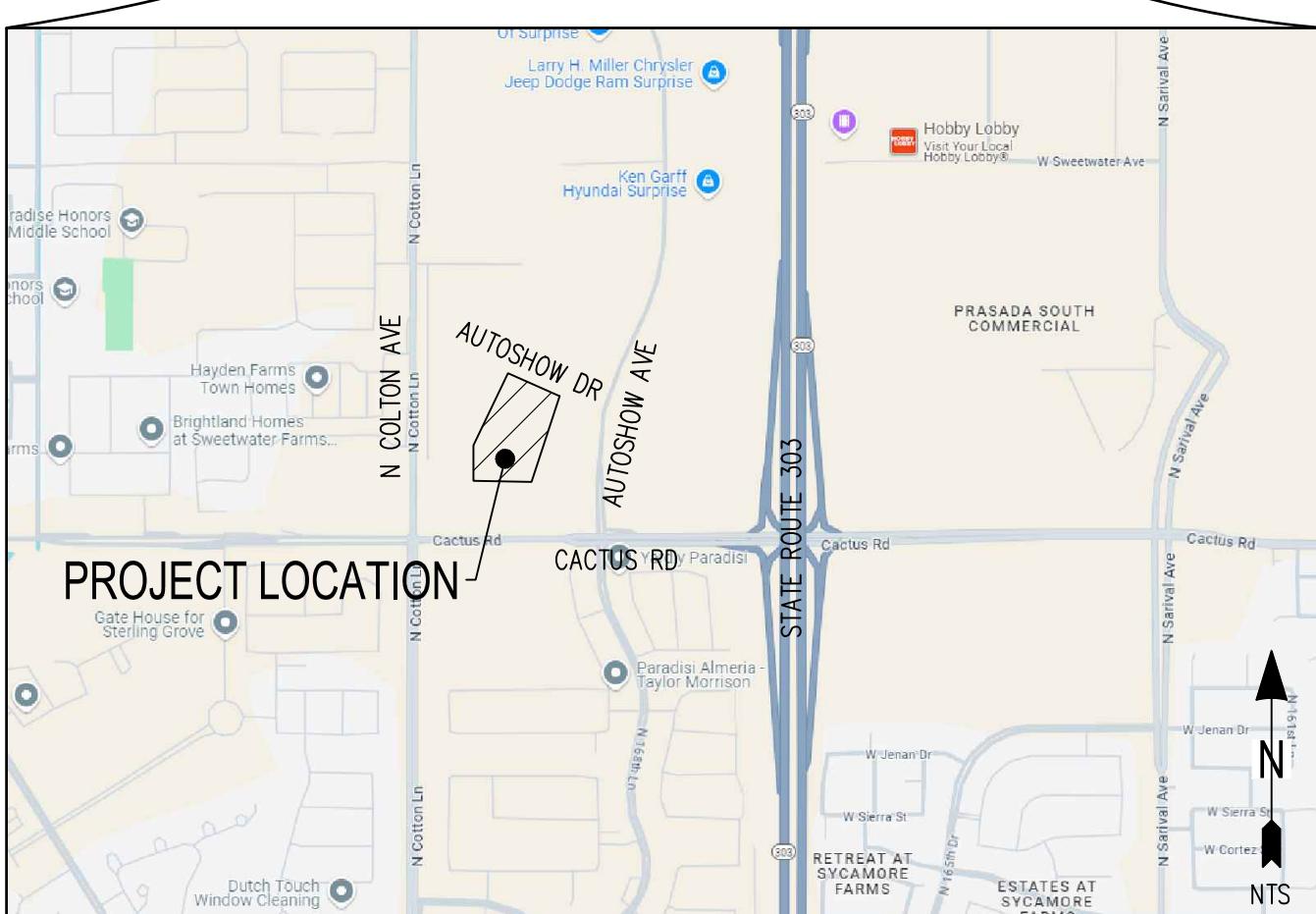
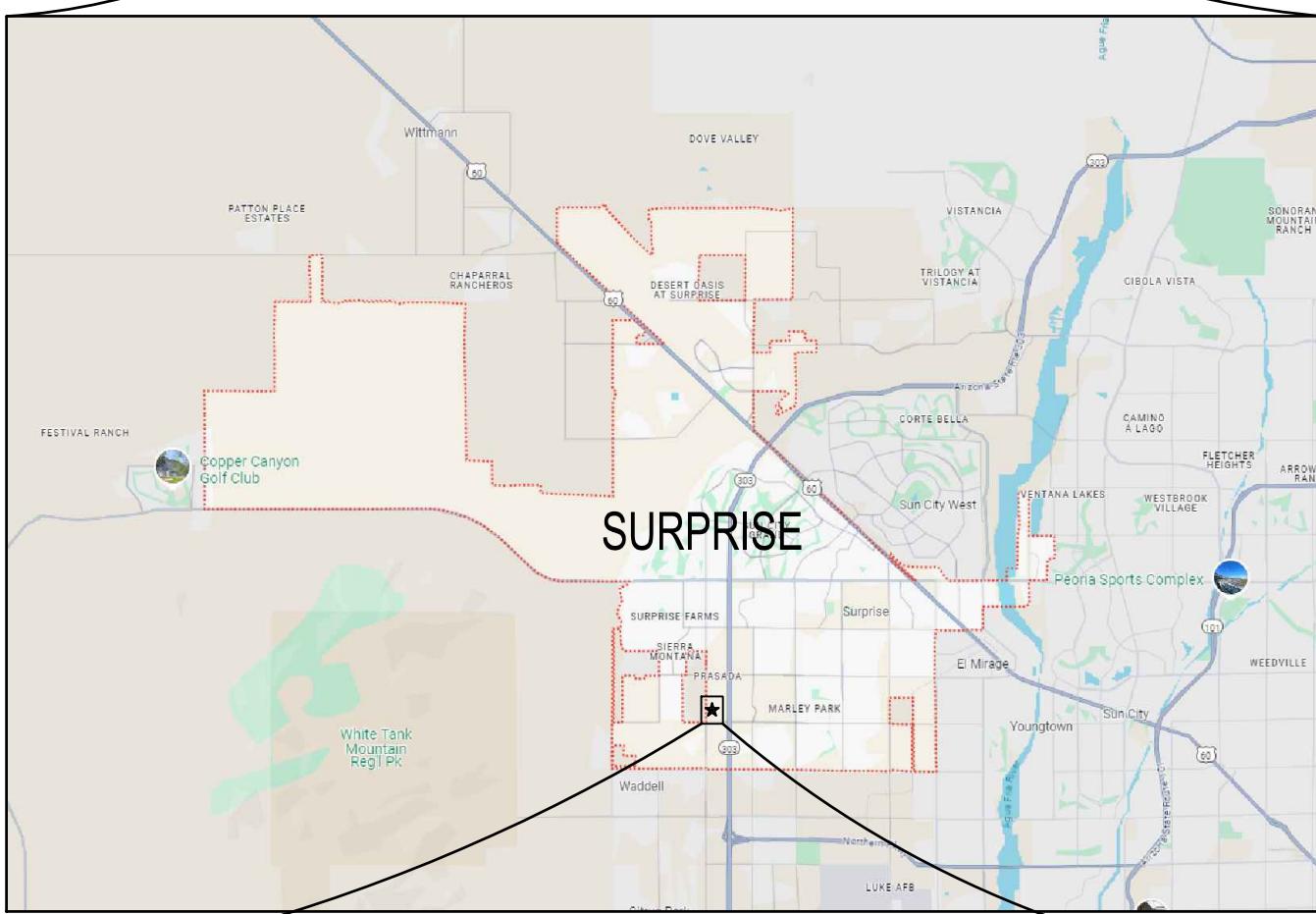


