PRELIMINARY GRADING, DRAINAGE & UTILITY PLAN

FOR

THE LANDING AT FALCON FIELD

1919 N. 46TH STREET

S.W.C. OF E MCKELLIPS ROAD AND N 48TH STREET

MESA, ARIZONA 85205

C-2 (G&D) C-3 (G&D) 141-34-367 BLDG A 141-34-002H C-5 (G&D) 141-34-372 C-4 (G&D) C-8 (UTILITES) C-9 (UTILITES) BLDG D JASMINE. STREET APN 141-34-353 141-34-344 141-34-345 141-34-346A 141-34-348 141-34-349 141-34-351 141-34-002J **-**(NOT A PART)

SITE MAP

INDEX OF PLAN SHEETS

COVER SHEET

6-9 (C-6-9) PRLELIMINARY UTILITY PLANS

2-5 (C-2-5) PRELIMINARY GRADING AND DRAINAGE PLAN

OWNER/DEVELOPER

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BASIS OF BEARINGS

THE BASIS OF BEARING IS THE MONUMENT LINE OF MCKELLIPS ROAD, ALSO BEING THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 10, USING A BEARING OF NORTH 89 DEGREES 48 MINUTES 45 SECONDS EAST, AS PER THE RECORD OF SURVEY IN BOOK 661 OF MAPS, PAGE 17, RECORDS OF MARICOPA COUNTY, ARIZONA.

VICINITY MAP

BENCHMARK

CITY OF MESA BENCHMARK, BEING A TAGGED NAIL IN THE TOP OF CURB AT THE NORTHWEST CORNER OF THE INTERSECTION OF GREENFIELD ROAD & MCKELLIPS ROAD, HAVING AN ELEVATION OF 1356.57 FEET, NAVD88.

ZONING

141-34-002H

FLOOD ZONE

ACCORDING TO THE FLOOD INSURANCE RATE MAP #04013C2280L, DATED OCTOBER 16, 2013, THIS PROPERTY IS LOCATED IN FLOOD ZONE "X".

PROJECT DESCRIPTION

THE LANDING AT FALCON FIELD IS A 33+/- ACRE MIXED USE DEVELOPMENT COMPRISED OF COMMERCIAL/RETAIL AND INDUSTRIAL USES. THE PROPOSED CENTER CONSISTS OF TWO PAD BUILDINGS AND FOUR INDUSTRIAL BUILDINGS IN ADDITION TO PAVING, DRAINAGE, AND UTILITY IMPROVEMENTS TO SERVE SAID BUILDINGS. THIS PLAN SET CONTAINS A PRELIMINARY GRADING/DRAINAGE AND UTILITY SCHEME ALONG WITH PERTINENT RETENTION VOLUME CALCULATIONS FOR THE 100-YR; 2-HR EVENT, AND A CONCEPTUAL ROUTING OF A GRAVITY BLEED-OFF LINE WHICH TIES INTO THE EXISTING 54" STORM DRAIN WITHIN MCKELLIPS ROAD. PRELIMINARY OFFSITE IMPROVEMENTS AND RIGHT-OF-WAY DEDICATIONS ARE ALSO REFLECTED WITHIN THE CIVIL SUBMITTAL AS STIPULATED BY CITY OF MESA.

LEGAL DESCRIPTION

A PORTION OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 1 NORTH, RANGE 6 EAST OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT A BRASS CAP IN HANDHOLE AT THE CENTERLINE INTERSECTION OF 48TH STREET AND MCKELLIPS ROAD, FROM WHICH THE NORTH QUARTER CORNER OF SAID SECTION BEARS NORTH 88 DEGREES 47 MINUTES 43 SECONDS EAST, A DISTANCE OF 270.03 FEET;

THENCE SOUTH 88 DEGREES 47 MINUTES 43 SECONDS WEST ALONG THE NORTH LINE OF SAID NORTHWEST QUARTER, A DISTANCE OF 1014.81 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 01 DEGREES 12 MINUTES 17 SECONDS EAST, A DISTANCE OF 55.00 FEET TO THE POINT OF BEGINNING:

THENCE NORTH 88 DEGREES 47 MINUTES 43 SECONDS EAST, PARALLEL WITH AND 55.00 FEET SOUTH OF SAID NORTH LINE, A DISTANCE OF 965.14 FEET TO THE BEGINNING OF A 12.00 FOOT RADIUS CURVE. CONCAVE

THENCE DEPARTING SAID PARALLEL LINE AND SOUTHEASTERLY ALONG SAID CURVE, THROUGH A CENTRAL ANGLE OF 86 DEGREES 10 MINUTES 27 SECONDS, AN ARC LENGTH OF 18.05 FEET TO THE WESTERLY RIGHT-OF-WAY LINE OF 48TH STREET AND THE BEGINNING OF A 1038.14 FOOT RADIUS REVERSE CURVE

THENCE SOUTHEASTERLY ALONG SAID CURVE AND WESTERLY RIGHT-OF-WAY LINE, THROUGH A CENTRAL ANGLE OF' 25 DEGREES 39 MINUTES 25 SECONDS, AN ARC LENGTH OF 464.88 FEET TO THE BEGINNING OF A 917.63 FOOT RADIUS REVERSE CURVE CONCAVE SOUTHWESTERLY:

THENCE SOUTHEASTERLY ALONG SAID CURVE AND WESTERLY RIGHT-OF-WAY LINE THROUGH A CENTRAL ANGLE OF 30 DEGREES 29 MINUTES 28 SECONDS, AN ARC LENGTH OF 488.34 FEET;

THENCE SOUTH OO DEGREES 11 MINUTES 47 SECONDS EAST ALONG SAID WESTERLY RIGHT-OF-WAY LINE, A DISTANCE OF 346.31 FEET TO THE NORTHEAST COMER OF "MESA COMMERCE CENTER", ACCORDING TO BOOK 292, PAGE 21, MARICOPA COUNTY RECORDS:

THENCE DEPARTING SAID WESTERLY RIGHT-OF-WAY LINE, SOUTH 88 DEGREES 42 MINUTES 56 SECONDS WEST ALONG THE NORTH LINE OF SAID "MESA COMMERCE CENTER", A DISTANCE OF 1146.20 FEET; THENCE DEPARTING SAID NORTH LINE, NORTH 00 DEGREES 06 MINUTES 14 SECONDS WEST, PARALLEL WITH AND 130.00 FEET EAST OF THE WEST LINE OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 10. A DISTANCE OF 50.00 FEET:

THENCE DEPARTING SAID PARALLEL LINE, SOUTH 88 DEGREES 42 MINUTES 56 SECONDS WEST, PARALLEL WITH AND 50.00 FEET NORTH OF SAID NORTH LINE OF "MESA COMMERCE CENTER". A DISTANCE OF 100.00 FEET:

THENCE DEPARTING SAID PARALLEL LINE, NORTH 00 DEGREES 06 MINUTES 14 SECONDS WEST, PARALLEL WITH AND 30.00 FEET EAST OF SAID WEST LINE, A DISTANCE OF 1218.86 FEET TO THE POINT OF BEGINNING.

RETENTION CALCULATIONS

<u>MARICOPA COUNTY 100-YEAR, 2-HOUR STORM</u> VOLUME REQUIRED = A * P/12 * C

WHERE: A = AREA (S.F.)

P = 100-YEAR, 2-HOUR RAINFALL = 2.20"

C = RUNOFF COEFFICIENT = 0.90 (COMMERCIAL)

DRAINAGE AREA 1

AREA = 1.550.868 S.F.

VOLUME REQUIRED = 1,550,868 + 2.20/12 + 0.90 = 255,893 C.F.

TOTAL SURFACE BASIN VOLUME PROVIDED: 24,966

TOTAL UNDERGROUND RETENTION REQUIRED:

- OVERALL VOLUME REQUIRED SURFACE BASIN PROVIDED
- = 255,893 C.F. 24,966 C.F. = 230,927 C.F.

