILL. SEE NOTE C DWG 2201.

H. INSTALL STEPS ON DOWNSTREAM FACE.

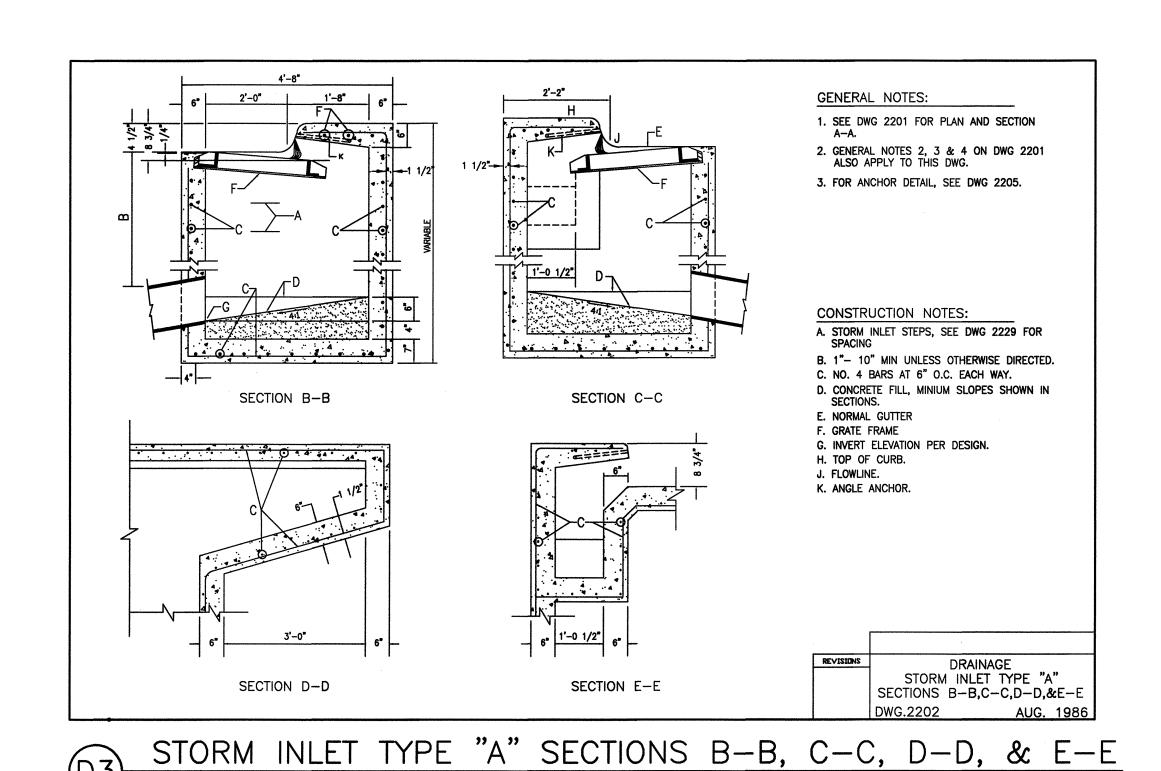
STORM INLET SINGLE "D"