CRASH CHAMPIONS

CIVIL CONSTRUCTION DOCUMENTS

SURPRISE, ARIZONA



APPLICANT

LRG INVESTORS
822 A1A NORTH, SUITE 310
PONTE VEDRA, FL 32082
PHONE: 312.404.6066
CONTACT: JOE BRADY

ENGINEER

JSA CIVIL, LLC
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512
PHONE: 360.515.9600
CONTACT: CHARLIE SEVERS

ARCHITECT

HILLSIDE ARCHITECTURE, PLLC
345 W BOEHMITE CT, SUITE 120
BOISE, ID 83706
PHONE: 208.810.7745
CONTACT: DANIEL ZIMMERMANN

LANDSCAPE ARCHITECT

STACK ROCK GROUP
404 S 8TH STREET, SUITE 154
BOISE, ID 83702
PHONE: 208.716.4787
CONTACT: JESSE BUSTER

GEOTECHNICAL

TERRACON
4685 S ASH AVE, SUITE H-4
TEMPE, ARIZONA 85282
PHONE: 480-897-8200
CONTACT: EDDY RAMIREZ

SURVEYOR

S&F LAND SERVICES
2345 E THOMAS RD, SUITE 150
PHOENIX, AZ
PHONE: 602.805.8921
CONTACT: GARY GREEN

GOVERNING AGENCY

CITY OF SURPRISE
16000 N CIVIC CENTER PLAZA
SURPRISE, AZ 85374
PHONE: 623.222.3244
CONTACT: LINSEY CARLOS

UTILITIES

SEWER
CITY OF SURPRISE
PHONE: 623.222.6000

WATER
EPOR
PHONE: 1.800.383.0834

POWER
ARIZONA PUBLIC SERVICE
PHONE: 602.371.6140

NATURAL GAS
SOUTHWEST GAS CORPORATION
PHONE: 877.860.6020

EPOR
2355 WEST PINNACLE PEAK ROAD, SUITE 300
PHOENIX, ARIZONA 85027
PHONE: 623.445.2400

SITE INFORMATION

ADDRESS: 303 AUTOMOTIVE DR
SURPRISE, ARIZONA
PARCEL: 501-44-993
ACRES: ±3.52
ZONING: PRASADA PAD
PRASADA GATEWAY VILLAGE 3 (PGV-S)

LEGAL DESCRIPTION

LOT 1X, AEO POWERSPORTS, ACCORDING TO BOOK 1708 OF MAPS, PAGE 28, RECORDS OF MARICOPA COUNTY, ARIZONA

EXCEPT ALL MINERALS, COAL CARBONS, HYDROCARBONS, OIL, GAS, CHEMICAL ELEMENTS AND COMPOUNDS WHETHER IN SOIL, LIQUID OR GASEOUS FORM, ADD ALL STEAM AND OTHER FORMS OF THERMAL ENERGY ON, IN, OR UNDER THE LAND, AS RESERVED IN DEED RECORDED IN RECORDING NO. 20071019342, RECORDS OF MARICOPA COUNTY

HORIZONTAL DATUM

ARIZONA STATE PLANE COORDINATE SYSTEM CENTRAL ZONE NAD83 (2011), SEE TOPOGRAPHIC SURVEY

VERTICAL DATUM

NAVD88, SEE TOPOGRAPHIC SURVEY

BENCHMARKS

SEE TOPOGRAPHIC SURVEY

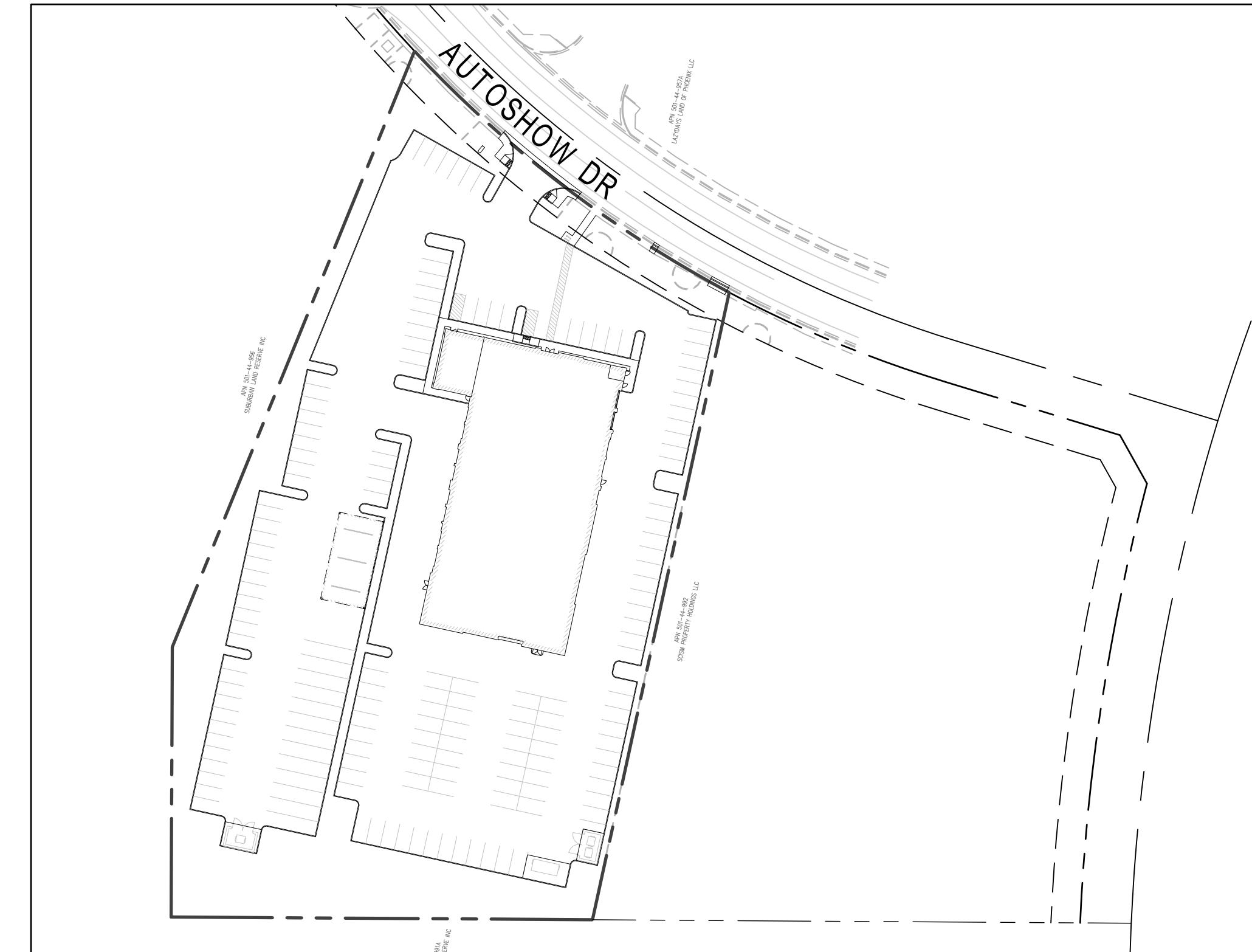
FEMA FLOOD ZONE

ZONE X
MAP NUMBER: 0413C1660L
EFFECTIVE DATE: OCTOBER 16, 2013

SHEET INDEX

SHEET	TITLE
C1.0	COVER SHEET
C1.1	GENERAL NOTES & ABBREVIATIONS
C1.2	GENERAL NOTES
C2.0	TOPOGRAPHIC SURVEY
C3.0	EROSION CONTROL PLAN
C3.1	EROSION CONTROL NOTES & DETAILS
C4.0	SITE & PAVING PLAN
C4.1	HORIZONTAL CONTROL PLAN
C4.2	SITE & PAVING DETAILS
C4.3	SITE & PAVING DETAILS
C4.4	PUBLIC SAFETY SITE PLAN
C5.0	GRADING PLAN
C5.1	DETAILED GRADING PLAN
C5.2	GRADING DETAILS
C6.0	UTILITY PLAN
C7.0	STORMWATER PLAN
C7.1	STORMWATER DETAILS
C7.2	STORMWATER DETAILS
C7.3	STORMWATER DETAILS
C8.0	WATER PLAN
C8.1	WATER DETAILS
C8.2	WATER DETAILS
C8.3	WATER DETAILS
C9.0	SEWER PLAN
C9.1	SEWER DETAILS

REVISIONS	
PROJECT NO. 121.044	
DRAWN C. DAHM	
CHECKED D. PHILLIPS	
SUBMITTED DATES	
OTD DATE —	
JSA CIVIL Engineering Planning Management 111 TUMWATER BLVD SE, SUITE B203 TUMWATER, WA 98512	
STAMP Professional Engineer CIVIL CHARLES L. SEVERS State of Arizona, U.S.A. 03/10/2025	



OVERALL SITE PLAN

1'=80'

