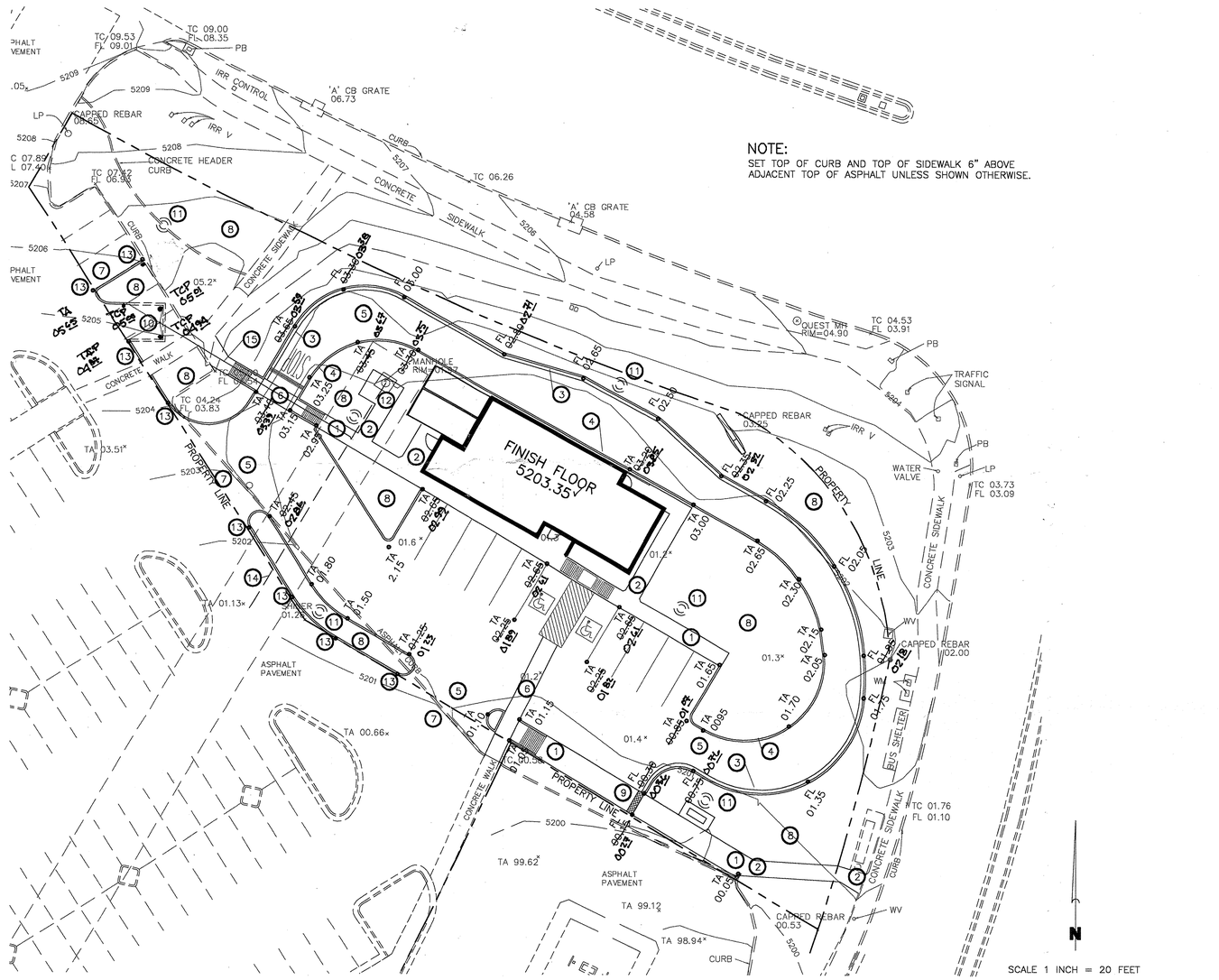



## KEYED NOTES

1. TURNDOWN SIDEWALK. SEE DETAIL SHEET C5.2.
2. SIDEWALK. SEE DETAIL SHEET C5.2.
3. CURB & GUTTER. SEE DETAIL SHEET C5.2.
4. HEADER CURB. SEE DETAIL SHEET C5.2
5. ASPHALT PAVEMENT – LIGHT DUTY. SEE DETAIL SHEET C5.2.
6. COLORED, TEXTURED CONCRETE SIDEWALK. SEE ARCHITECTURAL.
7. EXISTING ASPHALT PAVEMENT, TO REMAIN. BROKEN HATCHED AREA.
8. LANDSCAPE
9. 20" WIDE SIDEWALK CULVERT. SEE DETAIL SHEET C5.2.
10. REFUSE ENCLOSURE. SEE GRADING INFORMATION ON SHEET C5.2.
11. AREA LIGHT. SEE ARCHITECTURAL
12. CONCRETE PAD (ELEV. 03.20) WITH TABLE. SEE ARCHITECTURAL.
13. SET TOP OF CURB 6" ABOVE ADJACENT EXISTING TOP OF ASPHALT.
14. EXISTING SAS.
15. NEW 4" SAS FROM REFUSE ENCLOSURE AREA DRAIN TO EXISTING SAS.

