

100-YR RUNOFF & RETENTION CALCULATIONS:

VOLUME REQUIRED NORTH:

WHERE: $V_{REQ} = C \cdot D \cdot A \cdot I$
 V_{REQ} = RUNOFF VOLUME (CF)
 C = WEIGHTED RUNOFF COEFFICIENT = 0.195
 D = 100% 24HR RAINFALL DEPTH (IN) = 2.21-IN
 A = AREA OF PROJECT SITE IN ACRES (25.67 AC)

$V_{REQ} = 198,921 \text{ CF}$

UNDERGROUND RETENTION: 1,600 LF OF 10" CMP = 125,644 CF

SURFACE RETENTION: 84,644 CF

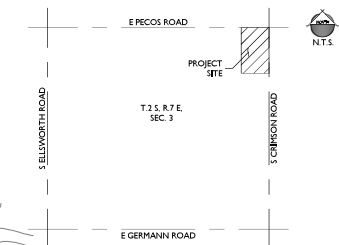
$V_{REQ} = 220,144 \text{ CF}$

PRELIMINARY GRADING & DRAINAGE PLANS

**FOR
KOMATSU
MESA, ARIZONA**

THE EAST LINE OF THE NORTH-EAST QUARTER OF SECTION 3, TOWNSHIP 2 SOUTH,
RANGE 7 EAST OF THE GILA AND SALT RIVER MERIDIAN,
MARICOPA COUNTY, ARIZONA

VICINITY MAP



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BASIS OF BEARING

BASE OF BEARING FOR THIS SURVEY IS A BEARING OF NORTH 89°24'31" WEST ALONG THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 3, TOWNSHIP 2 SOUTH, RANGE 7 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, ACCORDING TO PLS SUBMERSON RECORD OF SURVEY, RECORDED IN BOOK 410, PAGE 21, MARICOPA COUNTY RECORDS, ARIZONA.

BENCHMARK

3.0 KM (1.85 MI) NORTHERLY ALONG ELLSWORTH ROAD FROM THE POST OFFICE IN QUEEN CREEK, 29.8 M (97.8 FT) WEST OF THE ROAD CENTERLINE, 12.7 M (41.7 FT) WEST OF A FENCE CORNER, 8.3 M (27.2 FT) NORTH OF AND LEVEL WITH THE CENTER OF SUPERSTITION DRIVE, 1.9 M (6.2 FT) EAST OF A UTILITY POLE WITH A GUY CABLE, AND 0.9 M (3.0 FT) SOUTH OF A WITNESS POST AND FENCE. NOTE-ACCESS TO THE DATUM POINT IS THROUGH A SUNCH LOGO CAP.

NAV888 ELEV=1394.01

FLOOD ZONE INFORMATION

THIS SITE IS LOCATED WITHIN "ZONE X SHADED" AS SHOWN ON FLOOD INSURANCE RATE MAP NUMBER 04013C0794.
 0.2% ANNUAL CHANCE FLOOD HAZARD. AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTH LESS THAN ONE FOOT OR WITH DRAINAGE AREAS OF LESS THAN ONE SQUARE MILE.

LEGEND

- SEWER LINE
- SEWER MAN-HOLE
- WATER LINE
- ⊕ FIRE HYDRANT
- ⊕ WATER VALVE
- FF= FINISHED FLOOR
- SLOPE DIRECTION
- STORM DRAIN PIPE
- TRENCH DRAIN
- CATCH BASIN
- DRYWELL
- UNDERGROUND RETENTION
- HEADWALL