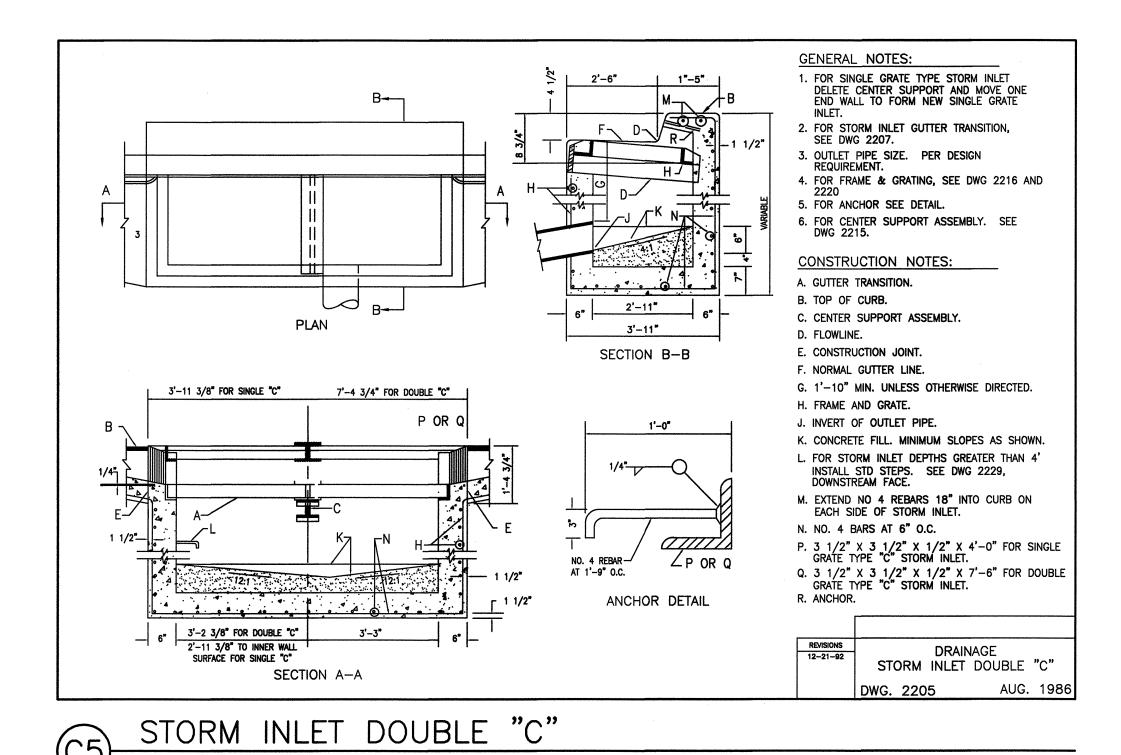
DWG. 2206

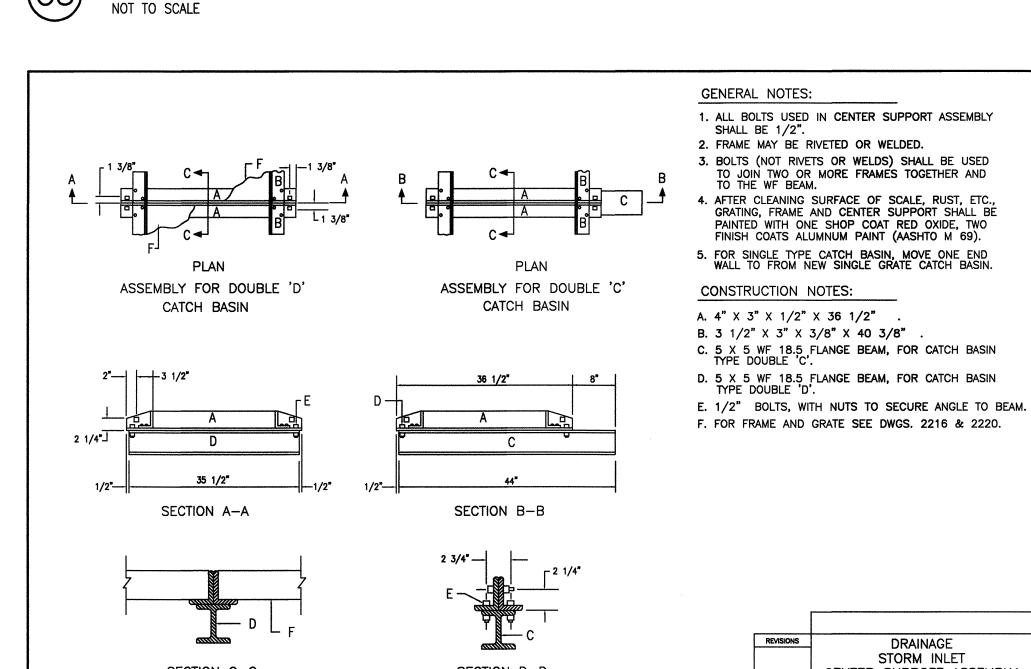
3. OUTLET PIPE SIZE. PER DESIGN

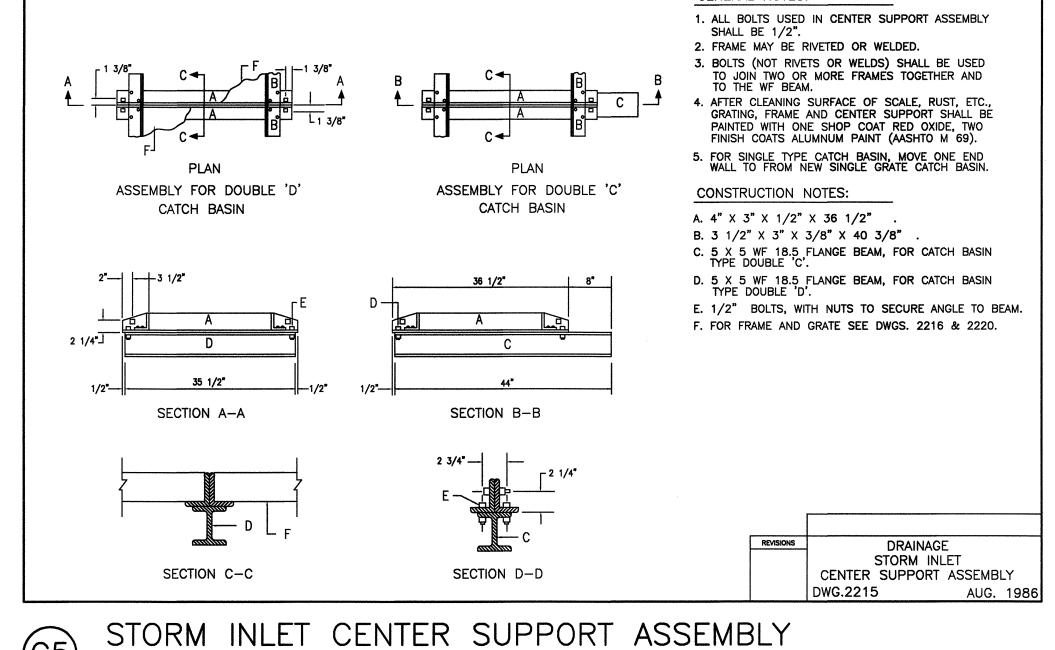
