

The drawings are the property of the architect and are not to be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of the architect. The contractor shall check and verify all dimensions and report any discrepancies to the architect prior to construction. Do not scale the drawing.



PRELIMINARY GRADING & UTILITY PLAN

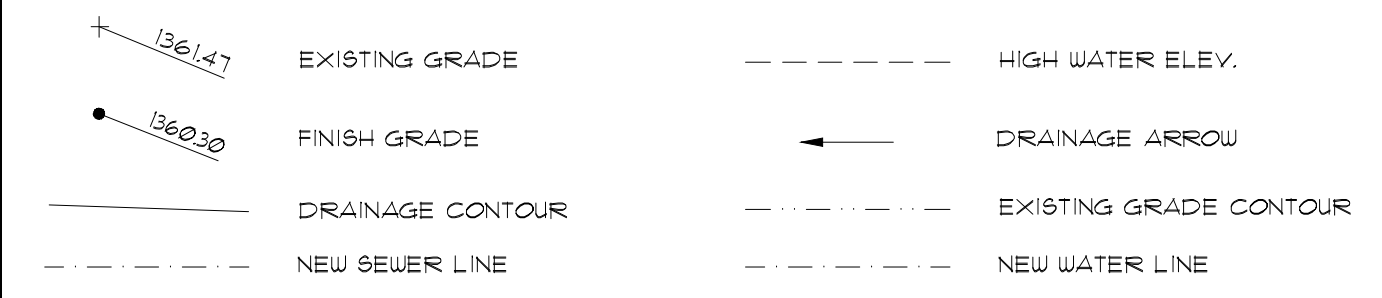
SCALE: 1" = 20'-0"

SITE BENCHMARK:
 FOUND 1/2" REBAR AT SECTION
 LINE 3.40' EAST OF FROM SUC
 ELEV = 136049 NAVD88 DATUM
BENCHMARK:
 CITY OF MESA BENCHMARK
 PND BR459 TAG ON TOP OF CURB
 SUC MCDOWELL AND GREENFIELD
 ELEV = 136479 NAVD88 DATUM

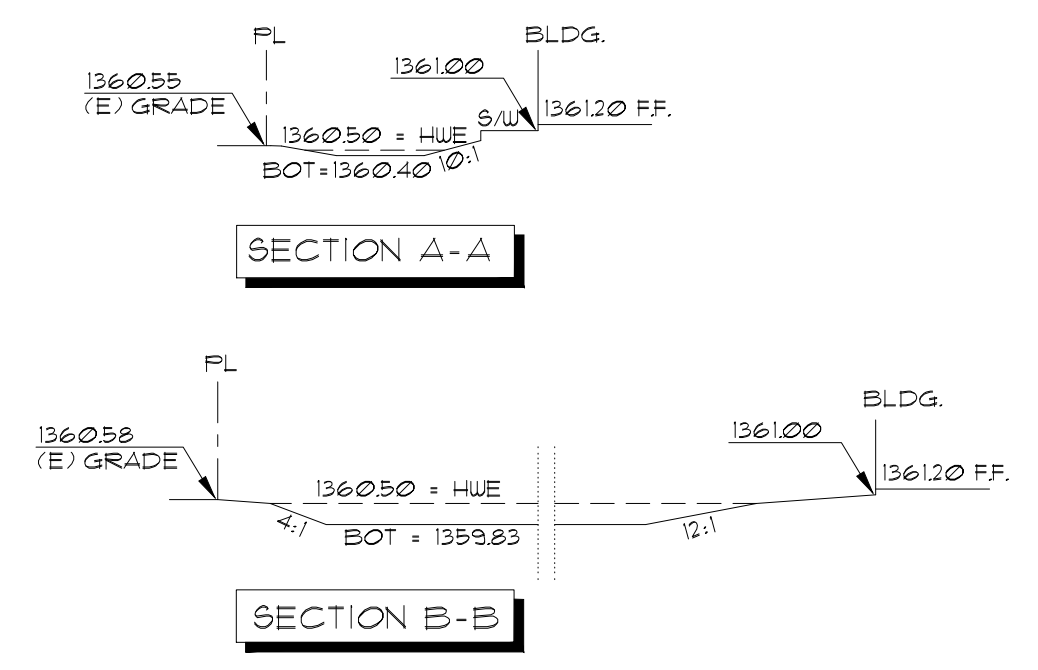
CONSTRUCTION NOTES

- ① RIP RAP
- ② NEW 6-INCH FIRELINE
- ③ NEW 4-INCH SEWER LINE
- ④ NEW 1-INCH WATER LINE
- ⑤ NEW ELECTRICAL LINES
- ⑥ EXISTING POWER POLE TYP.
- ⑦ EXISTING MANHOLE
- ⑧ ELECTRICAL S.E.S.
- ⑨ FIRE DEPARTMENT CONNECTION
- ⑩ NEW WATER TAP W/ 3/4" WATER METER AND BOX
- ⑪ NEW 3/4" BACKFLOW PREVENTER
- ⑫ NEW 6" DOUBLE CHECK VALVE BFF
- ⑬ NEW 6-INCH WATER TAP
- ⑭ NEW 4-INCH SEWER TAP
- ⑮ NEW CONCRETE

