BURGER KING
PRELIMINARY GRADING AND DRAINAGE PLAN
353 E. BROWN RD
MESA, AZ 85201

BENCHMARK:

BENCHMARK IS A BRASS TAG ON TOP OF CURB LOCATED AT THE SW CORNER OF THE INTERSECTION OF MESA DRIVE AND UNIVERSITY DRIVE. ELEVATION = 1242.68' NAVD 88 (CITY OF MESA DATUM)

BASIS OF BEARING:

THE BASIS OF BEARING AND ALL MONUMENTATION SHOWN HEREON IS BASED ON THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 15, TOWNSHIP 1 NORTH, RANGE 5 EAST, USING A BEARING OF SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, AS SHOWN ON THE FINAL PLAT OF FITCH PLAZA, RECORDED IN BOOK 266, PAGE 38, MARICOPA COUNTY RECORDS.

PROPOSED LEGEND:

Symbol	Description
G=XX.XX	GUTTER ELEVATION. TC (TOP OF CURB) = G+0.5'
P=XX.XX	PAVEMENT ELEVATION
C=XX.XX	CONCRETE ELEVATION
	SAWCUT/LIMITS OF CONSTRUCTION
	RIDGE LINE
	PROPERTY LINE
	CONCRETE CURB & GUTTER
	FLOW ARROW
	HEAVY DUTY PAVEMENT
	CONCRETE PAVEMENT
	LIGHT DUTY PAVEMENT
PE:XX.XX	EXISTING PAVEMENT ELEVATION
TC:XX.XX / G:XX.XX	EXISTING GUTTER ELEVATION TC (TOP OF CURB) = G+0.5'

DRAINAGE STATEMENT:

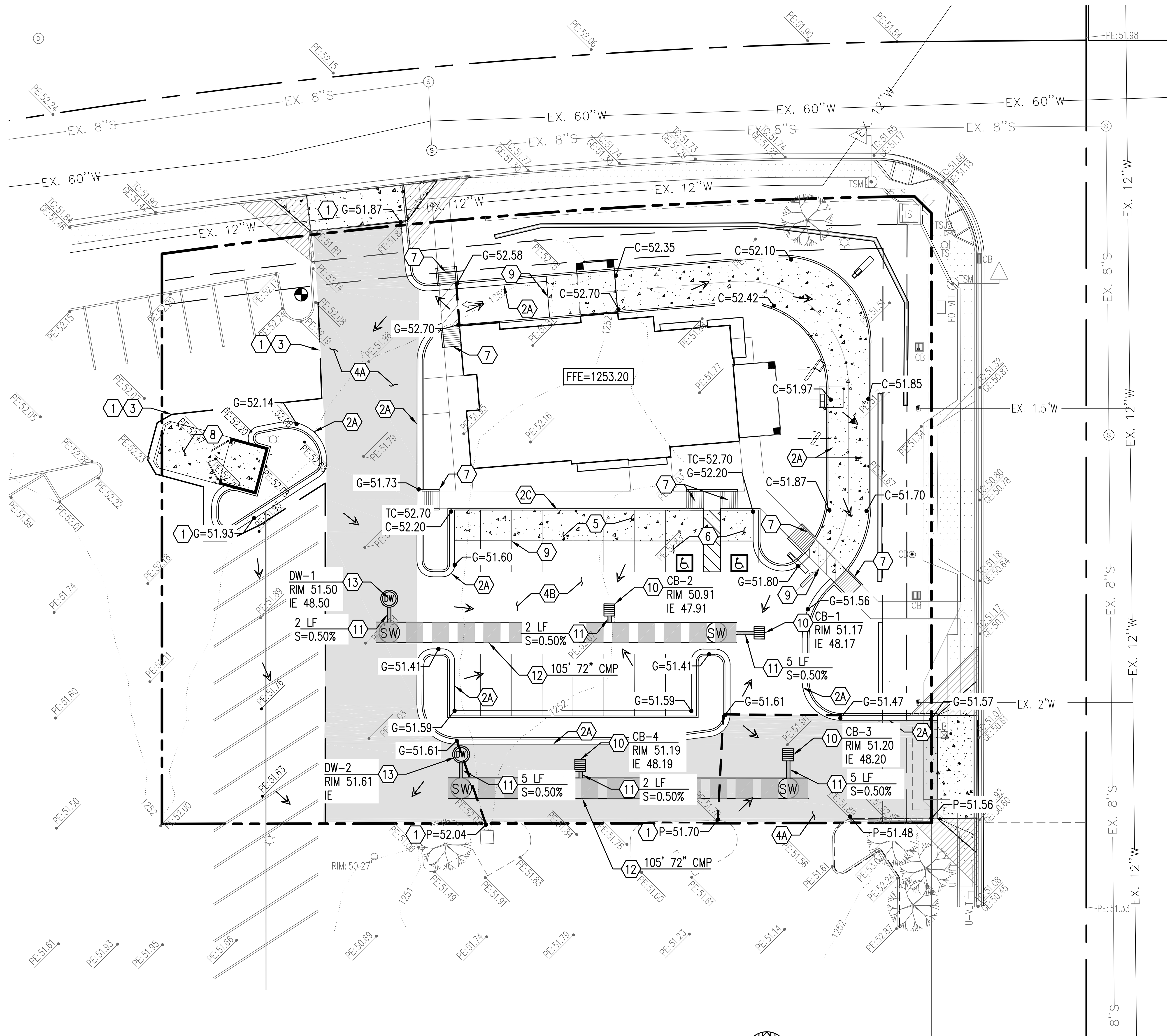
THE PROJECT PROPERTY CONSISTS OF A SINGLE PARCEL LOT OF LAND WHICH IS A PORTION OF THE NORTH-EAST ONE-QUARTER OF SECTION 15, TOWNSHIP 1 NORTH, RANGE 5 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, MESA, ARIZONA. THE BURGER KING DRIVE THRU HAS AN APPROXIMATE AREA OF 0.908 ACRES LOCATED ON 353 E. BROWN ROAD.