DELETE CENTER SUPPORT AND MOVE ONE END WALL TO FORM NEW SINGLE GRATE

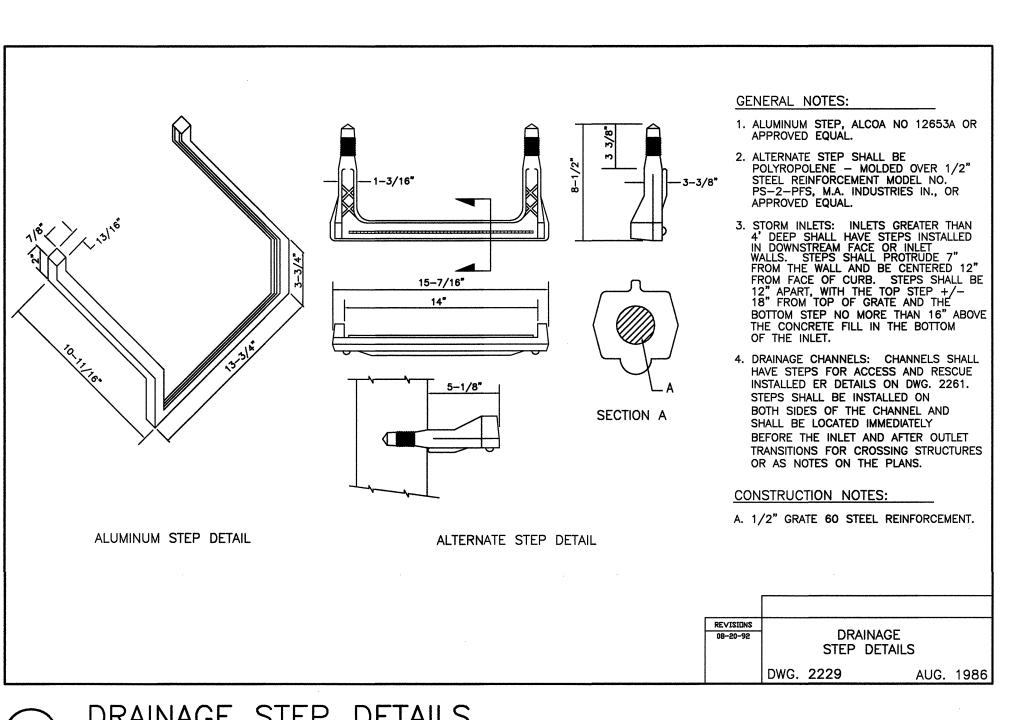
BE SHOWN ON THE CONSTRUCTION PLANS.

