

GENERAL NOTES:

- THE FOLLOWING "GENERAL NOTES" SHALL BE INCLUDED ON ALL PRIVATE LAND DEVELOPMENT PROJECTS THAT INVOLVE PUBLIC IMPROVEMENTS SUCH AS PUBLIC STREETS, OR CITY OF MESA UTILITIES AND FACILITIES.
- ALL WORK AND MATERIALS SHALL CONFORM TO THE CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS FURNISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS AND AS AMENDED BY THE CITY OF MESA. ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE AMENDED SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
 - SEPARATE RIGHT-OF-WAY PERMITS ARE REQUIRED FOR ALL PUBLIC UTILITIES, PUBLIC STREET IMPROVEMENTS, AND RIGHT-OF-WAY LANDSCAPING. FOR INFORMATION REGARDING AVAILABILITY AND COST OF RIGHT-OF-WAY PERMITS, CONTACT THE DEVELOPMENT SERVICES DEPARTMENT AT (480) 644-4273 OR AT [HTTP://WWW.MESA AZ.GOV/DEVSUSTAIN/CONSTRUCTIONPERMITS.ASPX](http://www.mesaaz.gov/devsustain/constructionpermits.aspx). THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED UNLESS OTHERWISE NOTED. CONTRACTORS MUST HOLD THE APPROPRIATE CLASS OF LICENSE AND SHALL HAVE ON FILE WITH THE PERMIT SERVICES SECTION PROOF OF INSURANCE COVERAGE. PERMITS BECOME INVALID AND MUST BE UPDATED IF WORK HAS NOT BEGUN WITHIN NINETY (90) DAYS. PERMITS ALSO BECOME INVALID IF THE CONTRACTOR'S INSURANCE LAPSES OR IS VOIDED.
 - TWENTY FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY CITY OF MESA ENGINEERING DEPARTMENT AT (480)644-2251 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRELIMINARY FIELD REVIEW AT THE PROJECT SITE WITH THE CITY OF MESA ENGINEERING DEPARTMENT CONSTRUCTION INSPECTOR (CITY INSPECTOR). FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED.
 - CONTRACTOR'S SHALL COMPLY WITH THE REQUIREMENTS TO OBTAIN THE NECESSARY RIGHT-OF-WAY PERMITS AND SHALL COMPLY WITH THE RIGHT-OF-WAY PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.
 - THE CITY OF MESA PARKS & RECREATION DIVISION IS NOT REPRESENTED BY BLUE STAKE. WHEN THE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO A CITY PARK, THE CONTRACTOR SHALL CONTACT THE PARKS & RECREATION ADMINISTRATION SECTION AT (480) 644-2354 TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES.
 - THE CONTRACTOR SHALL OBTAIN AN EARTH-MOVING PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL.
 - THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL & SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED AND ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS. THE ENGINEER OR ARCHITECT ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN CORRECTLY PLOTTED/SHOWN.
 - THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM SEWER, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT" DRAWINGS PROVIDED BY THE ENGINEER TO THE CITY'S ENGINEERING DEPARTMENT.
 - THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATIONS BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OF-WAY AND EASEMENTS HAVE BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.
 - THE DEVELOPER SHALL PROVIDE ALL CONSTRUCTION STAKING FOR THE PROJECT.
 - THE DEVELOPER OR THE ENGINEER IS RESPONSIBLE FOR ARRANGING FOR THE RELOCATION OR REMOVAL OF ALL UTILITIES OR FACILITIES THAT ARE IN CONFLICT WITH THE PROPOSED PUBLIC IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ALL UTILITIES, POWER POLES, IRRIGATION DRY-UPS, RESETS REMOVALS BY OTHERS, ETC.
 - THE CONTRACTORS SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATION AND AVOID DAMAGE TO SAME. CALL (602)263-1100 FOR BLUE STAKE TWO WORKING DAYS PRIOR TO DIGGING. CALL SALT RIVER PROJECT FOR POLE BRACING, ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT (602) 273-8888.
 - WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
 - CONTRACTORS SHALL COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AND BARRICADING PER THE CURRENT CITY OF MESA TRAFFIC BARRICADE MANUAL.
 - IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM PERMIT SERVICES AND PAY ALL APPLICABLE FEES AND CHARGES.
 - IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST OF THE CITY INSPECTOR, AND IT IS NECESSARY FOR CITY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE CITY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY CITY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.
 - THE CONTRACTOR IS ADVISED THAT DAMAGE TO PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY INSPECTOR. UNLESS OTHERWISE APPROVED BY THE CITY, ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES AND SYSTEMS AS A RESULT OF CONTRACTOR'S ACTIVITIES SHALL BE BORNE BY THE CONTRACTOR.

