

BENCHMARK:

BENCHMARK IS A BRASS TAG AT THE NORTHWEST CORNER IN BRIDGE. ELEVATION = 1356.84 (NAVD 88 CITY OF MESA DATUM)

BASIS OF BEARING:

THE BASIS OF BEARING FOR THIS SURVEY IS A BEARING OF NORTH 00°23'24" WEST, ALONG THE EAST LINE OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 2 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA.

PROPOSED LEGEND:

- 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
- D.E. DRAINAGE EASEMENT
- PE=XX.XX EXISTING PAVEMENT ELEVATION
- TC=XX.XX EXISTING GUTTER ELEVATION TC (TOP OF CURB) = G+0.5'

DRAINAGE STATEMENT:

THE PROJECT PROPERTY CONSISTS OF A SINGLE PARCEL OF LAND, LOT 3, WHICH IS A PORTION OF THE SOUTHEAST QUARTER OF SECTION 4, TOWNSHIP 2 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, MESA, ARIZONA. THE BURGER KING DRIVE THRU HAS AN APPROXIMATE AREA OF 1.067 ACRES LOCATED ON 9063 E. PECOS ROAD.

PER FIRM MAP NUMBER 04013C2770L DATED 10/16/2013, 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 THEREFORE 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 USED FOR THIS PROJECT. A RAINFALL DEPTH (P) OF 2.19 INCHES IS USED FOR VOLUME CALCULATIONS.

SINCE THIS IS A DEVELOPED LAND, EXISTING STORM WATER DRAINAGE SYSTEMS MUST BE IDENTIFIED AND UTILIZED IF APPLICABLE. DRYWELLS ARE NOT ALLOWED. AFTER A RAINFALL EVENT, STORM WATER COLLECTED IN THE UNDERGROUND RETENTION SYSTEM WILL BE BLEED OFF USING A PUMP AND ROUTED TO THE EXISTING 12" STORM DRAIN SYSTEM ON ON SITE.

THE ONSITE TOTAL DRAINAGE AREA IS APPROXIMATELY 1.067 AC. THE REQUIRED VOLUME (V) IS CALCULATED IN THE "VOLUME REQUIREMENT" SECTION, SHOWN BELOW:

VOLUME REQUIREMENTS:

ONSITE:
C=0.95
P=2.19 IN
A=46,500 SF
 $V = C \times (P/12) \times A = 0.95 \times (2.19/12) \times 46,500 = 8,062 \text{ CF}$

OFFSITE:
3,368 CF (PER HUNTER ENGINEERING PLAN #BELT013 - MESA GERMANN BUSINESS PARK)

TOTAL REQUIREMENT:
8,062 CF + 3,368 CF = 11,430 CF

AMOUNT OF 8' DIAMETER CMP REQUIRED:

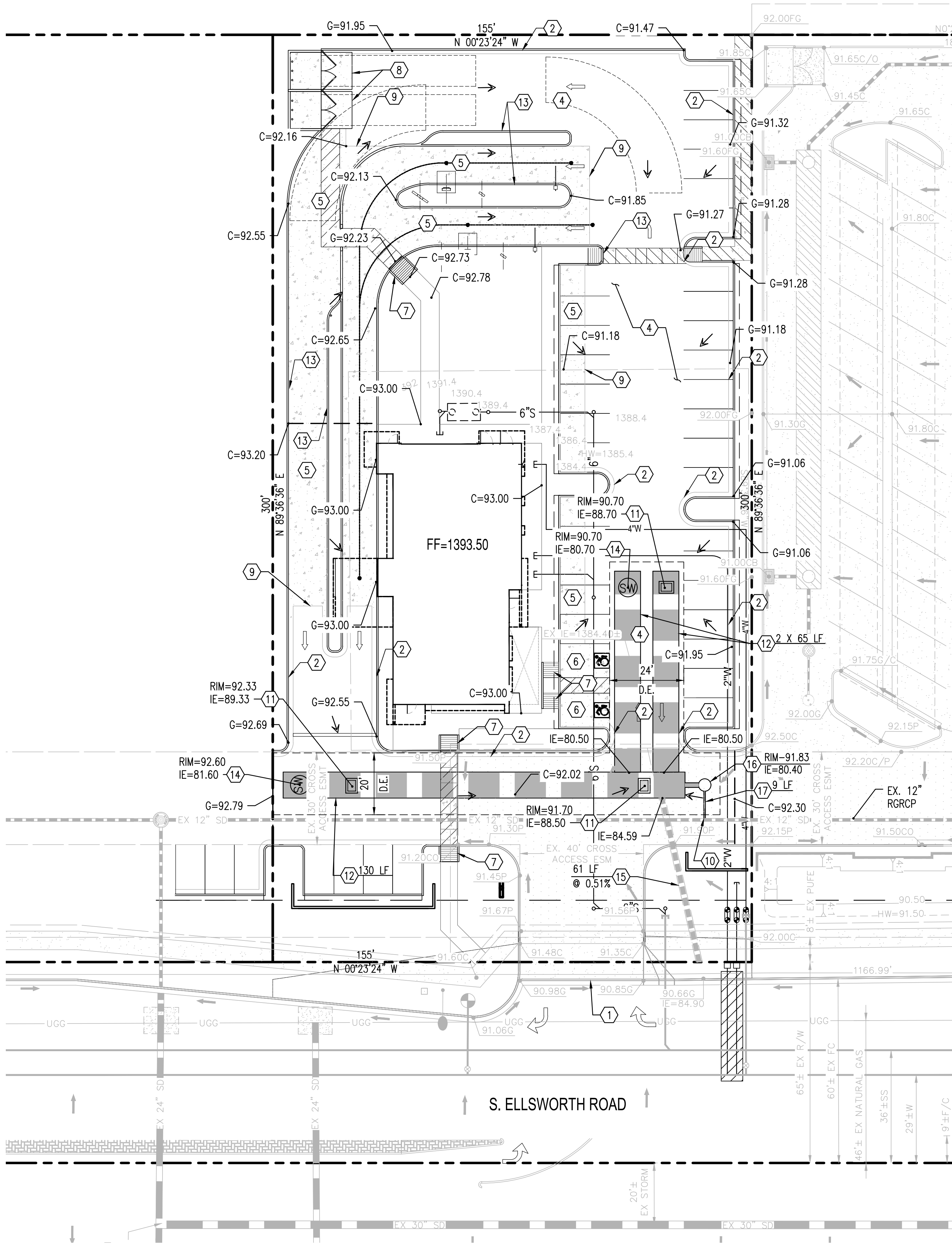
$V_p = L \times A = 260 \times 50.24 = 13,062 \text{ CF}$

PIPE OUT:

*UNDERGROUND RETENTION DISCHARGE TO OCCUR VIA A PUMP TO EXISTING STORM SYSTEM ALONG S. ELLSWORTH ROAD. - BLEED OFF WILL OCCUR IN LESS THAN 36 HOURS. (12 HOURS ASSUMED).

$Q = (13,062 \text{ CF} / 12 \text{ HRS}) / 3,600 = 0.30 \text{ CFS}$

BURGER KING
PRELIMINARY GRADING AND DRAINAGE PLAN
9063 E. PECOS ROAD
MESA, AZ 85212



OWNER :

SUNBELT LAND HOLDINGS, LP
8095 OTHELLO AVENUE
SAN DIEGO, CA 92111
PHONE: 858-776-7698
ATTN: DENNIS O'NEIL

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:

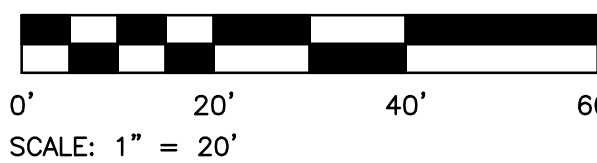
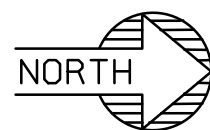
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KEYNOTES