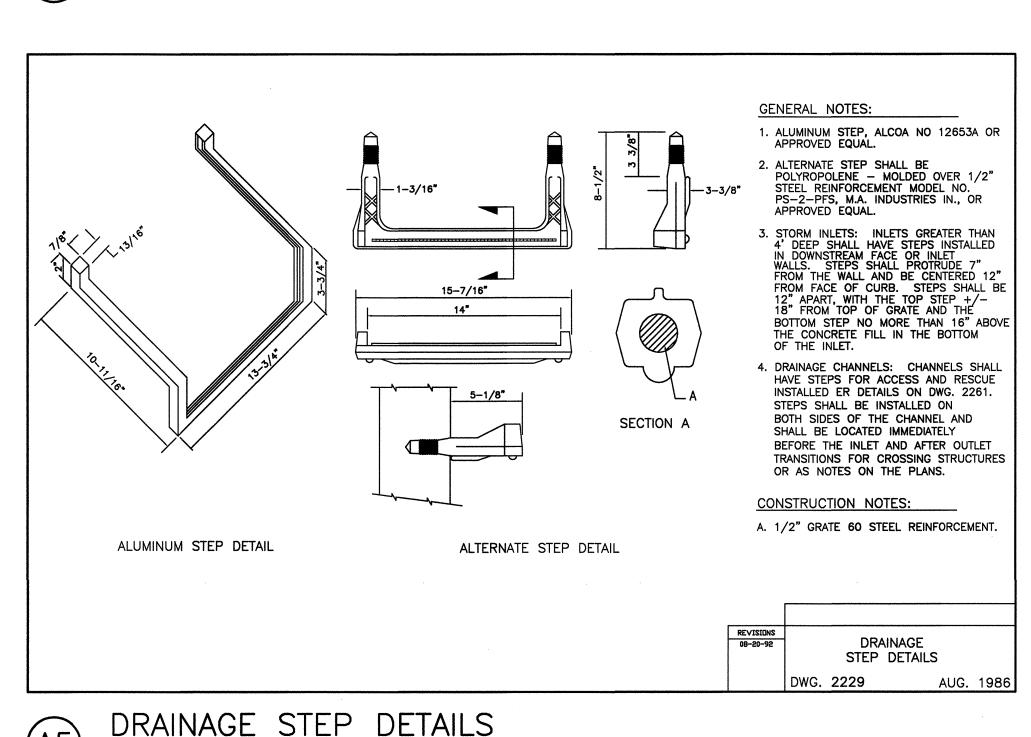


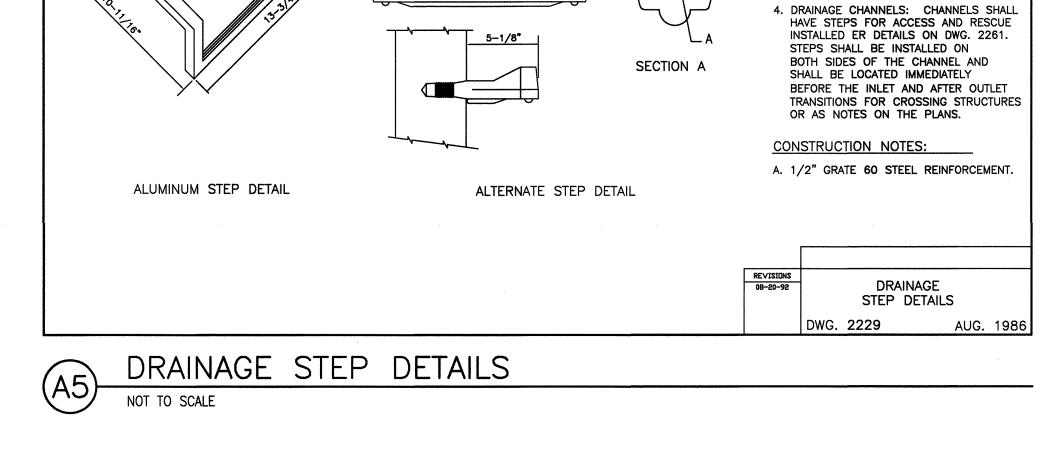








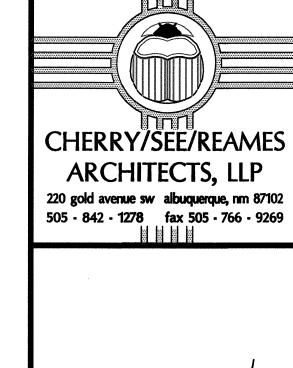




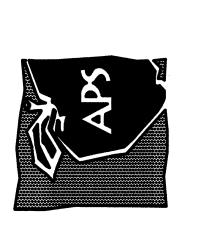




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REY G. MORT



KEY PLAN NOT REQUIRED

NOT REQUIRED			
À	05-2014	REC. DWG & CER PHASE 2	
/3\	05-2014	PHASING	
	4/1/2013	100% CD SUBMITT	
	9/28/2012	50% CD SUBMITT	
	6/11/2010	100% CD SUBMITT	
	3/22/2010	95% CD SUBMIT	
	12/18/2009	50% CD SUBMIT	
	9/30/2009	DD SUBMITTA	
	6/15/2009	SD SUBMITTA	
MARK	DATE	DESCRIPTION	

MANAGEMENT BLOCK

PROJECT NO: CHAPARRAL CAD DWG FILE: 2009.004.7/2009.004.8 DRAWN BY: CFA/BLE/JDS CHECKED BY: J.G.M.

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STORM INLET DETAILS

SHEET NUMBER C-104

SHEET OF

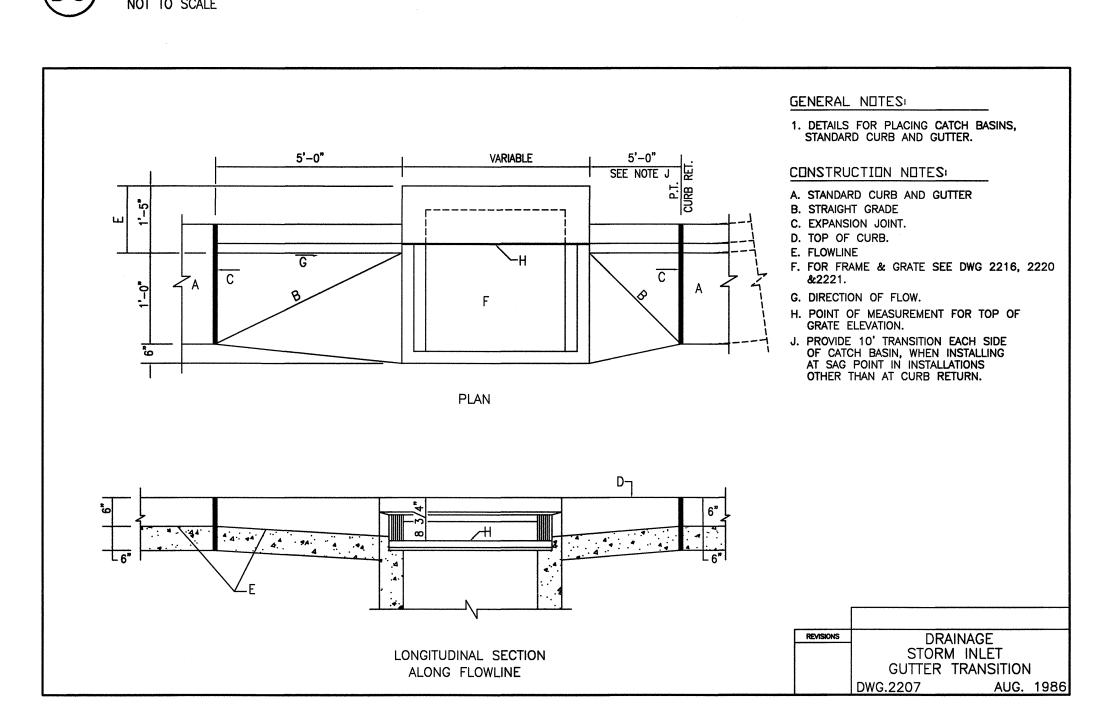
SECTION X-X

SCALE: 1" = 1' - 0"