LEGEND



SECTIONS



RETENTION CALCULATIONS

RETENTION PROVIDED:

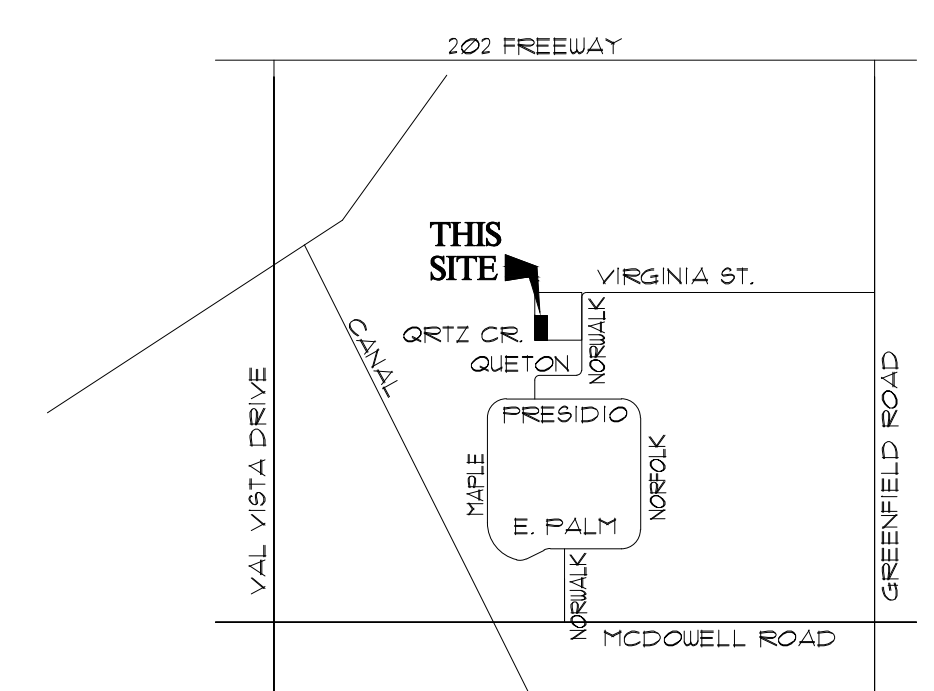
RETENTION BASIN	AREA BOTTOM SQ. FT.	AREA TOP SQ. FT.	DEPTH FT.	VOLUME * C.F.	H.W.E.	RET. BOT.
BASIN A	5248	7178	0.67	4163	136050	135983
TOTAL RETENTION PROVIDED:				4163		

$$*V = \frac{A_b + A_t}{2} \times D$$

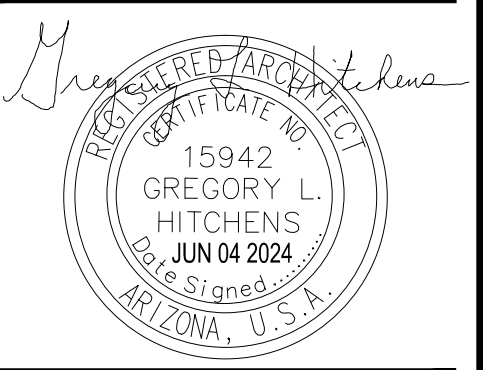
RETENTION REQUIRED:

$V = (C) (D/12) (A)$
 $C_1 = 0.50$ (LANDSCAPE - 11568 SF) $V_L = (0.50) (0.18) (11568) = 1041$ CF
 $C_2 = 0.35$ (ROOF - 16,975 SF) $V_A = (0.35) (0.18) (16,975) = 2886$ CF
 $D = 22$ REQD RETENTION TOTAL: = 3,927 CF
 $A = 28,443$ SQ. FT.

VICINITY MAP



HITCHENS ASSOCIATES ARCHITECTS
 3126 N. LOS ALAMOS
 MESA, ARIZONA 85213
 TELEPHONE: 602.615.0204



REVISIONS

NEW BUILDING FOR
 ABLE STEEL FABRICATORS
 4150 E. Quartz Circle
 Mesa, Arizona

PROJECT NO: 22303
 DRAWN BY: GLH
 DATE: 6-4-2024

PRELIMINARY GRADING AND UTILITY PLAN C-1