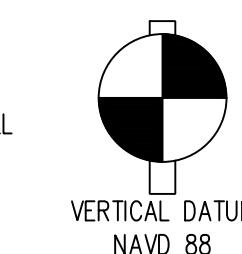
WATER/SEWER "AS-BUILT" CERTIFICATION

I HEREBY CERTIFY THAT THE "AS-BUILT" MEASUREMENTS AS SHOWN HEREIN WERE MADE UNDER MY SUPERVISION OR AS NOTED, AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AFTER DUE REVIEW. ADDITIONALLY, I HEREBY CERTIFY THAT ALL MAINS AND SERVICES HAVE BEEN INSTALLED WITHIN THE LIMITS OF EASEMENTS DEDICATED TO EPOR WATER ARIZONA INC., OR INSIDE DEDICATED STREET RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT

THIS SET OF PLANS HAS BEEN REVIEWED FOR COMPLIANCE WITH CITY REQUIREMENTS PRIOR TO ISSUANCE OF PERMITS. THE CITY NEITHER ACCEPTS NOR ASSUMES ANY LIABILITY FOR ERRORS OR OMISSIONS. THE COMPLIANCE APPROVAL SHALL NOT PREVENT THE CITY ENGINEER FROM REQUIRING CORRECTIONS OF ERRORS OR OMISSIONS IN PLANS FOUND TO BE IN VIOLATION OF LAWS OR ORDINANCES

CITY OF SURPRISE ENGINEER DATE

SHEET TITLE	
COVER SHEET	
SHEET	
C1.0	
FSXX-XXXX	



CALL BEFORE YOU DIG

The contractor shall be fully responsible for the location and protection of all existing utilities. The contractor shall verify all utility locations prior to construction by calling the underground locate line at 811 a minimum of 48 hours prior to any excavation.

JSA CIVIL GENERAL CONSTRUCTION NOTES

- ALL WORK, WORKMANSHIP AND MATERIALS FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE FOLLOWING MANUAL(S) AND DOCUMENT(S):
 - CITY OF SURPRISE ENGINEERING DEVELOPMENT STANDARDS MANUAL, 2021 EDITION
[HTTPS://CONTENT.CIVICPLUS.COM/API/ASSETS/549EDDEE-FD24-4C43-9C6B-036AC02221E0](https://CONTENT.CIVICPLUS.COM/API/ASSETS/549EDDEE-FD24-4C43-9C6B-036AC02221E0)
 - CITY OF SURPRISE SUPPLEMENTAL ENGINEERING DEVELOPMENT STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION, JANUARY 2022
[HTTPS://CONTENT.CIVICPLUS.COM/API/ASSETS/AZ-SURPRISE/A828718E-22E1-4B04-BE5F-85186C42880B](https://CONTENT.CIVICPLUS.COM/API/ASSETS/AZ-SURPRISE/A828718E-22E1-4B04-BE5F-85186C42880B)
 - CITY OF SURPRISE PLANNING AND ENGINEERING DESIGN STANDARDS
[HTTPS://CONTENT.CIVICPLUS.COM/API/ASSETS/2F8891FE-D71A-49ED-8949-1600B5A81FAF?SCOPE=ALL](https://CONTENT.CIVICPLUS.COM/API/ASSETS/2F8891FE-D71A-49ED-8949-1600B5A81FAF?SCOPE=ALL)
 - EPCOR 2020 DEVELOPER & ENGINEERING GUIDE
[HTTPS://WWW.EPCOR.COM/CONTENT/DAM/EPCOR/DOCUMENTS/SUPPORTING-DOCUMENTS/2020_DEVELOPER-ENGINEERING-GUIDE.PDF](https://WWW.EPCOR.COM/CONTENT/DAM/EPCOR/DOCUMENTS/SUPPORTING-DOCUMENTS/2020_DEVELOPER-ENGINEERING-GUIDE.PDF)
 - MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION (2024)
[HTTPS://AZMAG.GOV/PORTALS/0/DOCUMENTS/MAGCONTENT/2020_MAG_UNIFORM_STANDARD_DETAILS_FOR_PUBLIC_WORKS_CONSTRUCTION_SPECS_FINAL.PDF?VER=2019-12-30-103511-630](https://AZMAG.GOV/PORTALS/0/DOCUMENTS/MAGCONTENT/2020_MAG_UNIFORM_STANDARD_DETAILS_FOR_PUBLIC_WORKS_CONSTRUCTION_SPECS_FINAL.PDF?VER=2019-12-30-103511-630)
 - FCDMO DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, VOLUME III, EROSION CONTROL
[HTTPS://WWW.MARICOPA.GOV/DOCUMENTCENTER/VIEW/2368/DRAINAGE-DESIGN-MANUAL-FOR-MARICOPA-COUNTY-VOLUME-III-EROSION---REVISED-73018-PDF](https://WWW.MARICOPA.GOV/DOCUMENTCENTER/VIEW/2368/DRAINAGE-DESIGN-MANUAL-FOR-MARICOPA-COUNTY-VOLUME-III-EROSION---REVISED-73018-PDF)
 - PRASADA PLANNED AREA DEVELOPMENT
[HTTPS://CONTENT.CIVICPLUS.COM/API/ASSETS/97DF4DF1-4DC3-41F6-8359-D9A131D6EE73?CACHE=1800](https://CONTENT.CIVICPLUS.COM/API/ASSETS/97DF4DF1-4DC3-41F6-8359-D9A131D6EE73?CACHE=1800)
 - GEOTECHNICAL REPORT FINALIZED BY TERRACON ON DECEMBER 13, 2024
- ALL GOVERNMENTAL SAFETY REGULATIONS SHALL BE STRICTLY ADHERED TO INCLUDING OSHA.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DULY NOTIFY THE CITY OF SURPRISE AND EPCOR IN ADVANCE OF THE COMMENCEMENT OF ANY AUTHORIZED WORK AND TO SCHEDULE REQUIRED INSPECTIONS. ANY REQUIRED INSPECTION TEST WILL BE PERFORMED AT THE CONTRACTOR'S EXPENSE.
- THE APPROVAL OF THESE PLANS BY THE CITY OF SURPRISE AND EPCOR DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO COMPLY WITH THE REQUIREMENTS OF OTHER GOVERNING AGENCIES.
- CAUTION – NOTICE TO CONTRACTOR**
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON THE PROJECT SURVEY AND OTHER RECORDS OF UTILITIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CALL FOR UTILITY LOCATES 48 HOURS PRIOR TO PLANNED EXCAVATIONS.
- THE DESIGN SHOWN IS BASED UPON THE ENGINEER'S UNDERSTANDING OF THE EXISTING CONDITIONS. THE EXISTING CONDITIONS SHOWN ON THIS PLAN SET ARE BASED UPON COMPILED SURVEY DATA. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FIELD CONDITIONS PRIOR TO BIDDING THE PROPOSED WORK IMPROVEMENTS. IF CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNER'S REPRESENTATIVE.
- EXISTING UTILITIES ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY EXACT LOCATION, DIAMETER, LENGTH, CONDITION, PIPE TYPE, SLOPE, AND VERTICAL AND HORIZONTAL ALIGNMENT OF THE EXISTING ALIGNMENT OF THE PROPOSED POINTS OF CONNECTION PRIOR TO CONNECTION AND REPORT ANY DISCREPANCIES TO ENGINEER PRIOR TO INSTALLATION OF THE PROPOSED UTILITIES.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY LOCAL, STATE, AND FEDERAL APPROVALS AND PERMITS.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE A COPY OF THE APPROVED PLANS, SPECIFICATIONS, CONSTRUCTION SWPP, AND CONTRACT DOCUMENTS AT THE CONSTRUCTION SITE AT ALL TIMES.
- CONSTRUCTION SIGNING AND TRAFFIC CONTROL SHALL BE PER THE CURRENT COPY OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). THE CONTRACTOR SHALL PREPARE AND SUBMIT A TRAFFIC CONTROL PLAN TO THE CITY OF SURPRISE AND EPCOR AND OBTAIN APPROVAL PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
- ALL VEHICLES AND EQUIPMENT SHALL BE KEPT WITHIN THE WORK AREAS ESTABLISHED FOR THAT WORK SHIFT UNLESS TRAVELING TO OR FROM THE SITE. UNDER NO CIRCUMSTANCES SHALL VEHICLES BE PARKED OR EQUIPMENT BE STORED OUTSIDE OF THESE AREAS.
- OTHER CONSTRUCTION PROJECTS MAY OCCUR NEAR THE PROJECT SITE AND MAY BE IN PROGRESS CONCURRENT WITH THE PROJECT. THE CONTRACTOR SHALL COOPERATE AS NECESSARY AND NOT INTERFERE OR HINDER THE PROGRESS OR COMPLETION OF WORK BEING PERFORMED BY OTHER CONTRACTORS.
- THE CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND INSTALLING ALL MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHOWN ON THESE DRAWINGS AND TO OBTAIN ACCEPTANCE BY THE CITY OF SURPRISE AND EPCOR AND THE PROJECT OWNER.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL "PRE CONSTRUCTION" STATE OR BETTER.
- DRIVeway ACCESS AND UTILITY SERVICE TO EXISTING HOMES AND BUSINESSES SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL ASSUME THAT A PORTION OF THE SOILS WILL NOT PROVIDE SUFFICIENT STABILITY TO STAND UP IN VERTICAL TRENCH WALLS. THIS WILL RESULT IN WIDER TRENCHES, GREATER EARTHWORK VOLUMES, AND MORE SURFACE DISTURBANCE. THE CONTRACTOR SHALL ASSUME THAT A PORTION OF NATIVE SOILS WILL INCLUDE BOULDERS/COBBLES WHICH ARE GREATER THAN 24 INCHES IN DIAMETER WHICH WILL SLOW DOWN THE CONTRACTOR'S PROGRESS. THIS WILL RESULT IN WIDER TRENCHES, GREATER EARTHWORK VOLUMES, MORE SURFACE DISTURBANCE, AND MORE SURFACE RESTORATION THAN WHAT MAY BE SHOWN ON THE DRAWINGS.
- THE REMOVAL, LOADING, AND HAULING OF EXCESS MATERIALS AS A RESULT OF DEMOLITION, TRENCHING, AND EXCAVATION ACTIVITIES SHALL BE DISPOSED OF AT A CONTRACTOR-PROVIDED WASTE SITE AT NO ADDITIONAL COST TO THE OWNER.
- THE EXISTING CONDITIONS SHOWN ON THESE DRAWINGS ARE BASED ON A ALTA/NSPS LAND TITLE SURVEY FROM S&F LAND SERVICES, DATED NOVEMBER 27, 2024. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO BIDDING AND ALERT THE ENGINEER IMMEDIATELY IF DISCREPANCIES ARE FOUND
- THE CONTRACTOR SHALL PROVIDE PRODUCT SUBMITTALS AND SHOP DRAWINGS TO THE JURISDICTION HAVING AUTHORITY FOR REVIEW AND APPROVAL FOR UTILITIES THAT WILL BE PUBLICLY OWNED AND MAINTAINED PRIOR TO ORDERING MATERIALS