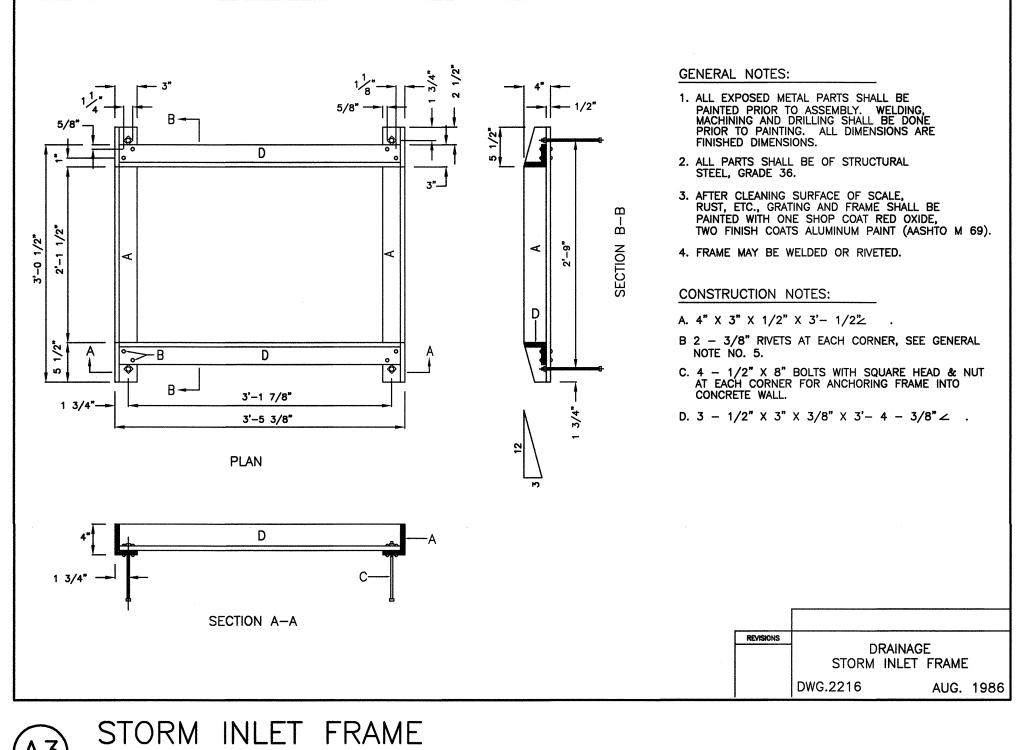
6" CURB AND GUTTER, TYP A 4 ··. CMU MECHANICAL ENCLOSURE WALL REPLACE 24" SIDEWALK CULVERT W/ 12"
SIDEWALK CULVERT W/ 14"X8" GRATE @ BSW (PHASE 2) -GROUT WALL OPENING AROUND PIPE SCALE: 1" = 20'8"x8" WALL OPENING, INV@13.15 — - INSTALL 4" PVC SLEEVE MECHANICAL ENCLOSURE FINISHED GRADE 7.44 NEENAH R-4990-FX, TYPE REPLACE 24" SIDEWALK
CULVERT W/ 12" SIDEWALK
CULVERT CENTERED ON 4"
PIPE ABOVE 12" SUBGRADE COMPACTED @ / 95% A.S.T.M. D-1557 4 4 4 12" SUBGRADE COMPACTED @ 95% A.S.T.M. D-1557

SECTION Y-Y

SCALE: 1" = 1' - 0"