## DRAINAGE NOTES

1. THE SITE IS A TRACT WITHIN A LARGER DEVELOPMENT AND IS PRESENTLY GRADED AND LANDSCAPED. THE OFFSITE FLOWS ARE LIMITED TO A LANDSCAPED AREA OUTSIDE THE TRACT BUT WITHIN THE LARGER DEVELOPMENT. THESE FLOWS ARE INTERCEPTED BY THE CIRCULAR DRIVE AND ROUTED TO A SIDEWALK CULVERT ON THE SOUTHERLY PROPERTY BOUNDARY. ALL FLOWS ARE ROUTED TO THE LARGER DEVELOPMENT AND THENCE TO GOLF COURSE ROAD.

2. THE SITE IS LOCATED IN PRECIPITATION ZONE 1. THERE IS A FLOW INCREASE OF 0.75 AND 0.83 CFS FOR THE 10 YEAR AND 100 YEAR STORMS RESPECTIVELY AND THE 6 HOUR RUNOFF VOLUMES FOR THE 10 YEAR AND 100 YEAR STORM INCREASE BY 1301 AND 1658 CUBIC FEET RESPECTIVELY.

3. THE SITE IS LOCATED IN A 'ZONE X' PER FEMA FIRM MAP NO. 329, DATED NOVEMBER, 2003.

4. TOPO SURVEY DATA SHOWN ON THIS DRAWING WAS OBTAINED BY B&C LAYOUT SERVICES, DATED JANUARY, 2008.

## GRADING NOTES

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE NEW MEXICO ONE CALL SYSTEM AT 260–1990 FOR LOCATION OF EXISTING UTILITIES.

2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

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

4. ALL CONSTRUCTION WITHIN THE PUBLIC RIGHT–OF–WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

## EROSION CONTROL NOTES

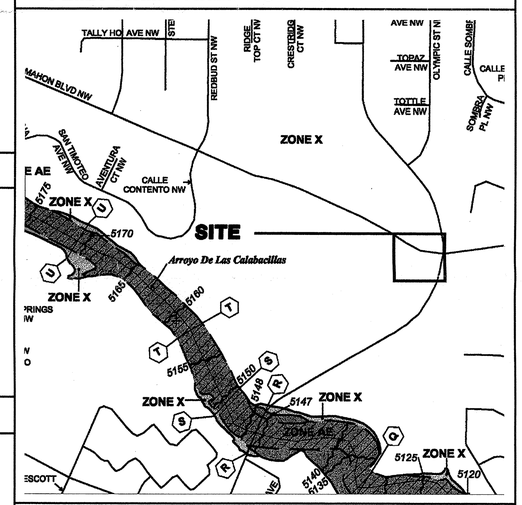
1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE ONTO PUBLIC RIGHT–OF–WAY OR PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY THE CONSTRUCTION OF TEMPORARY SOIL BERMS OR SILT FENCES AT PROPERTY LINES AND WETTING SOIL TO PREVENT IT FROM BLOWING. IF THE SITE IS CONTROLLED BY A SWPPP PLAN, EROSION CONTROL SHALL BE ACCOMPLISHED ACCORDING TO THE PLAN.

2. 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 THE STREET.

3. THE CONTRACTOR SHALL SECURE THE APPROPRIATE BARRICADING, TOP SOIL DISTURBANCE AND EXCAVATION PERMITS FROM THE CITY PRIOR TO BEGINNING CONSTRUCTION.

## VICINITY MAP A-12


## FEMA FIRM PANEL NO. 329




## LEGAL DESCRIPTION

TRACT 1B–5, PARIDISE NORTH SUBDIVISION

## OFFSITE DRAINAGE MAP

OFFSITE DRAINAGE IS LIMITED BY SLOPE AND CURBS TO THE LANDSCAPED AREA IMMEDIATELY ADJACENT TO THE TRACT IN QUESTION. THIS AREA IS SHOWN AS BASIN A IN THE DRAINAGE CALCULATIONS.

## ENGINEER'S CERTIFICATION

I, JEAN J. BORDENAVE, NMPE&LS NO. 5110, OF THE FIRM BORDENAVE DESIGNS, HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN STAMP DATED 02/13/09. THE RECORD INFORMATION EDITED ONTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.
EXCEPTIONS AND/OR QUALIFICATIONS:

NONE.