DATE

- PRE-SUBMITTAL 03-04-2024
- DR SUBMITTAL 05-27-2024
- SUP SUBMITTAL 05-27-2024
- DR/SUP 2nd SUBMITTAL 07-15-2024



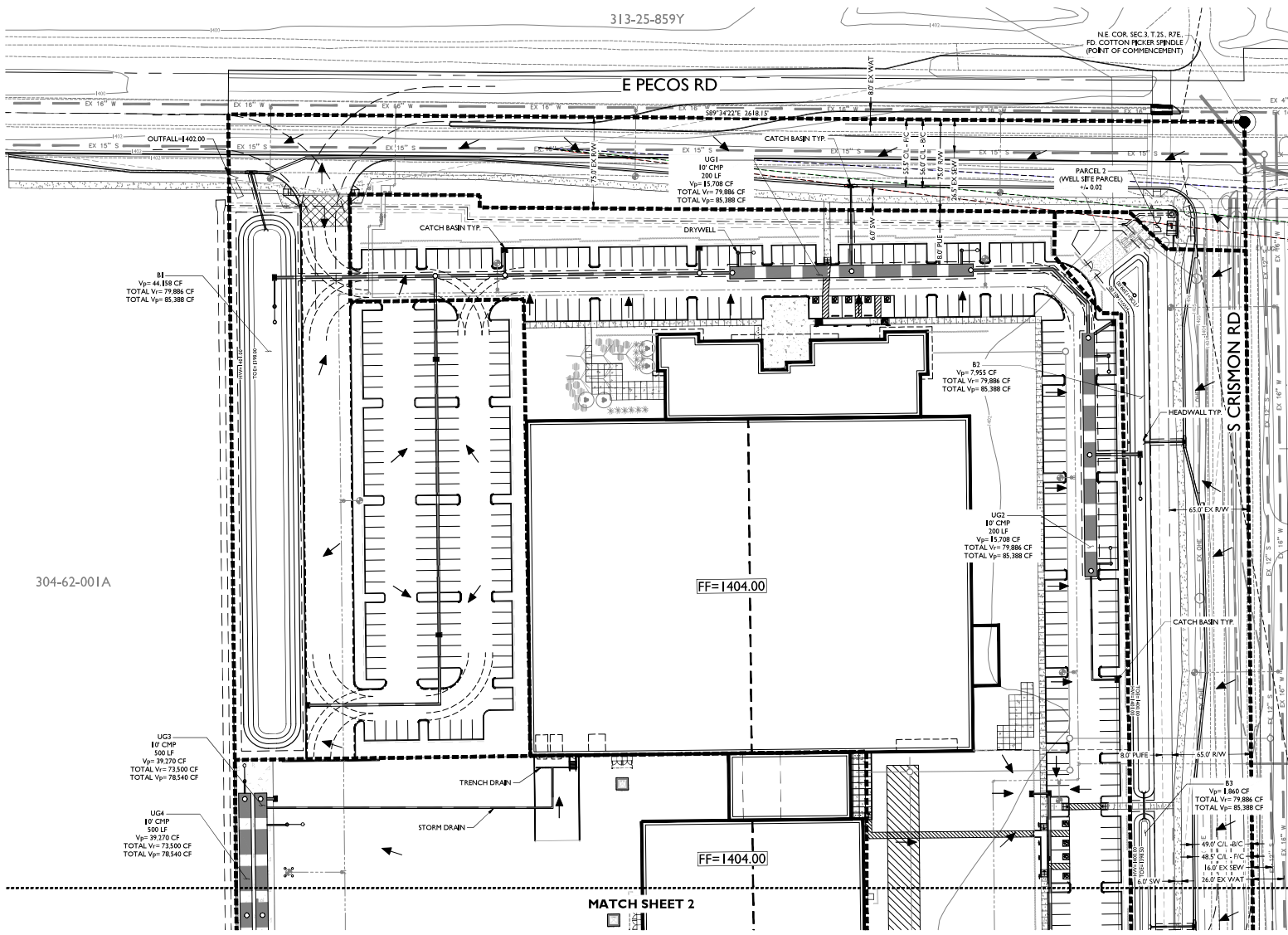
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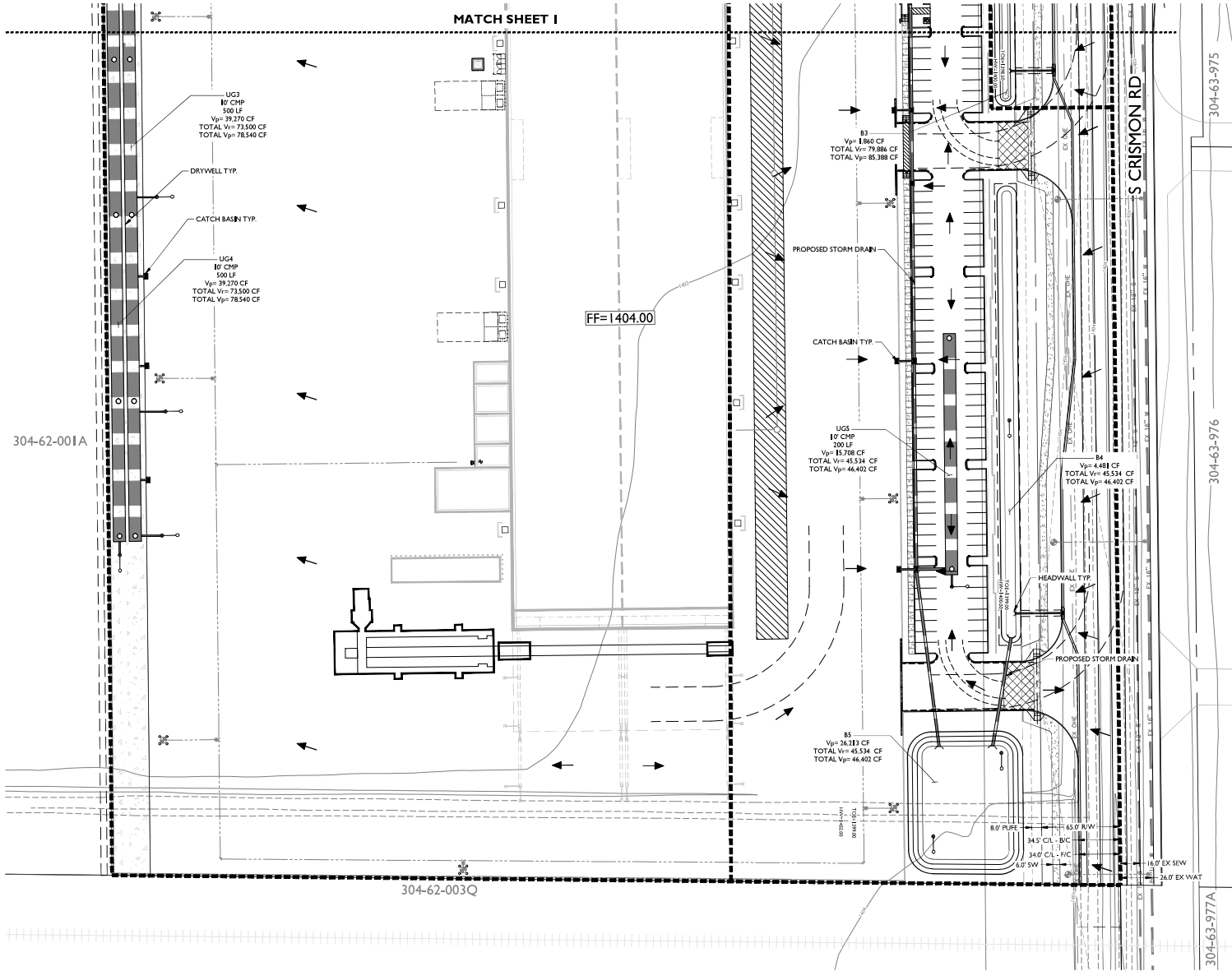
PRELIM GRD PLAN

Project: 230721 PG01



304-62-001A

MATCH SHEET 2



- LEGEND**
- SEWER LINE
 - SEWER MAN-HOLE
 - WATER LINE
 - FIRE HYDRANT
 - WATER VALVE
 - FF=
 - SLOPE DIRECTION
 - STORM DRAIN PIPE
 - TRENCH DRAIN
 - CATCH BASIN
 - DRYWELL
 - UNDERGROUND RETENTION
 - HEADWALL

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KOMATSU SALES AND SERVICE FACILITY

9927
E. PECOS
ROAD
MESA
ARIZONA
85212

DATE

PRE-SUBMITTAL
03-04-2024
DR SUBMITTAL
05-27-2024
SUP-SUBMITTAL
05-27-2024
DR/SUP 2nd
SUBMITTAL
07-15-2024



DRAWN BY: NG & CC

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PRELIM G&D PLAN

Project: PG02