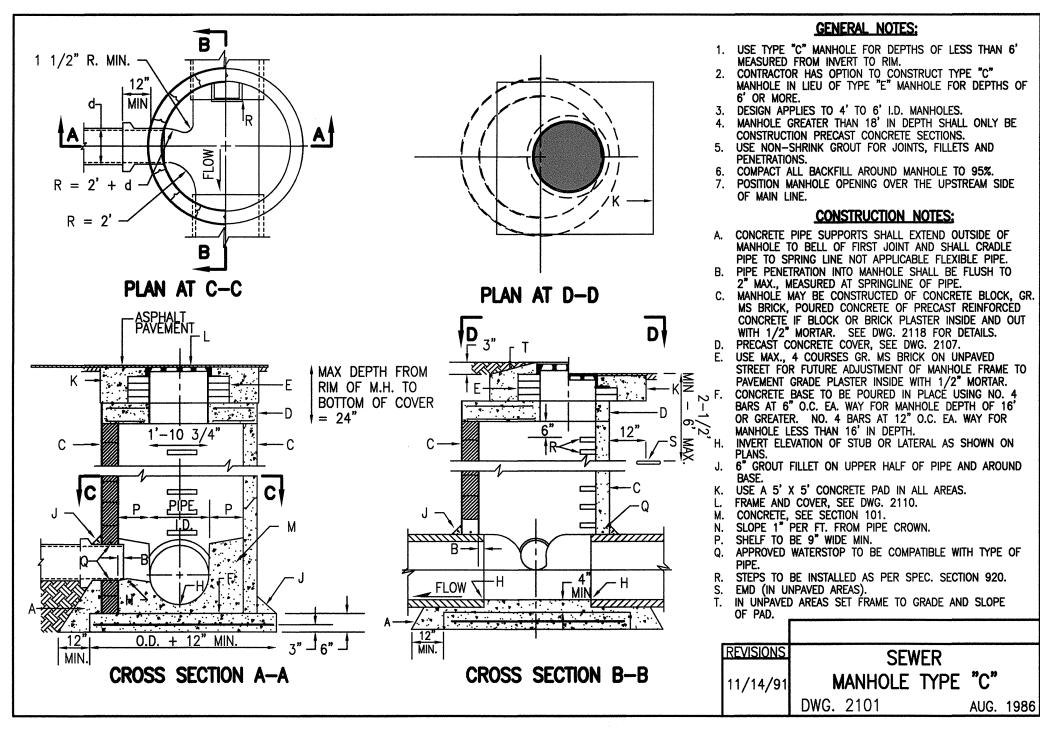


STORM INLET GUTTER TRANSITION

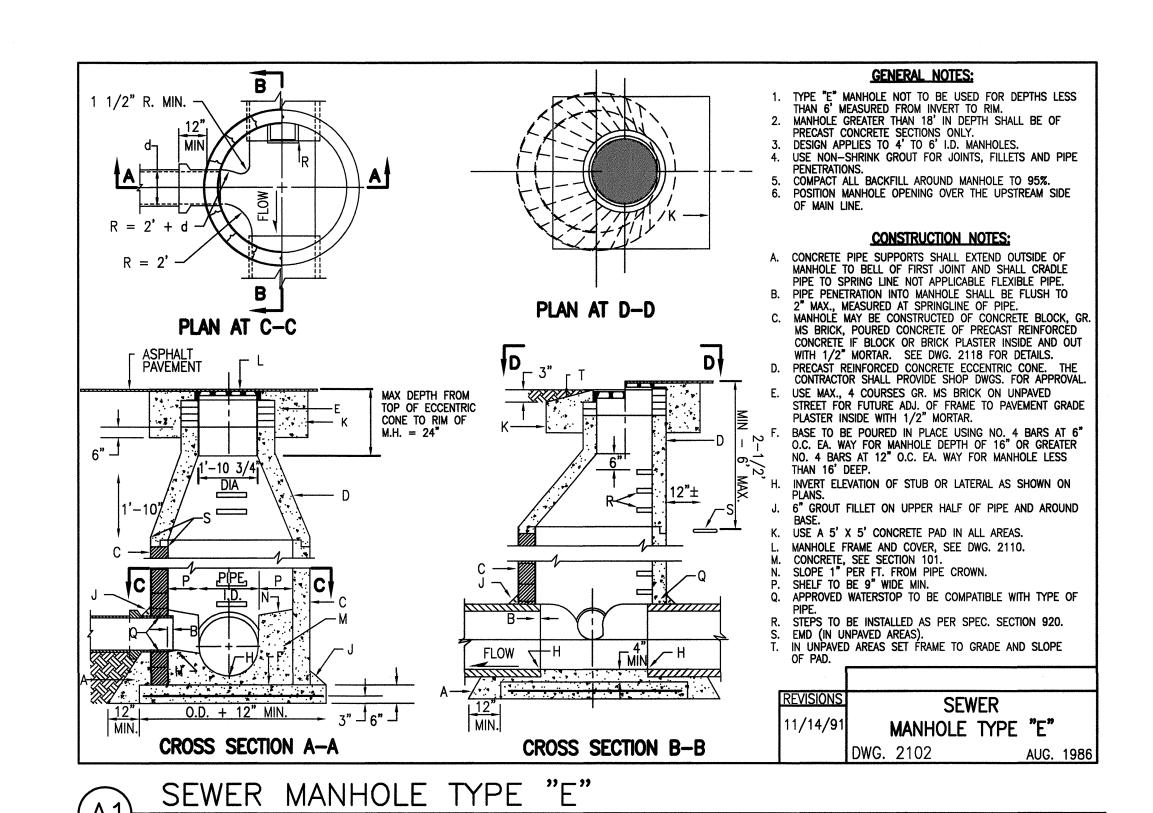


NOT TO SCALE