CITY OF MESA PAVING NOTES:

- THE DEVELOPER AND THE CONTRACTOR ARE REQUIRED TO COORDINATE THE PLACEMENT OR INSTALLATION OF DRIVEWAYS IN ORDER TO AVOID CONFLICT WITH UTILITY SERVICES.
- ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC., SHALL BE INSTALLED TO FINISH GRADE OR SHALL BE ADJUSTED TO FINISH GRADE AFTER PLACING OF ASPHALTIC SURFACE COURSE BY THE CONTRACTOR PER M.A.G. STANDARD DETAIL 270 AND 422.
- THE CONTRACTOR SHALL ADJUST ALL FRAMES, COVERS, VALVE BOXES, MANHOLES, ETC. THAT ARE LOCATED WITHIN THE PARKWAY AREA AFTER FINAL GRADING AND INSTALLATION OF LANDSCAPING.
- ALL LANDSCAPING IMPROVEMENTS, INCLUDING IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT-OF-WAY OR RETENTION BASINS THAT ARE TO BE MAINTAINED BY THE CITY OF MESA, SHALL BE IN ACCORDANCE WITH THE LANDSCAPING AND IRRIGATION STANDARDS BOOKLET.
- THE STREET PAVING PERMITTEE/CONTRACTOR IS HEREBY NOTIFIED THAT IN THE EVENT THAT ACCEPTANCE OF THE PUBLIC STREET PAVING IS DELAYED; SIX MONTHS OR MORE AFTER THE PAVEMENT WAS INSTALLED, THE PERMITTEE/CONTRACTOR SHALL APPLY A SEAL COAT TO THE PAVEMENT. TYPE OF MATERIAL AND RATE OF APPLICATION WILL BE DIRECTED BY THE CITY OF MESA ENGINEERING DEPARTMENT – FIELD SUPERVISING ENGINEER.
- A STANDARD RESIDENTIAL DRIVEWAY APPROACH SHALL BE CONSTRUCTED TO A MAXIMUM WIDTH OF 30 FEET UNLESS SPECIAL APPROVAL HAS BEEN OBTAINED.

CITY OF MESA STORMWATER DRAINAGE & RETENTION NOTES:

- THE ENGINEER, OR LAND SURVEYOR SHALL CERTIFY THAT THE REQUIRED STORM WATER RETENTION HAS BEEN PROVIDED. THE CERTIFICATION SHALL ALSO INDICATE THE ACTUAL VOLUME PROVIDED. SUCH CERTIFICATION SHALL BE PROVIDED TO BUILDING SAFETY DIVISION – BUILDING INSPECTIONS WHEN THE RETENTION AREA IS TO REMAIN PRIVATE PROPERTY AND TO ENGINEERING CONSTRUCTION SERVICES WHEN THE RETENTION AREA IS TO BECOME CITY OF MESA PROPERTY.
- ALL DRYWELLS SHOWN ON THIS PROJECT SHALL BE MAINTAINED BY THE OWNERS AND ARE TO BE REPLACED BY THE OWNERS WHEN THEY CEASE TO DRAIN WATER IN A 36 HOUR PERIOD. REGULAR MAINTENANCE OF THE DRYWELL – SILING CHAMBER IS REQUIRED TO ACHIEVE THE BEST OPERATION OF THE DRYWELL. IN ACCORDANCE WITH ARIZONA REVISED STATUTES, DRYWELLS ARE REQUIRED TO BE REGISTERED WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (A.D.E.Q.) IT IS THE OWNER'S RESPONSIBILITY TO REGISTER ALL DRYWELLS. AN AQUIFER PROTECTION PERMIT MAY BE REQUIRED BY A.D.E.Q. FOR DRYWELLS DEEMED TO BE HAZARDOUS TO GROUNDWATER.