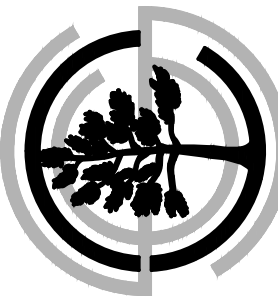
- 1 MATCH EXISTING GRADE; CONTRACTOR TO VERIFY IN FIELD ALL GRADES PRIOR TO ANY CONSTRUCTION ACTIVITIES AND TO CONTACT ENGINEER IN CASE OF ANY DISCREPANCIES.
- 2 CONSTRUCT 6" CURB & GUTTER PER MAG STD DET 220-1 TYPE "A".
- 3 SAWCUT EXISTING PAVEMENT/CURB TO PROVIDE STRAIGHT VERTICAL EDGES, FREE FROM IRREGULARITIES. SAWCUT SIDEWALK TO NEAREST JOINT.
- 4 CONSTRUCT HEAVY DUTY PAVEMENT. (REFER TO GEOTECH REPORT)
- 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 CONTRACTOR TO FIELD VERIFY LOCATION AND MAKE CONNECTION TO EXISTING 12" RGRCP.
- 11 INSTALL CMP RISER INLET WITH CATCH BASIN GRATE.
- 12 INSTALL 8' CMP.
- 13 CONSTRUCT 6" VERTICAL CURB PER MAG STD DET 222, TYPE "A".
- 14 CONSTRUCT ACCESS SHAFT AND MANHOLE LID PER UNDERGROUND RETENTION MANUFACTURES DETAILS.
- 15 EXISTING 18" RGRCP CLASS V TO REMAIN, FROM EXISTING CATCH BASIN AND TO CONNECT TO UNDERGROUND STORAGE. LENGTH AND SLOPE PER PLAN. (INFORMATION FROM HUNTER ENGINEERING #BELT013)
- 16 CONTRACTOR TO INSTALL PUMP STATION TO BLEED UNDERGROUND STORAGE SYSTEM WITHIN 36 HOURS MAXIMUM.
- 17 CONTRACTOR TO INSTALL 2" PRESSURIZED LINE FOR BLEED OFF. LENGTH PER PLAN.



NOTE TO CONTRACTOR:
THIS SET OF DRAWINGS AND DOCUMENTS IS INTENDED AS A SET OF GUIDELINES FOR THE PROJECT AND ARE INTENDED TO BE USED IN CONJUNCTION WITH A SET OF CONSTRUCTION SPECIFICATIONS TO BE SUPPLIED BY OWNER. THEY MUST BE READ TO INCORPORATE ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES INCLUDING FEDERAL A.D.A. REQUIREMENTS. THIS SET ASSUMES THAT THERE ARE NO UNUSUAL SOIL CONDITIONS OR WIND LOADS. THE ENGINEER'S DESIGN CONDITION MAY REQUIRE SIGNIFICANT CHANGES TO THESE DOCUMENTS. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO CONFORM TO ALL APPLICABLE CODES AND TO INFORM THE OWNER/ARCHITECTS OF ANY QUESTIONS OR CLARIFICATIONS WHICH ARE REQUIRED. CONTRACTORS SHALL ALSO VISIT THE SITE BEFORE BEGING. CONTRACTORS ARE REQUIRED TO KNOW ALL OBSERVABLE CONDITIONS AND APPLICABLE CODES.

NOT FOR
CONSTRUCTION

8280 E GELDING DR #101, SCOTTSDALE, ARIZONA 85260
WWW.AZSEG.COM TEL. 480.888.7226



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

PROJECT
BURGER KING
ELLSWORTH ROAD AND PECOS ROAD

LOCATION
9063 E. PECOS ROAD
MESA, AZ 85212

DRAWN: GERSTER
CHECKED: GERSTER
DESIGNED: GERSTER
PROJ. MGR.: COUNSELL
FAKIH

DATE: 03/05/2019
ISSUED FOR: PRELIMINARY DESIGN

REVISION NO.: DATE:
1
2
3
4

JOB NO.: 181203PM/ENT

SHEET TITLE:

PRELIMINARY GRADING AND DRAINAGE PLAN

SHEET NO.:

C3.00

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