ABBREVIATIONS

&	AND	KWH	KILOWATT HOURS
±	ANGLE APPROXIMATELY	L	LENGTH
⊕	AT	LB(S)	POUND(S)
◎	CENTERLINE	LF	LINEAR FEET
·	DEGREE	LP	LOW POINT ELEVATION
=	EQUALS	LT	LEFT
,	FOOT		
>	GREATER THAN	MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
*	INCH	MAX	MAXIMUM
#	NUMBER	MFR	MANUFACTURER
%	PERCENT	MH	MANHOLE
		MIN	MINIMUM, MINUTE
		MISC	MISCELLANEOUS
		MON	MONUMENT IN CASE
AC	ASPHALTIC CONCRETE		
ADD'L	ADDITIONAL	N	NORTH, NORTHING
ADJT	ADJACENT	N/A	NOT APPLICABLE
AFF	ABOVE FINISH FLOOR	NE	NORTHEAST
AP	ANGLE POINT	NEMA	NATIONAL ELECTRICAL MANUFACTURER ASSOCIATION
APPROX	APPROXIMATE	NIC	NOT IN CONTRACT
ARCH	ARCHITECT	NO	NUMBER
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	NTS	NOT TO SCALE
ATB	ASPHALT TREATED BASE COURSE	NW	NORTHWEST
AVE	AVENUE		
BCR	BEGIN CURB RETURN	OC	ON CENTER
BVF	BUTTERFLY VALVE	OD	OUTSIDE DIAMETER
BGS	BELOW GROUND SURFACE	OSHA	INDUSTRIAL SAFETY & HEALTH ADMINISTRATION
BLK	BLOCK(S)	P	POWER, POWER VAULT
BLDG	BUILDING	PC	POINT OF CURVATURE
BM	BENCHMARK	PCC	POINT OF COMPOUND CURVE
BVC	BEGIN VERTICAL CURB		OR PORTLAND CEMENT CONCRETE
C	CONDUT	PED	PEDESTAL
CB	CATCH BASIN	PI	POINT OF INTERSECTION
CF	CUBIC FEET	R	PROPERTY LINE
CIRC	CIRCUIT, CIRCULAR(R, TION)	POC	POINT OF CONNECTION
OIP	CAST-IN-PLACE	PP	POWER POLE
OIP MON	CAST-IN-PLACE MONUMENT	PRC	POINT OF REVERSE CURVATURE
CJ	CENTER JOINT	PROP	PROPERTY
CL	CENTER LINE	PSI	POUNDS PER SQUARE INCH
CLR	CROWNLINE	PT	POINT OF TANGENCY
CO	CLEAR	PVC	POINT OF VERTICAL CURVE
COMM	CLEANOUT	PV	POINT OF VERTICAL INTERSECTION
COMPT	COMMUNICATION	PVT	POINT OF VERTICAL TANGENT
CONC	COMPACTED	PWMT	PAVEMENT
CONST	CONCRETE	PWR	POWER
CONT	CONSTRUCT	QTY	QUANTITY
COORD	CONTINUOUS, ED, OUS, ATION)	R	RADIUS
CSBC	COORDINATE	RD	ROAD, ROADWAY
CSTC	CRUSHED SURFACING BASE COURSE	REF	REFERENCE
CULV	CRUSHED SURFACING TOP COURSE	CU YD	CUBIC YARD
	CULVERT	REINF	REINFORCED, ED, INC, MENT)
D/W	DRIVeway	REQ'D	REQUIRED
DEF	DEFLECTION	REV	REVISION
DEG	DEGREE	RIM	STRUCTURE RIM ELEVATION
DEMO	DEMOLISH/DEMOLITION	RT	RIGHT TURN
DIA	DIAMETER	R/W, ROW	RIGHT OF WAY
DIM	DIMENSION(S)	S	SOUTH OR SLOPE
D.I.	DUCTILE IRON PIPE	SCHED	SCHEDULE
DR	DRIVE	SD, SDMH	STORM DRAIN, STORM DRAIN MANHOLE
DWG(S)	DRAWING(S)	SE	SOUTHEAST
E	EAST OR ELECTRICAL	SECT	SECTION(S)
EA	EACH	SHT	SHOOT
ECR	END CURB RETURN	SP	SPRINKLER
EHH	ELECTRICAL HANDBOKE	SQ	SQUARE
EL, ELEV	ELEVATION	SQ FT	SQUARE FEET
ELEC	ELEVATOR	SQ IN	SQUARE INCH
ENGR	ENGINEER	SS	SANITARY SEWER
EOP	EDGE OF PAVEMENT	SSMH	SANITARY SEWER MANHOLE
EQ	EQUALLY	ST	STREET
EQUIP	EQUIPMENT	STA	STATION
ESMT	EASEMENT	STD	STANDARD
EVC	END VERTICAL CURVE	STRUCT	STRUCTURE, AL)
EX, EXIST	EXISTING	SW	SOUTHWEST
EXP	EXPANSION	SYS	SYSTEM
FDC	FIRE DEPARTMENT CONNECTION	T	TELEPHONE OR TELEPHONE VAULT
FDN	FOUNDATION	TBD	TO BE DETERMINED
FF	FINISH FLOOR	TBM	TEMPORARY BENCH MARK
FG	FINISH GRADE ELEVATION	TC	TOP OF CURB ELEVATION
FH	FIRE HYDRANT	TELE	TELEPHONE
FIN	FINISH(ED)	TEMP	TEMPORARY
FL	FINE LINE/FLANGE	TP, T/P	TOP OF PIPE
FT	FOOT/FEET	TOP	TOP OF WALL ELEVATION
G	GAS	UDG	UNDERGROUND
GALV	GALVANIZED	VAP	VERTICAL ANGLE POINT
GRND	GROUND	VC	VERTICAL CURVE
GV	GATE VALVE	VERT	VERTICAL
HH	HANDLEHOLE	VOL	VOLUME
HMA	HOT MIX ASPHALT	W	WEST, WIDTH, WIDE OR WATER
HORIZ	HORIZONTAL	W/	WITH
HT	HEIGHT	W/O	WITHOUT
IE	INVERT ELEVATION	WM	WATER MAIN OR WILLAMETTE MERIDIAN
IN	INCH	WV	WATER VALVE
JB, J-BOX	JUNCTION BOX	XFMR	TRANSFORMER
JT	JOINT TRENCH		
KV	KILOVOLTS		
KW	KILOWATT		