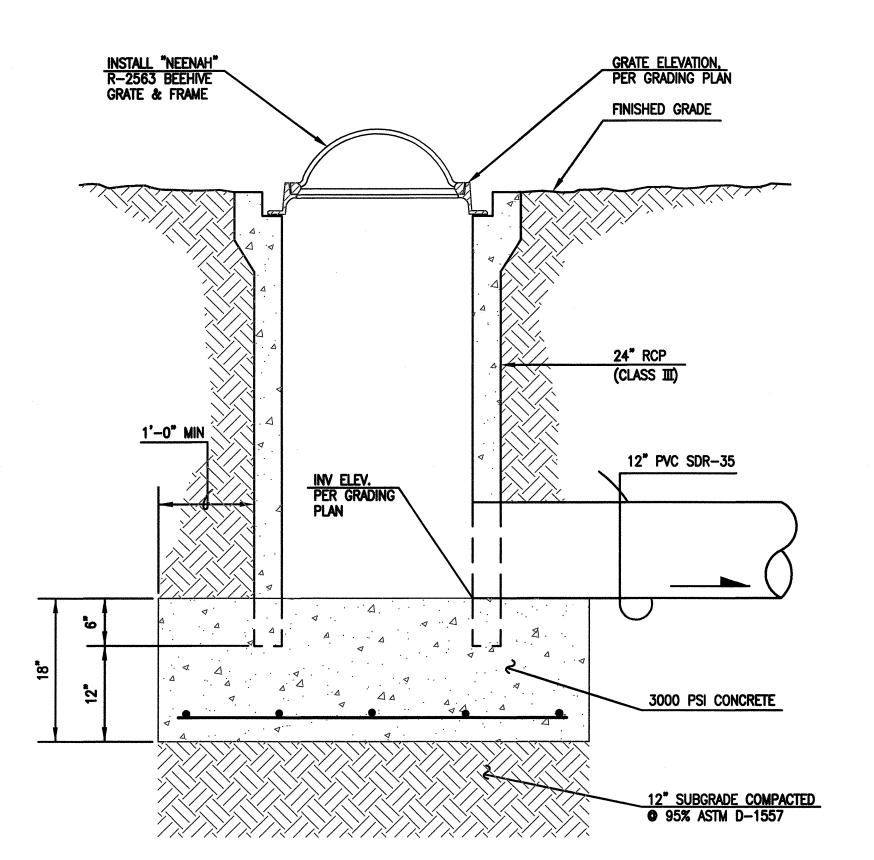
TYPICAL RUNDOWN SECTION



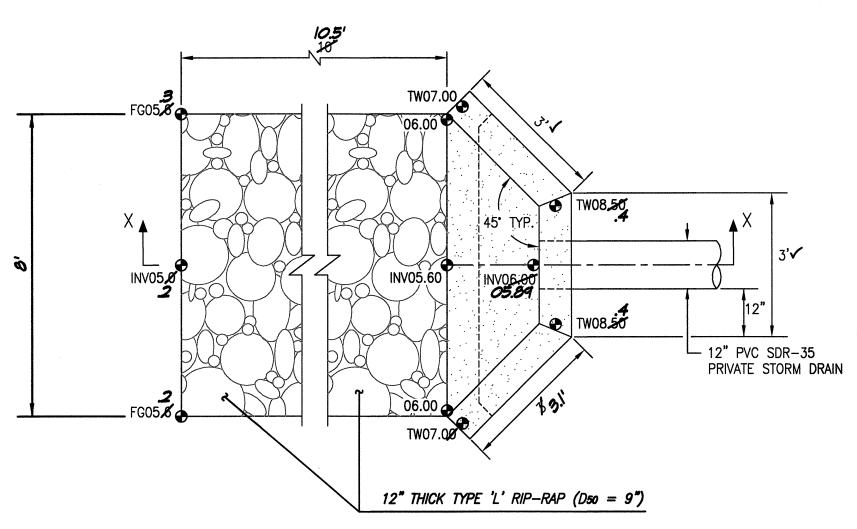
SEWER MANHOLE TYPE "C"