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT I HAVE REVIEWED THE "AS-BUILT" FOR THE ABOVE REFERENCED PROJECT AND CERTIFY THAT THE DEVELOPMENT HAS BEEN CONSTRUCTED IN ACCORDANCE WITH THE APPROVED IMPROVEMENT PLANS, THAT IT WILL FUNCTION AS DESIGNED AND PERMITTED.

REGISTERED CIVIL ENGINEER _____ DATE _____

I HEREBY CERTIFY THAT THE "RECORD DRAWING" MEASUREMENTS AS SHOWN HEREON WERE MADE UNDER MY SUPERVISION OR AS NOTED ARE CORRECT TO THE BEST OF MY KNOWLEDGE.

REGISTERED SURVEYOR _____ DATE _____

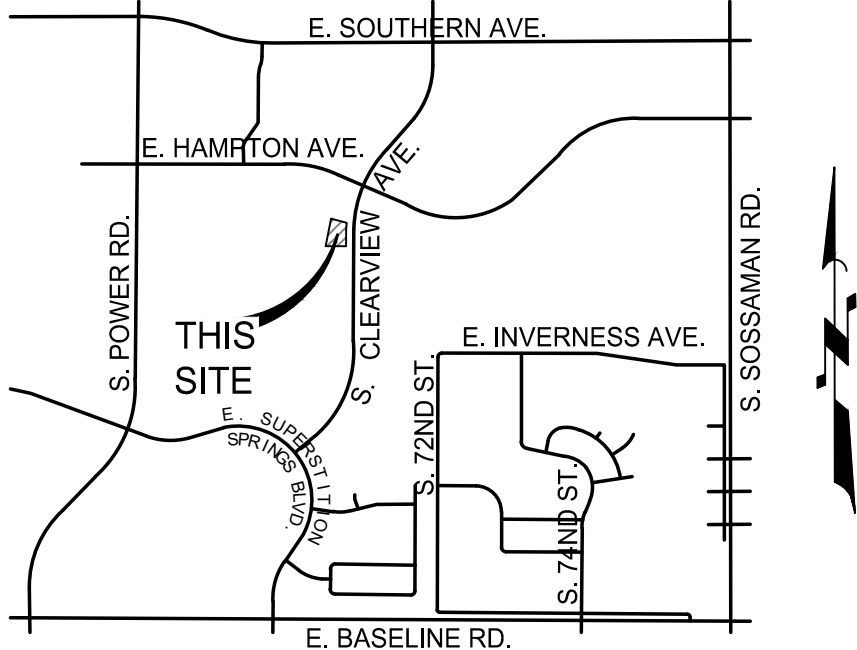
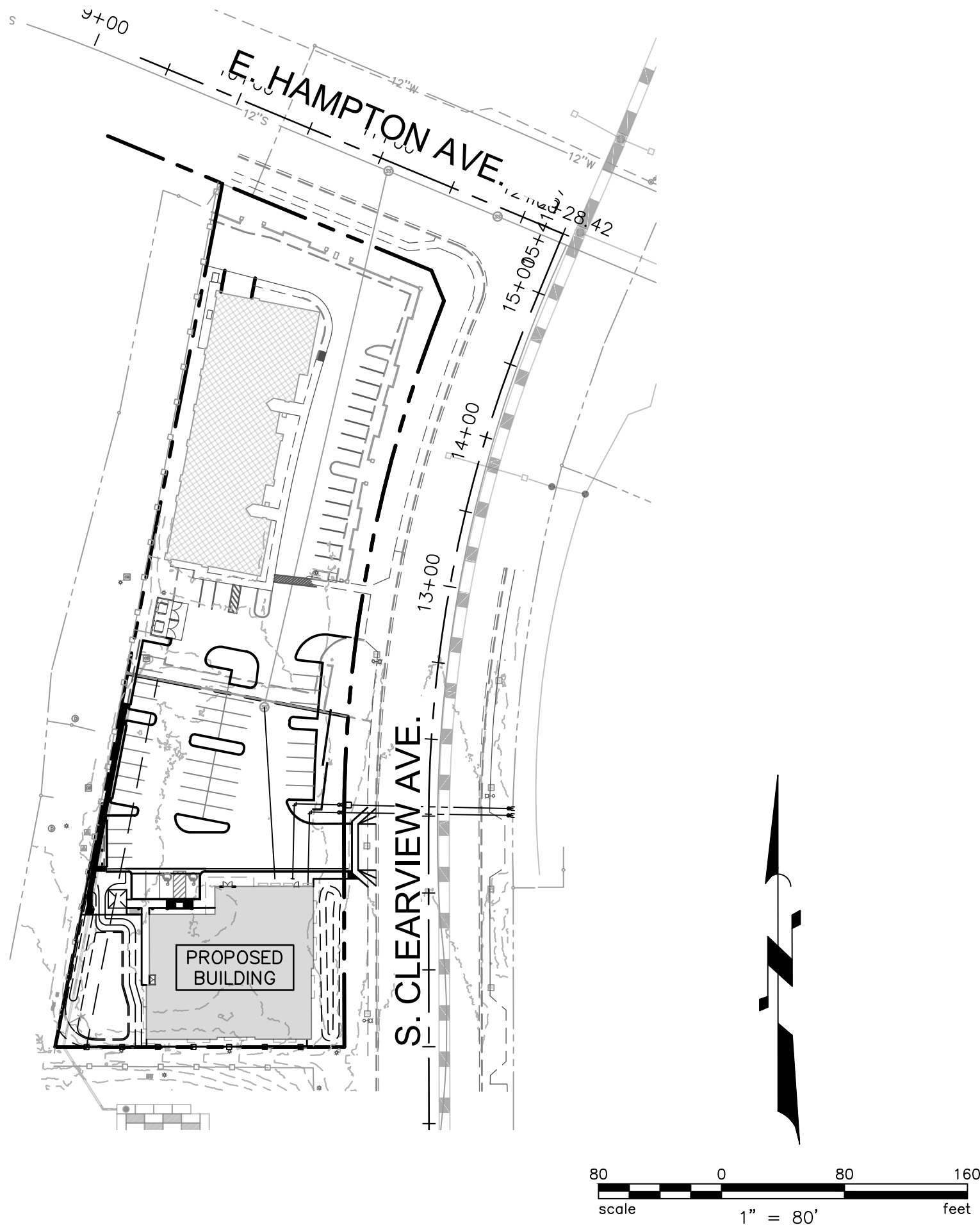
IMPROVEMENT PLAN