DRAFTING SYMBOLS

(XX)CONSTRUCTION NOTE NUMBER
XX-ASECTION NUMBER
XX-01SHEET NUMBER SECTION IS LOCATED ON
X	

REVISIONS	
PROJECT NO.	121044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTED DATES	
OTD DATE	-
JSA CIVIL	
Engineering Planning Management	
111 TUMWATER BLVD SE SUITE B203	
TUMWATER, WA 98512	
03/10/2025	
Stamp	
CRASH CHAMPIONS	
COMMERCIAL DEVELOPMENT PROJECT	
303 AUTOSHOW DRIVE	
SURPRISE, ARIZONA	
HillSide	
Architecture Inc.	
Sheet Title	
GENERAL NOTES & ABBREVIATIONS	
SHEET	
C1.1	
FSXX-XXXX	

GENERAL ENGINEERING NOTES:			GENERAL ENGINEERING NOTES (CONTINUED):			GENERAL TEMPORARY TRAFFIC CONTROL NOTES:			REVISIONS	
<p>1. ALL CONSTRUCTION MUST CONFORM TO MARICOPA ASSOCIATION OF GOVERNMENT (MAG) SPECIFICATIONS AND DETAILS AND LATEST REVISIONS UNLESS OTHERWISE STATED ON PLANS.</p> <p>2. THE ENGINEER WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES OR FOR SAFETY PRECAUTIONS OR PROGRAMS UTILIZED IN CONNECTION WITH THE WORK, AND THEY WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.</p> <p>3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL OVERHEAD AND UNDERGROUND UTILITY LOCATIONS WHERE CONSTRUCTION OCCURS. SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT ALL UTILITIES ARE AVOIDED. UTILITY LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND NOT FOR CONSTRUCTION PURPOSES. EXISTING UTILITIES SHALL BE REPAIRED AND OR REPLACED AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL COMPLY WITH ALL CURRENT ARIZONA UNDERGROUND FACILITIES LAWS (ARIZONA REVISED STATUTES TITLE 40, CHAPTER 2, ARTICLE 6.3, SECTION 40-360.21-32). CALL ARIZONA 811 FOR FIELD LOCATION BY DIAL 811.</p> <p>4. THE CITY OF SURPRISE ENGINEERING SERVICES OF PUBLIC WORKS SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION WORK AT 623-222-6150.</p> <p>5. THE ENGINEER AND APPLICABLE AGENCY MUST APPROVE, PRIOR TO CONSTRUCTION, ANY ALTERATION OR VARIATION FROM THESE PLANS. ANY VARIATION FROM THESE PLANS SHALL BE PROPOSED AND RESUBMITTED FOR REVIEW AND APPROVAL.</p> <p>6. THE CONTRACTOR SHALL PROTECT AND MAINTAIN ALL EXISTING UTILITIES ON THE SITE. ANY DAMAGE TO EXISTING UTILITIES, WHETHER SHOWN OR NOT ON THE DRAWING, SHALL BE REPAIRED/REPLACED AT THE CONTRACTOR'S EXPENSE. EXISTING SURFACE FEATURES AND FENCING SHALL BE REPLACED IN KIND.</p> <p>7. ANY INSPECTION BY THE CITY, COUNTY, OR THE ENGINEER, SHALL NOT IN ANY WAY RELIEVE THE CONTRACTOR FROM ANY OBLIGATION TO PERFORM THE WORK IN STRICT COMPLIANCE WITH THE APPLICABLE CODES AND AGENCY REQUIREMENTS.</p> <p>8. THE CONTRACTOR IS TO LOCATE ALL EXISTING LANDSCAPING, LANDSCAPING IRRIGATION LINES, PROPERTY MONUMENTS, FENCING OR SURFACE FEATURES PRIOR TO CONSTRUCTION. ANYTHING DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE.</p> <p>9. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE, ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.</p> <p>10. ALL CONSTRUCTION WATER USED WITHIN THE CITY OF SURPRISE WATER SERVICE AREA REQUIRES APPROVAL BY THE CITY OF SURPRISE PUBLIC WORKS DEPARTMENT AND MAY BE SUBJECT TO VOLUME AND TIME RESTRICTIONS. PLEASE SEE THE CITY OF SURPRISE CONSTRUCTION WATER GUIDELINES FOR ADDITIONAL INFORMATION. THE GUIDELINES CAN BE OBTAINED FROM THE PUBLIC WORKS DEPARTMENT AT 623-222-7000.</p> <p>11. TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH MAG SPECIFICATION 401, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE "TEMPORARY WORK ZONE TRAFFIC MANAGEMENT POLICY" (LATEST EDITION).</p> <p>12. PRIOR TO FINAL APPROVAL AND ACCEPTANCE OF THE WORK, THE DEVELOPER/CONTRACTOR WILL BE REQUIRED TO CLEAN AND REPAIR ADJACENT (OFF-PROJECT) ROADWAYS USED OR DAMAGED DURING THE COURSE OF CONSTRUCTION.</p>			<p>13. EMERGENCY VEHICLE ACCESS (E.V.A.) MUST BE PROVIDED BY THE DEVELOPER/CONTRACTOR THROUGHOUT THE PROJECT SITE. E.V.A. ROADS AND SIGNAGE SHALL BE MAINTAINED BY THE DEVELOPER/CONTRACTOR AT ALL TIMES. SIGNAGE SHALL BE POSTED AT THE POINT OF ENTRY TO THE SITE AND AT ALL LOCATIONS WHERE A CHANGE IN DIRECTION OCCURS.</p> <p>14. THE PLANS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT'S ACCESSIBILITY GUIDELINES, AS PUBLISHED IN THE FEDERAL REGISTER ON SEPTEMBER 15, 2010.</p>			<p>1. TEMPORARY TRAFFIC CONTROL SHALL BE PLACED AND MAINTAINED BY A COMPANY CERTIFIED BY THE CITY OF SURPRISE FOR TEMPORARY TRAFFIC CONTROL. ALL TEMPORARY TRAFFIC CONTROL SHALL BE PLACED AND MAINTAINED IN ACCORDANCE WITH THE MOST CURRENT REVISION OF THE CITY OF SURPRISE TEMPORARY WORK ZONE TRAFFIC MANAGEMENT POLICY OR AS DIRECTED BY THE CITY TRAFFIC ENGINEER OR DESIGNEE.</p> <p>2. WHERE LANES ARE RESTRICTED, RESTRICTION OF THE LANES SHALL BE ACCOMPLISHED BY USING REFLECTIVE VERTICAL PANELS. CONES SHALL NOT BE CONSIDERED ACCEPTABLE DEVICES FOR TRAFFIC DELINEATION ON ARTERIAL OR COLLECTOR STREETS.</p> <p>3. ALL TRAFFIC CONTROL SIGNS SHALL BE VIP DIAMOND GRADE SHEETING (TYPE IX) OR APPROVED EQUAL WHEN IN USE DURING NIGHTTIME HOURS.</p> <p>4. ADJUSTMENTS TO THE DETAILS OF THESE TRAFFIC CONTROL PLANS AND REQUIREMENTS MAY BE NECESSARY DUE TO CONSTRUCTION ACTIVITIES. ALL ADJUSTMENTS SHALL BE APPROVED BY THE CITY TRAFFIC ENGINEER OR DESIGNEE PRIOR TO IMPLEMENTATION.</p> <p>5. THE ROADWAY SURFACE SHALL BE SWEEPED, AND CLEANED BY AIR-JET BLOWING, IMMEDIATELY PRIOR TO PLACEMENT OF TEMPORARY MARKINGS.</p> <p>6. WHEN TRAFFIC CONTROL DEVICES ARE NOT IN USE, THEY SHALL BE MOVED AT LEAST THIRTY (30) FEET FROM THE EDGE OF TRAVEL WAY AND TURNED AWAY SO THE LEGENDS ARE NOT VISIBLE TO THE TRAVELING MOTORISTS. WHERE A THIRTY (30) FOOT DISTANCE CANNOT BE ACHIEVED, THE DEVICES SHALL BE MOVED AWAY AS FAR AS POSSIBLE WITHOUT INTERFERING WITH THE SIDEWALK, DRIVEWAYS OR OTHER FACILITIES. NO TRAFFIC CONTROL DEVICES SHALL BE LEFT IN THE MEDIAN.</p> <p>7. SPEED LIMIT REDUCTION SIGNING IS SUBJECT TO REVIEW AND CHANGE BY THE CITY TRAFFIC ENGINEER OR DESIGNEE AS DICTATED BY FIELD CONDITIONS.</p>				