UNDERGROUND RETENTION PIPE VOLUME PROVIDED:

VOLUME PROVIDED = LENGTH * CROSS SECTIONAL AREA OF STORAGE PIPE

2,945 LF OF 10' DIA. UNDERGROUND STORAGE PIPE

VOLUME PROVIDED = $2,945 * 3.14 * 5^2 = 231,183$ Cu.Ft.

OVERALL VOLUME PROVIDED: 24,966 + 231,183 = 256,149 Cu.Ft. OVERALL VOLUME REQUIRED: 255,893 Cu.Ft.

PRELIMINARY GRAVITY BLEED OFF SIZING

FOUND BRASS CAP IN HAND HOLE

FOUND MONUMENT AS SHOWN

EASEMENT LINE

BOUNDARY LINE

MONUMENT LINE

SET 1/2" REBAR WITH CAP

FOUND BRASS CAP FLUSH

255,893 CF; DRAIN TIME 36 HOURS ~ 1.97 CFS. 15" @ 0.45% CAPACITY 2.5 CFS

EXISTING CATCH BASIN

EXISTING SEWER CLEANOUT

EXISTING BACKFLOW PREVENTER

EXISTING TRAFFIC SIGNAL

EXISTING FIRE HYDRANT

EXISTING WATER VALVE

EXISTING SIGN

EXISTING STORM DRAIN MANHOLE

EXISTING SANITARY SEWER MANHOLE

EXISTING PULL/JUNCTION BOX EXISTING TELEPHONE MANHOLE

150 75 0 75 150

EXISTING UTILITY POLE

EXISTING SHUT OFF SWITCH

EXISTING ELECTRIC UTILITY

EXISTING LIGHT POLE

EXISTING SEWER MAIN

EXISTING WATER MAIN

EXISTING POST

SCALE IN FEET: 1"=150'

— -OHE- — **EXISTING OVERHEAD ELECTRIC** EXISTING STORM DRAIN P XX.XX SPOT ELEVATION. PROPOSED SCREEN AND/OR RETAINING WALL PROPOSED RIP RAP

PROPOSED STORM DRAIN

LEGEND

CONCRETE ELEVATION TOP OF CURB ELEVATION GUTTER ELEVATION SWALE FLOWLINE ELEVATION PAVEMENT FINISH GRADE ELEVATION FINISH GRADE TOP OF RETAINING WALL

FINISHED GRADE NORTH ELEVATION FINISHED GRADE EAST ELEVATION FINISHED GRADE SOUTH ELEVATION FINISHED GRADE WEST ELEVATION

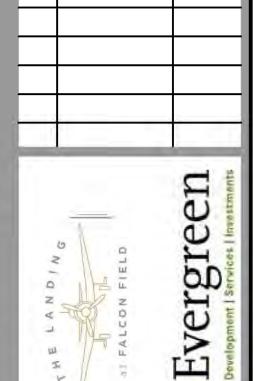
PROPOSED SEWER CLEANOUT ∞ DRAINAGE FLOW ARROW

PROPOSED BACKFLOW PROPOSED WATER METER PROPOSED CATCH BASIN PROPOSED STORM DRAIN MANHOLE

SLOPE OUT 4:1 MAXIMUM

PROPOSED DRAINAGE AREA BOUNDARY PROPOSED DRAINAGE AREA DESIGNATOR

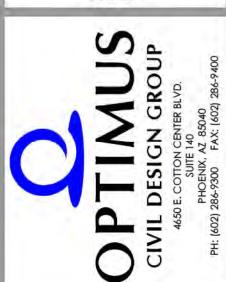
> Contact Arizona 811 at least two fu∎ ARIZONA'81 Call 811 or click Arizona811.c



REVISION

IELD

JAMSHEED D BEHRANA



DESIGNED: DB,JK DRAWN: CHECKED: JDB DATE: 12/2023 JOB NO .: 211366