FOR

POLARIS AUTISM ACADEMY

A PORTION OF THE NORTHWEST QUARTER OF SECTION 31, TOWNSHIP 1 NORTH,
RANGE 07 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN,
MARICOPA COUNTY, ARIZONA

APN# 218-56-570B



VICINITY MAP
N.T.S.

OWNER

POLARIS RE HOLDINGS, LLC.
2913 N POWER ROAD SUITE108
MESA, AZ 85215

ARCHITECT

BOYD H. THACKER
2637 E EL MORO AVE
MESA, AZ 85204
PH: (602) 909-3686

ENGINEER

BABBITT SMITH ENGINEERING
1140 E. GREENWAY ST., SUITE 2
MESA, ARIZONA 85203
OFFICE: (480) 610-1341
DIRECT: (480) 757-8021
CONTACT: DARREN SMITH
EMAIL: darren@babbittsmith.com

SITE BENCHMARK

CITY OF MESA BENCHMARK
BRASS TAG, TOP OF CURB, NORTHEAST
CORNER 72ND STREET AND SOUTHERN
AVENUE
GRID NORTH: 870776.024
GRID EAST: 773449.582
ELEVATION=1390.34 (NAVD88 DATUM)

FLOOD ZONE

ACCORDING TO FEMA FLOOD INSURANCE
RATE MAP, MAP NUMBER 04013C2295L
DATED OCTOBER 16, 2013, THE
SUBJECT PROPERTY IS LOCATED IN
ZONE X. ZONE X IS DEFINED AS "AREAS
OF 0.2% ANNUAL CHANCE FLOOD
HAZARD; AREAS OF 1% ANNUAL CHANCE
FLOOD WITH AVERAGE DEPTH LESS THAN
1 FOOT OR WITH DRAINAGE AREAS OF
LESS THAN 1 SQUARE MILE; AND AREAS
OF FUTURE CONDITIONS OF 1% ANNUAL
CHANCE FLOOD HAZARD".