DATE REVISED: 1/2022		GENERAL ENGINEERING NOTES	DETAIL NO: 2-04 SHEET 1 OF 2		GENERAL ENGINEERING NOTES	DETAIL NO: 2-04 SHEET 2 OF 2		GENERAL TEMPORARY TRAFFIC CONTROL NOTES	DETAIL NO: 2-12	 111 TUMWATER BLVD SE SUITE B203 TUMWATER, WA 98512
GENERAL GRADING NOTES:			GENERAL GRADING NOTES (CONTINUED):							
<p>1. CONTRACTOR TO FOLLOW RECOMMENDATIONS LISTED IN THE PROJECT SPECIFIC GEOTECHNICAL REPORT. SHOULD ANY CONFLICTS ARISE BETWEEN THE SOILS INVESTIGATION REPORT AND THESE GRADING PLANS, THE CIVIL ENGINEER SHALL BE CONTACTED FOR CLARIFICATION.</p> <p>2. THE ENGINEER MAKES NO REPRESENTATION OR GUARANTEE REGARDING EARTHWORK QUANTITIES OR THAT THE EARTHWORK FOR THIS PROJECT WILL BALANCE DUE TO UNFORESEEN FIELD CONDITIONS.</p> <p>3. THE ENGINEER WILL PERFORM FIELD SURVEYS FOR PAD ELEVATION CERTIFICATIONS, UPON NOTIFICATION BY THE GRADING CONTRACTOR, THAT THE PADS ARE COMPLETE AND READY FOR CERTIFICATION. IT IS UNDERSTOOD THAT THE CERTIFICATION PROVIDES ONLY A REPRESENTATIVE ELEVATION OF THE AVERAGE GRADE OF EACH LOT, BUILDING, OR UNIT PAD, AND SHALL NOT BE CONSTRUED TO INCLUDE YARD AND STREET SUBGRADE CERTIFICATION OR CERTIFICATION THAT THE ENTIRE PAD IS LEVEL. THAT IT WAS CONSTRUCTED IN THE DESIGNED LOCATION OR WAS GRADED TO THE CROSS-SECTION SET FORTH ON THE PLANS OR AS DESIGNATED IN THE SOILS REPORT.</p> <p>4. AN APPROVED GRADING AND DRAINAGE PLAN MUST BE ON THE JOB SITE AT ALL TIMES. DEVIATIONS FROM THIS PLAN MUST BE PRECEDED BY AN APPROVED PLAN REVISION.</p> <p>5. ALL DRAINAGE FACILITIES SUCH AS SWALES, INTERCEPTOR DITCHES, PIPES, PROTECTIVE BERMS, BARRIER WALLS, CONCRETE CHANNELS, OR OTHER MEASURES DESIGNED TO PROTECT BUILDINGS FROM STORM RUNOFF MUST BE CONSTRUCTED PRIOR TO CONSTRUCTION OF ANY BUILDINGS.</p> <p>6. A GRADING PERMIT IS REQUIRED. BEFORE A GRADING PERMIT IS ISSUED BY THE CITY OF SURPRISE ENGINEERING SERVICES, THE CONTRACTOR MUST FIRST OBTAIN A DUST CONTROL PERMIT FROM MARICOPA COUNTY ENVIRONMENTAL SERVICES-AIR QUALITY DIVISION.</p> <p>7. HAUL PERMITS, WHEN REQUIRED, MUST BE OBTAINED PRIOR TO OR CONCURRENTLY WITH THE GRADING AND DRAINAGE PERMIT.</p> <p>8. A SEPARATE PERMIT IS NECESSARY FOR ANY OFFSITE CONSTRUCTION.</p> <p>9. CONTRACTOR SHALL PROVIDE LEVEL BOTTOM IN ALL RETENTION BASINS AT ELEVATIONS AS SHOWN ON THE PLANS. SIDE SLOPES IN ALL RETENTION BASINS SHALL NOT EXCEED 4:1 UNLESS NOTED OTHERWISE ON THE PLANS.</p> <p>10. DRYWELLS, WHEN REQUIRED, MUST BE DRILLED A MINIMUM OF TEN (10) FEET INTO PERMEABLE POROUS STRATA OR PERCOLATION TESTS WILL BE REQUIRED. THE CIVIL INSPECTOR MUST BE PRESENT BEFORE BACKFILL OR WELL PIPES ARE PLACED WITHIN ANY DRYWELLS.</p> <p>THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR REGISTERING THE DRYWELLS SHOWN ON THE PLAN WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ).</p> <p>11. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR MAINTENANCE OF DRYWELLS SHOWN ON THE PLAN.</p> <p>12. ACCESS BARRIERS/TRASH RACKS ARE REQUIRED ON THE EXPOSED ENDS OF ALL STORM DRAINS EIGHTEEN (18) INCHES IN DIAMETER AND GREATER. SEE DETAILS 5-04A, 5-04B, AND 5-04C. REFER TO MAG DETAILS 502-1 AND 502-2 FOR PIPES LESS THAN THIRTY (30) INCHES IN DIAMETER.</p> <p>13. SOIL COMPACTION TEST RESULTS MUST BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING SERVICES FOR BUILDING PADS THAT HAVE ONE (1) FOOT OR MORE OF FILL MATERIAL INDICATED.</p>			<p>14. A PAD CERTIFICATION LETTER FOR EACH PHASE OR PARCEL MUST BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING SERVICES BY THE DEVELOPER STATING THAT EACH PAD HAS BEEN BUILT IN ACCORDANCE WITH THE SOILS INVESTIGATIVE REPORT AND CITY OF SURPRISE REQUIREMENTS.</p> <p>15. APPROVAL OF THESE PLANS SHALL NOT PREVENT THE CITY FROM REQUIRING THE CORRECTION OF ERRORS IN THE PLANS WHERE SUCH ERRORS ARE SUBSEQUENTLY FOUND TO BE IN VIOLATION OF ANY LAW OR ORDINANCE.</p> <p>16. ALL CONSTRUCTION SITES WITH DISTurbed AREAS OF ONE (1) ACRE OR GREATER SHALL HAVE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND ALL ASSOCIATED DOCUMENTS (SEE ENGINEERING AND PERMITTING APPLICATION PACKET).</p> <p>CAUTION REGARDING STORM DRAIN PIPES: CONTRACTOR IS RESPONSIBLE FOR PROTECTING THE PIPE FROM DAMAGE DURING THE CONSTRUCTION STAGE. THE COVER ON THE DRAINAGE PIPE IS DESIGNED FOR FINAL GRADE; THEREFORE, EXTRA CARE MUST BE EXERCISED DURING THE CONSTRUCTION PHASE TO MAINTAIN COVER OVER PIPES.</p> <p>NOTE REGARDING CMU AND RETAINING WALLS: THE CITY OF SURPRISE REQUIRES ALL WALLS BE APPROVED BY THE COMMUNITY DEVELOPMENT DEPARTMENT (623-222-3000). BUILDING PERMITS AND INSPECTIONS ARE REQUIRED PER THE INTERNATIONAL BUILDING CODE.</p>							
DATE REVISED: 1/2022		GENERAL GRADING NOTES	DETAIL NO: 2-05 SHEET 1 OF 2		GENERAL GRADING NOTES	DETAIL NO: 2-05 SHEET 2 OF 2	CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT 303 AUTOSHOW DRIVE SURPRISE, ARIZONA			 HillSide architecture inc.
001 C1.2 GENERAL NOTES										SHEET TITLE GENERAL NOTES
										SHEET C1.2
										FSXX-XXXX