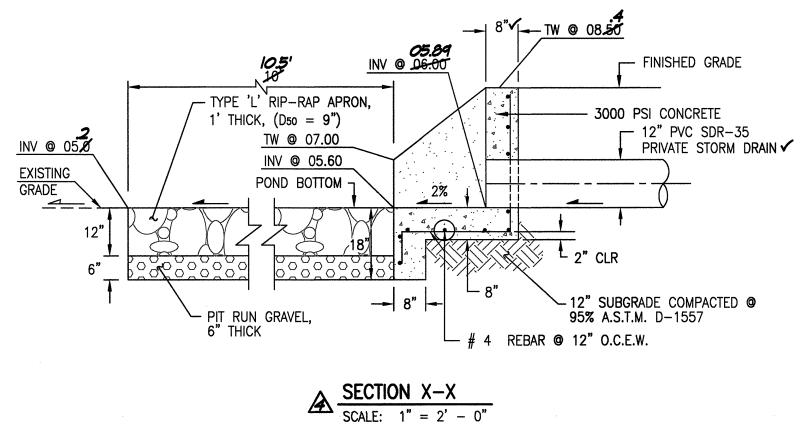






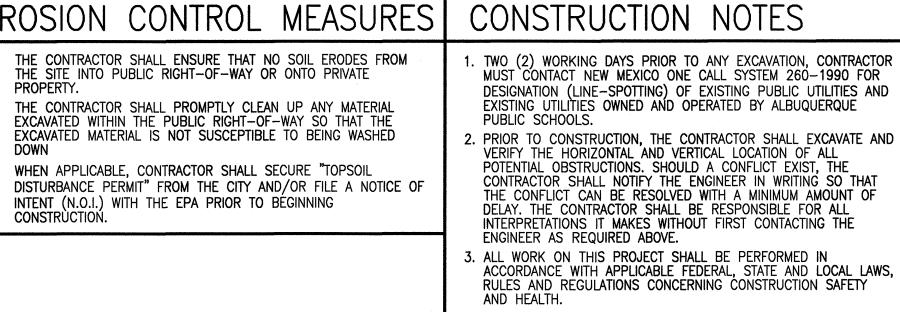
BEEHIVE INLET SECTION





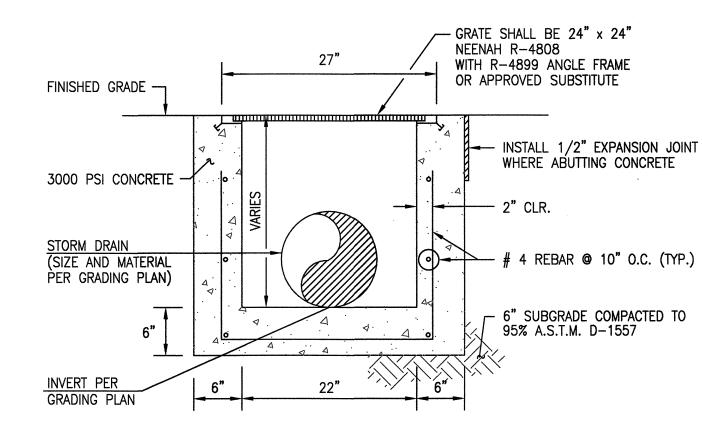
TYPICAL HEADWALL (BY SO#19 PERMIT) — PHASE 2

NOT TO SCALE

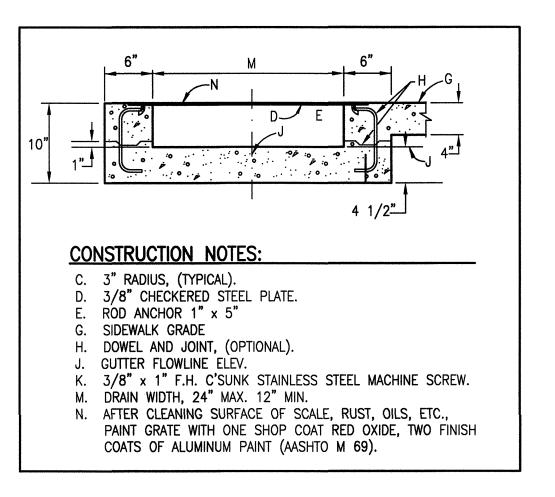


4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES. 5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE 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. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES. 3. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN. 7. AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THESE PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION FOR THIS PERMIT. 8. BACKFILL COMPACTION SHALL BE ACCORDING TO RESIDENTIAL 9. MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED. 10.AS A CONDITION FOR PHASE 2 CERTIFICATE OF OCCUPANCY, CONTRACTOR MUST PROVIDE COPIES OF ALL COMPACTION AND CONCRETE TEST REPORTS FOR ALL SO#19 PERMIT WORK. -NONE PROVIDED

APPROVALS	NAME	DATE
HYDROLOGY		
SIDEWALK INSPECTOR		
STORM DRAIN MAINTENANCE	JASON RODRIGUEZ VIA E-MAIL	10-17-2014



TYPICAL 24"X24" STORM INLET SECTION



SIDEWALK CULVERT (PRIVATE)

SCALE: 1" = 0'-6"

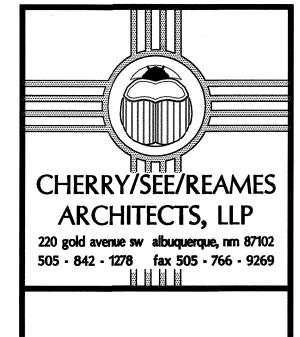


4

RECORD DRAWING FOR CERTIFICATION, SEE SHEET C-103

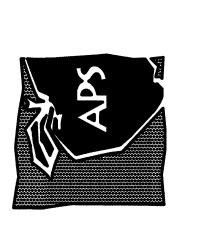


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12 12-2014 05-21-2014 04-25-293 REY G. MORTEN

nentary School Addition 6325 Milne Rd NW Albuquerque, NM 87120



KEY PLAN NOT REQUIRED

4	05-2014	REC. DNG & CER PHASE 2
<i>∫</i> 3\	05-2014	PHASING
$\overline{\Lambda}$	4/13/2013	SO#19
	4/1/2013	100% CD SUBMITT
	9/18/2012	50% CD SUBMITT
	6/11/2010	100% CD SUBMITT
	3/22/2010	95% CD SUBMITT
	12/18/2009	50% CD SUBMITT
	9/30/2009	DD SUBMITTA
	6/15/2009	SD SUBMITTAL
MARK	DATE	DESCRIPTION
ISSUE:		

MANAGEMENT BLOCK

PROJECT NO: CHAPARRAL

CAD DWG FILE: 2009.004.7/2009.004.8

DRAWN BY: CFA/BLE/JDS/EJS/SCC CHECKED BY: J.G.M.

TITLE OF SHEET DRAINAGE AND
MANHOLE
SECTIONS & DETAILS

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SHEET NUMBER

C-105 SHEET OF