SHEET INDEX

-COVER SHEET
-GRADING & DRAINAGE PLAN
-GRADING SECTIONS
-UTILITY PLAN

ENGINEER'S NOTES:

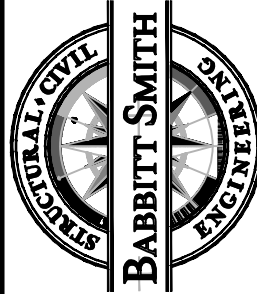
- THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS REGARDING THESE PLANS SHALL BE PRESENTED TO THE ENGINEER. ANYONE WHO TAKES UPON HIMSELF THE INTERPRETATION OF THE DRAWINGS OR MAKES REVISIONS TO THE SAME WITHOUT CONFERRING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THERE OF.

MCESD APPROVAL:

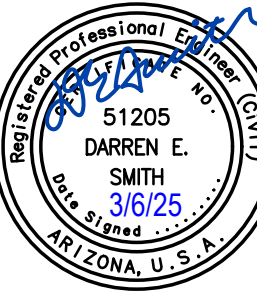
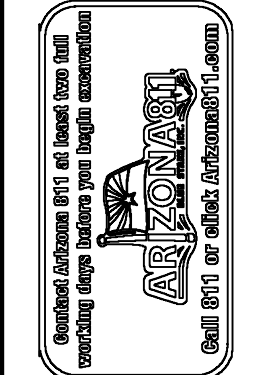
PERMIT NUMBERS XXXXXX

MARICOPA ENVIRONMENTAL SERVICES DEPARTMENT _____ DATE _____

Babbitt Smith Engineering
1140 E. Greenway St. Suite 2
Mesa, Arizona 85203
office: (480) 610-1341
direct: (480) 757-8021
cell: (480) 882-8240



COVER SHEET PLAN
PROJECT: 1440 S CLEARVIEW AVE.
POLARIS AUTISM ACADEMY
MESA, ARIZONA



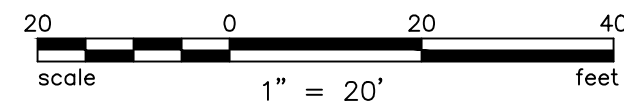
JOB NO.
24054

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SHEET NO.

1

1 OF 4



	CENTERLINE
	PROPERTY LINE
	SETBACK LINE
	EASEMENT
	RIGHT-OF-WAY
	PUBLIC UTILITY EASEMENT
	EXISTING CONTOUR
	PROPOSED SINGLE CURB
	EXISTING VERTICAL CURB & GUTTER
	PROPOSED WATER
	PROPOSED SEWER
	EXISTING WATER
	EXISTING SEWER
	PROPOSED FIRELINE
P=	PAVEMENT ELEVATION
EG=	EXISTING GRADE
FG=	FINISH GRADE
FF=	FINISHED FLOOR
PAD=	PAD ELEVATION
ETC=	EXISTING TOP OF CURB ELEVATION
EC=	EXISTING CONCRETE ELEVATION
INV=	INVERT ELEVATION
EP=	EXISTING PAVEMENT ELEVATION
TC=	TOP OF CURB ELEVATION
	SLOPE
	FINISHED FLOOR & PAD ELEVATION
	OUTFALL ELEVATION