**RESULTS OF
TOPOGRAPHIC SURVEY
A PORTION OF THE
SOUTHWEST QUARTER,
SECTION 13, T3N, R2W,
GILA AND SALT RIVER
MERIDIAN
MARICOPA COUNTY,
ARIZONA**

NOTES:

1. FIELD WORK WAS COMPLETED ON NOVEMBER 22, 2024.
 2. SANITARY SEWER PIPE SIZES AND MATERIALS WERE DERIVED FROM THE FIELD SURVEY.
 3. THE LOCATION OF EXISTING UNDERGROUND UTILITY FACILITIES SHOWN HEREON ARE BASED ON FIELD MEASUREMENTS BETWEEN UTILITY STRUCTURES AND LOCATE MARKS REQUESTED FOR THIS SURVEY PER ONE CALL PUBLIC LOCATE TICKET 2024111101604. THE SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE DELINEATION OF SUCH UNDERGROUND UTILITIES BY THE RESPECTIVE UTILITY OWNERS/BUILDERS, NOR FOR THE EXISTENCE OF BURIED OBJECTS WHICH WERE NOT DELINEATED BY SAID UTILITY OWNERS/BUILDERS. PER S&F LAND SERVICES STANDARDS POLICIES, STAFF ARE PROHIBITED FROM ENTERING ALL CONFINED SPACES AS DEFINED BY OSHA, THUS, INFORMATION SHOWN HEREON IS SUBJECT TO AN UNCERTAINTY IN ACCURACY DEPENDING ON DEPTH, SIZE, FLOW, AND CONSTRUCTION OF MANHOLES. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITY LINES BETWEEN STRUCTURES. ALL UTILITY LOCATIONS SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

SURVEY REFERENCES:

ALTA SURVEY BY KIMLEY HORN DATED 8-15-24 FOR EASEMENT LOCATIONS.
(R1) AEO POWERSPORTS PLAT (BOOK 1708, PAGE 28, MCR)

HORIZONTAL DATUM (BASIS OF BEARINGS):

ARIZONA STATE PLANE COORDINATE SYSTEM CENTRAL ZONE, NAD83 (2011), BASED ON GPS OBSERVATIONS. DISTANCES SHOWN HEREON ARE GROUND DISTANCES, INTERNATIONAL FEET, SCALED ABOUT CONTROL POINT NO 99.
NORTHING=945755.437, EASTING=545446.345. TO CONVERT TO GRID DISTANCES
MULTIPLY BY THE COMBINED FACTOR OF 0.9998735369.

VERTICAL DATUM: NAVD88 BASED ON STATIC GPS OBSERVATIONS

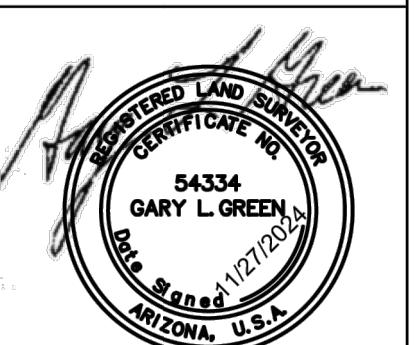
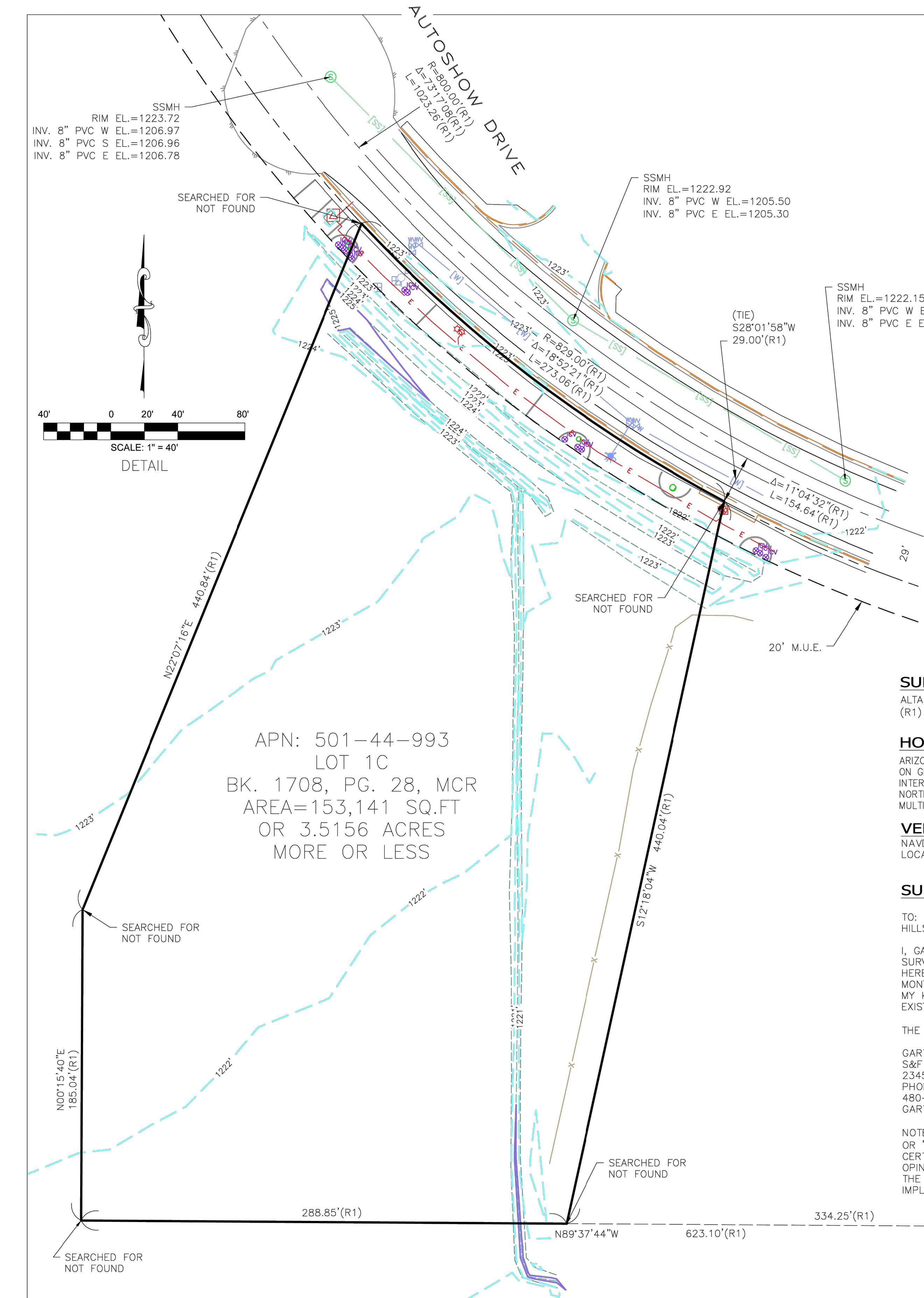
NAVD88 BASED ON STATIC GPS OBSERVATION
LOCAL BENCHMARKS SHOWN HEREON