PER FIRM MAP NUMBER 04013C2265M DATED 11/04/2015, THIS SITE IS DESIGNATED AS ZONE X WHICH IS FURTHER DESCRIBED AS AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AND THEREFOR IS NOT IN A SPECIAL FLOOD HAZARD AREA.

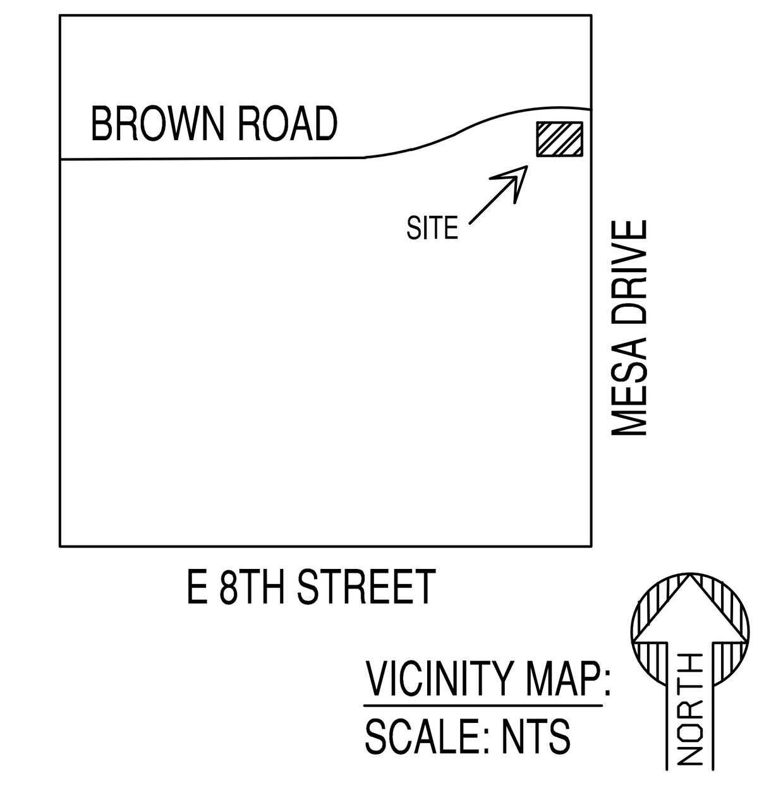
PER THE CITY OF MESA, THE REQUIRED STORM WATER STORAGE VOLUME IS V=C*P/12*A FOR A 100-YEAR, TWO-HOUR STORM EVENT. A C VALUE OF 0.95 WAS TAKEN FOR CONCRETE, 0.85 FOR ASPHALT AND 0.5 FOR LANDSCAPE AREAS, WHERE THE CW WAS COMPUTED TO BE AROUND 0.82. A RAINFALL DEPTH (P) OF 2.16 INCHES IS USED FOR VOLUME CALCULATIONS.