1	INSTALL 3" AC ON 8" ABC
2	INSTALL 2" AC ON 6" ABC
3	CURB TERMINATION PER MAG 222
4	CONSTRUCT 6" SINGLE CURB PER MAG 220, TYPE A
5	CONSTRUCT CONCRETE VALLEY GUTTER PER MAG STD DET 240
6	INSTALL FENCE PER ARCHITECTURAL PLANS
7	CONSTRUCT SIDEWALK PER MAG STD DTL 230 (WIDTH PER PLAN)
8	CONSTRUCT CURB OPENING, 3' WIDTH
9	CONSTRUCT 6" VERTICAL CURB AND GUTTER PER MAG 220-1
10	INSTALL RAMP
	DRAINAGE NOTES
1	INSTALL RETAINING WALL
2	RIPRAP, D50=6", THICKNESS=12"

RETENTION METHOD	DRAINAGE AREA	RUNOFF COEFFICIENT	AREA (ACRES)	R _R (CF)	D (FT)	A _T (SF)	A _B (SF)	R _P (CF)	Excess (CF)	Excess (CF)
BASIN A	1	0.81	0.65	4,249	2.2	3,586	308	4,283	35	1%
BASIN B	2	0.83	0.22	1,444	1.0	1,197	383	790	-654	-45%
TOTAL			0.87	5693.60				5073.24	-619.36	-11%

*RETENTION IN THE PARCEL IMMEDIATELY SOUTH (THE GEORGE) IS DESIGNED TO ACCEPT RUNOFF FROM THIS SUBJECT PARCEL

100yr-2hr precipitation depth¹ 2.20= inches = 0.1833 ft

100yr-2hr precipitation depth ¹	inches	feet
	2.20	0.1833

$$\text{Retention Required } (R_R)^1 = C \times P/12 \times A$$

Where:

- C = Weighted runoff coefficient
- P = 100-year 2-hour rainfall depth
- A = Contributing Area (SF)

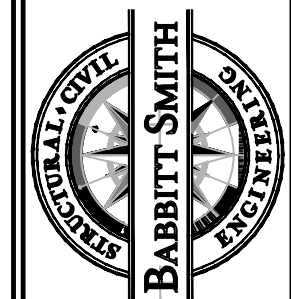
$$\text{Retention Provided (R}_P\text{)} = [(A_T + A_B) / 2] \times D$$

Where:

- A_T = Basin Top Area (SF)
- A_B = Basin Bottom Area (SF)
- D = Basin Depth (FT)

¹ CITY OF MESA EDSM

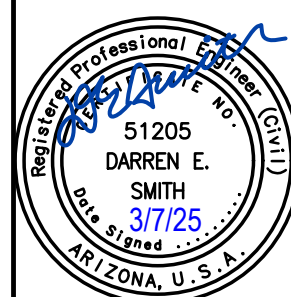
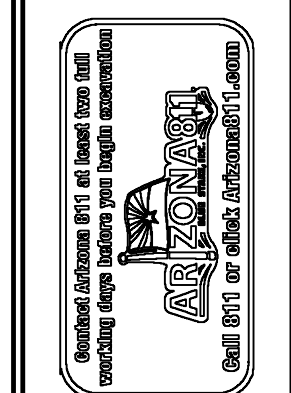
Babbitt Smith Engineering
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GRADING & DRAINAGE PLAN

1440 S CLEARVIEW AVE.
POLARIS AUTISM ACADEMY
MESA, ARIZONA

PROJECT:



JOB NO.
24054

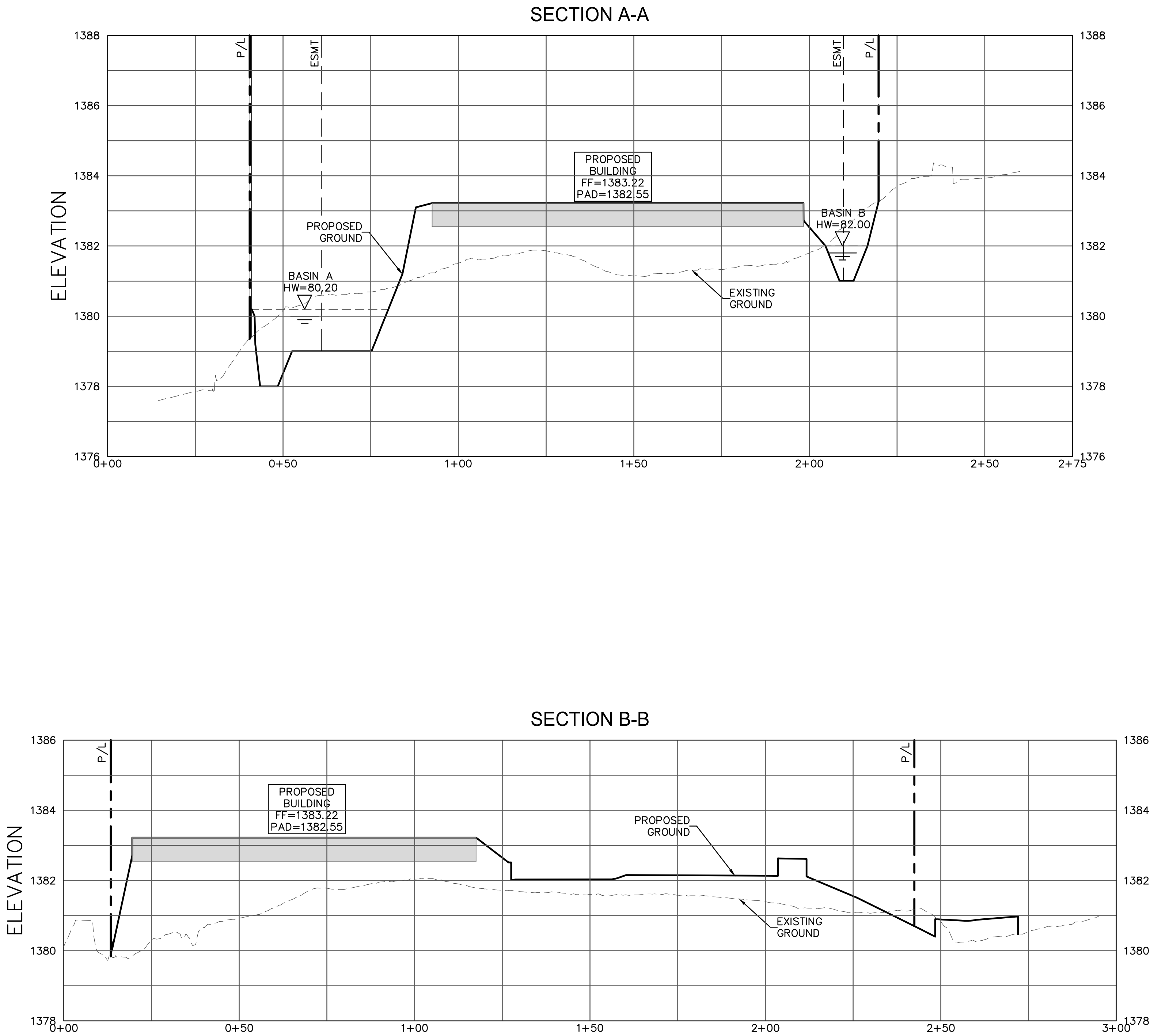
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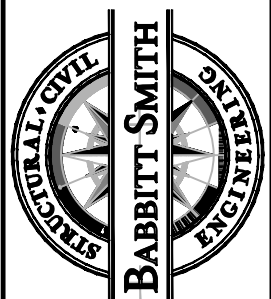
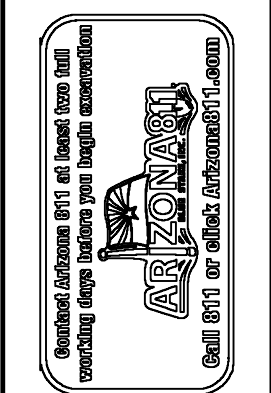

SHEET NO.

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REVISIONS:	
Babbitt Smith Engineering 1140 E. Greenway St. Suite 2 Mesa, Arizona 85203 office: (480) 610-1341 direct: (480) 757-5021 cell: (480) 862-8240	
	
GRADING SECTIONS	
PROJECT: 1440 S CLEARVIEW AVE. POLARIS AUTISM ACADEMY MESA, ARIZONA	
	
	
JOB NO. 24054	
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SHEET NO. 3	
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