THE RECORD INFORMATION PRESENTED ON THE EDITED DESIGN DOCUMENT IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THE EDITED DESIGN DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110 NEW MEXICO JEAN J. BORDENAVE

## LEGEND

| | | | |
|---|---|---|---|
| TBM | TEMPORARY BENCHMARK | GM | GAS MATER |
| G | GROUND | GV | GAS VALVE |
| FF | FINISH FLOOR | LP | LIGHT POLE |
| FG | FINISH GRADE | PP | POWER POLE |
| FL | FLOWLINE | GW | GUY WIRE |
| TA | TOP OF ASPHALT | PED | ELEC. OR TEL. PEDESTAL |
| TCP | TOP OF CONCRETE | RD | ROOF DRAINAGE POINT |
| TC | TOP OF CURB | | FEMA FLOODPLAIN BOUNDARY |
| TP | TOP OF EARTH PAD | | DRAINAGE BASIN BOUNDARY |
| TS | TOP OF SIDEWALK | | EROSION SETBACK LINE |
| TW | TOP OF WALL | | EXISTING CONTOUR |
| FH | FIRE HYDRANT | | PROPOSED CONTOUR |
| WM | WATER METER | XX.XX | EXISTING SPOT ELEVATION |
| WV | WATER VALVE | ●XX.XX | PROPOSED SPOT ELEVATION |
| MH | MANHOLE | XX.XX / XX.XX | RECORD SPOT ELEVATION |
| CB | CATCH BASIN GRATE | | |

## DRAINAGE DATA

| CONDITION | BASIN | STORM RETURN PERIOD | TREATMENT TYPE (table 4) | TREATMENT AREA | EXCESS PRECIPITATION (table 8) | PEAK RUNOFF (table 9) | RUNOFF VOLUME | RUNOFF RATE |
|---|---|---|---|---|---|---|---|---|
| - | - | year | - | sq. ft. | in. | cfs/acre | cu. ft. | cfs |
| EXISTING | SITE | 10 | A | 0 | 0.08 | 0.24 | 0 | 0.00 |
| | | | B | 26532 | 0.22 | 0.76 | 486 | 0.46 |
| | | | C | 0 | 0.44 | 1.49 | 0 | 0.00 |
| | | | D | 2565 | 1.24 | 2.89 | 265 | 0.17 |
| | | | TOTAL | 29097 | | | 751 | 0.63 |
| | | 100 | A | 0 | 0.44 | 1.29 | 0 | 0.00 |
| | | | B | 26532 | 0.67 | 2.03 | 1481 | 1.24 |
| | | | C | 0 | 0.99 | 2.87 | 0 | 0.00 |
| | | | D | 2565 | 1.97 | 4.37 | 421 | 0.26 |
| | | | TOTAL | 29097 | | | 1902 | 1.49 |
| DEVELOPED | SITE | 10 | A | 0 | 0.08 | 0.24 | 0 | 0.00 |
| | | | B | 11227 | 0.22 | 0.76 | 206 | 0.20 |
| | | | C | 0 | 0.44 | 1.49 | 0 | 0.00 |
| | | | D | 17870 | 1.24 | 2.89 | 1847 | 1.19 |
| | | | TOTAL | 29097 | | | 2052 | 1.38 |
| | | 100 | A | 0 | 0.44 | 1.29 | 0 | 0.00 |
| | | | B | 11227 | 0.67 | 2.03 | 627 | 0.52 |
| | | | C | 0 | 0.99 | 2.87 | 0 | 0.00 |
| | | | D | 17870 | 1.97 | 4.37 | 2934 | 1.79 |
| | | | TOTAL | 29097 | | | 3560 | 2.32 |
| | A | 100 | A | 0 | 0.44 | 1.29 | 0 | 0.00 |
| | | | B | 7895 | 0.67 | 2.03 | 441 | 0.37 |
| | | | C | 0 | 0.99 | 2.87 | 0 | 0.00 |
| | | | D | 115 | 1.97 | 4.37 | 19 | 0.01 |
| | | | TOTAL | 8010 | | | 460 | 0.38 |

### SIDEWALK CULVERT

FLOW RATE
Q = ((2.03)(11700) +(4.37)(7233))/43560
= 1.27 CFS

BROAD CRESTED WEIR (C = 2.8)
Q = 1.27 = (2.8)L(0.4*1.5)
L = 1.79 FT.
USE 20"

## PERMANENT BENCHMARK

ACS 9_A12 ELEVATION 5201.853 (NAVD 1988)

| no. | date | remarks | by |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |
| 1 | 03/09/09 | raise grade at south end of hc walk extension & ff | JJB |
| | | add area drain w/ outfall from refuse to SAS | |

REVISIONS

REGISTERED PROFESSIONAL ENGINEER AND LAND SURVEYOR NO. 5110 NEW MEXICO JEAN J. BORDENAVE

project title
**BURGER KING**
**MCMAHON @ GOLF COURSE**
**ALBUQUERQUE, NM**

sheet title
**GRADING & DRAINAGE PLAN**

| sheet date | design by | project no. |
|---|---|---|
| 03/13/09 | JJB | 0902 |

sheet
C5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