SINCE THIS IS A DEVELOPED LAND, EXISTING STORM WATER DRAINAGE SYSTEMS MUST BE IDENTIFIED AND UTILIZED IF APPLICABLE.

THE TOTAL DRAINAGE AREA IS APPROXIMATELY 0.91 AC. THEREFORE, THE REQUIRED VOLUME (V) IS EQUIVALENT TO V = (0.82*2.16/12*0.91)= 0.13 AC-FT=5,841 CF. ANY RETENTION SYSTEM MUST DRAIN ANY STORM EVENT UP TO AND INCLUDING THE 100-YEAR 2-HOUR STORM WITHIN 36 HOURS.



SCALE: 1" = 20'



VICINITY MAP:
SCALE: NTS

OWNER / DEVELOPER:

KRAF INC/BURGER KING
5070 N. 40TH ST. SUITE 100
PHOENIX, AZ 85018
PHONE: 602-273-7997
ATTN: RON BROATCH
RONBROATCH@AOL.COM

CIVIL ENGINEER:

SUSTAINABILITY ENGINEERING GROUP
8280 E GELDING DR., SUITE 101
SCOTTSDALE, AZ 85260
PHONE 480-237-2507
ATTN: ALI FAKIH
ALI@AZSEG.COM

ARCHITECT

SUSTAINABILITY ENGINEERING GROUP
8280 E GELDING DR., SUITE 101
SCOTTSDALE, AZ 85260
PHONE 480-237-2510
ATTN: BOB HANSEN
BOB@AZSEG.COM

KEYNOTES

1. MATCH EXISTING GRADE; CONTRACTOR TO VERIFY IN FIELD ALL GRADES PRIOR TO ANY CONSTRUCTION ACTIVITIES AND TO CONTACT ENGINEER IN CASE OF ANY DISCREPANCIES.
2A. CONSTRUCT 6" CURB & GUTTER PER MAG STD DET 220-1 TYPE "A".
2B. CONSTRUCT VERTICAL CURB PER MAG STD DET 222 TYPE "A".
2C. CONSTRUCT VERTICAL CURB PER MAG STD DET 222 TYPE "A" WITH TURNDOWN SLAB.
3. SAWCUT EXISTING PAVEMENT/CURB TO PROVIDE STRAIGHT VERTICAL EDGES, FREE FROM IRREGULARITIES. SAWCUT SIDEWALK TO NEAREST JOINT.
4A. CONSTRUCT HEAVY DUTY PAVEMENT.
4B. CONSTRUCT LIGHT DUTY PAVEMENT.
5. CONSTRUCT CONCRETE PAVEMENT.
6. 2% MAXIMUM SLOPE IN ANY DIRECTION AT ACCESSIBLE PARKING STALLS AND 2% MAXIMUM CROSS SLOPE AT ADA ACCESSIBLE ROUTE.
7. CONSTRUCT ADA RAMP.
8. CONSTRUCT CONCRETE PAD FOR TRASH ENCLOSURE. ENCLOSURE PER ARCHITECTURAL PLANS.
9. PAVEMENT JOINT.
10. FURNISH & INSTALL CATCH BASIN PER MAG STD 534-1.
11. INSTALL 12" HDPE.
12. INSTALL 6' CMP.
13. INSTALL DRYWELL.

SEG SUSTAINABILITY ENGINEERING GROUP
8280 E GELDING DR #101, SCOTTSDALE, ARIZONA 85260
WWW.AZSEG.COM TEL. 480.588.7226

BURGER KING CORP./ KRAF INC.
5070 NORTH 40TH STREET SUITE 100
PHOENIX, ARIZONA 85018

PROJECT: BURGER KING MESA & BROWN

LOCATION: N MESA DRIVE & E BROWN ROAD, MESA, AZ 85201

DRAWN	HARMOUCHE
DESIGNED	HARMOUCHE
CHECKED	COUNSELL
PROJ. MGR.	FAKIH
DATE:	04/04/18
ISSUED FOR:	DESIGN REVIEW BOARD (DRB)
JOB NO.:	171099
SHEET TITLE:	PRELIMINARY GRADING AND DRAINAGE PLAN
SHEET NO.:	C3.00