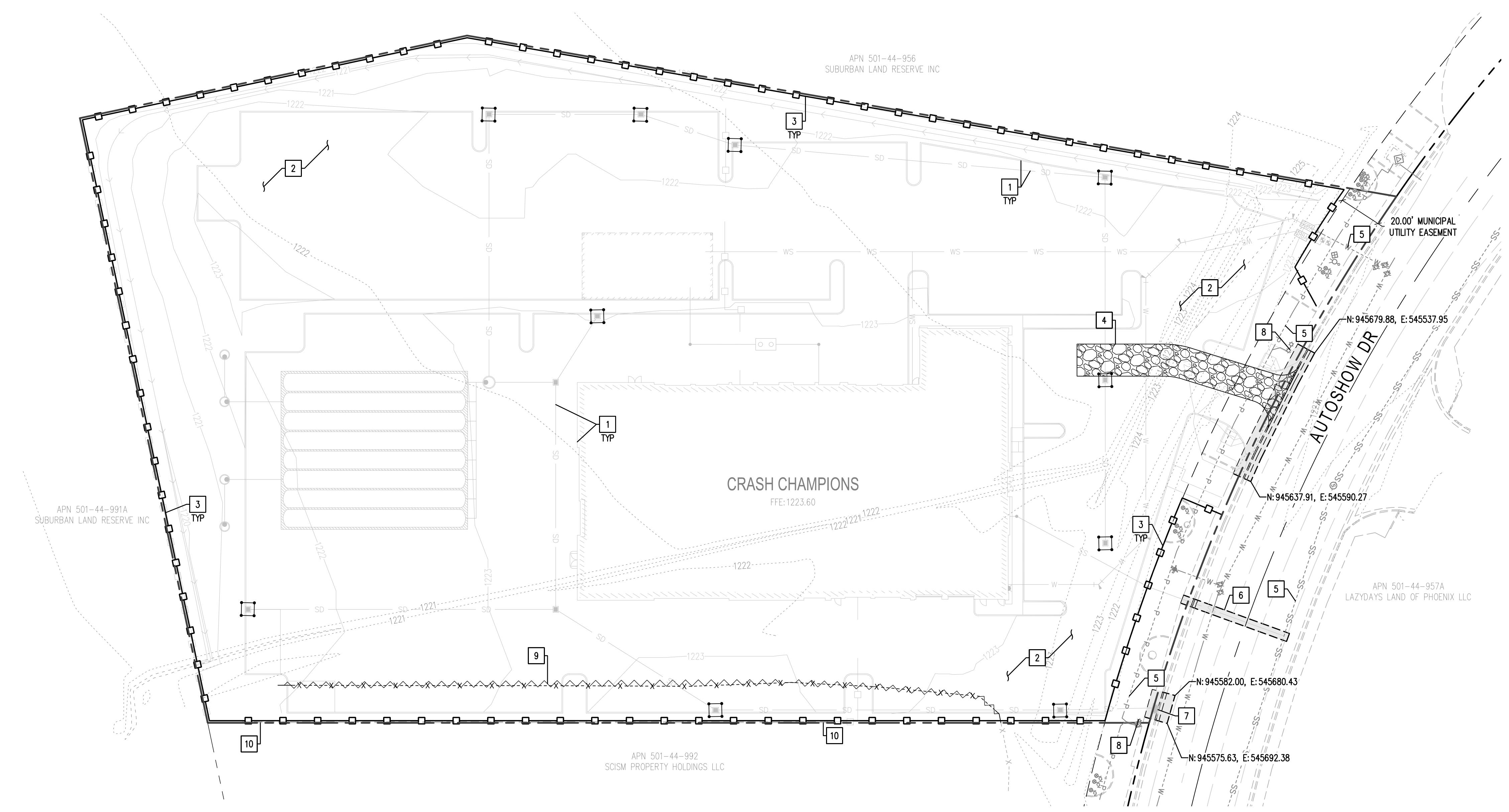
SURVEYOR'S CERTIFICATE

THE FIELDWORK WAS COMPLETED ON 11/22/2024.

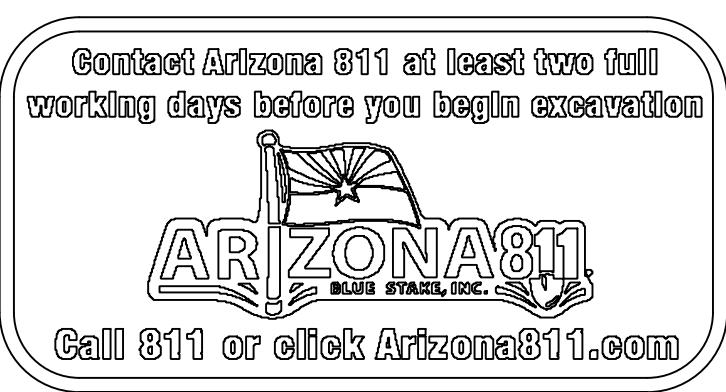
GARY L. GREEN PLS #54334
S&F LAND SERVICES
2345 E. THOMAS ROAD, STE.150
PHOENIX, AZ 85016
480-717-8830
GARY.GREEN@GMAIL.COM

NOTE: A.R.S. 32-151 STATES THAT THE USE OF THE WORD "CERTIFY" OR "CERTIFICATION" BY A PERSON OR FIRM THAT IS REGISTERED OR CERTIFIED BY THE BOARD IS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING FACTS OR FINDINGS THAT ARE THE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE AN EXPRESS OR IMPLIED WARRANTY OR GUARANTEE.



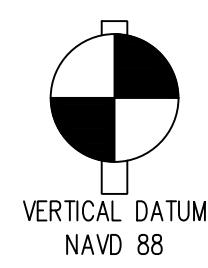


Mar 13, 2025 2:01:08pm – User CiaraDahm
N:\2 – PROJECTS\121 HILLSIDE ARCHITECTURE\121.044 CRASH CHAMPIONS SURPRISE, AZ\ACAD\121.044 EC-01.DWG



CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SAFETY AND PROTECTION OF ALL EXISTING UTILITIES. LOCATE AND VERIFY ALL UTILITY LOCATIONS PRIOR TO EXCAVATION. LOCATE THE UNDERGROUND LOCATE LINE AT 811 PRIOR TO ANY EXCAVATION.



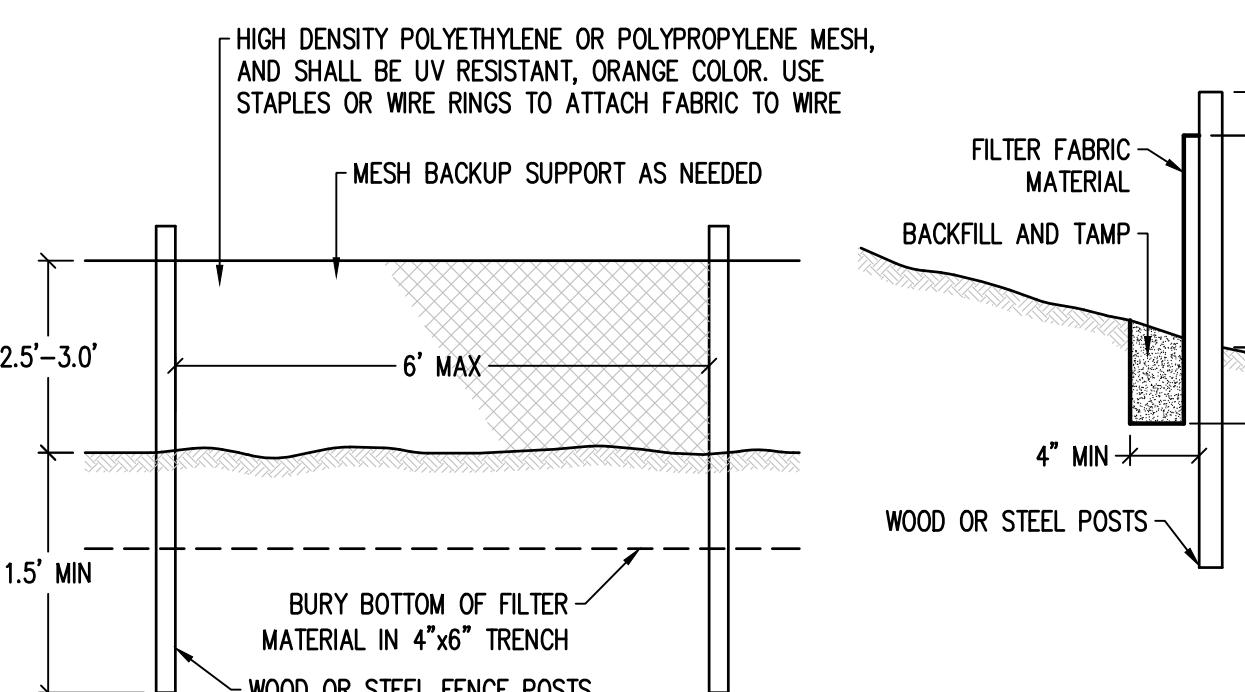
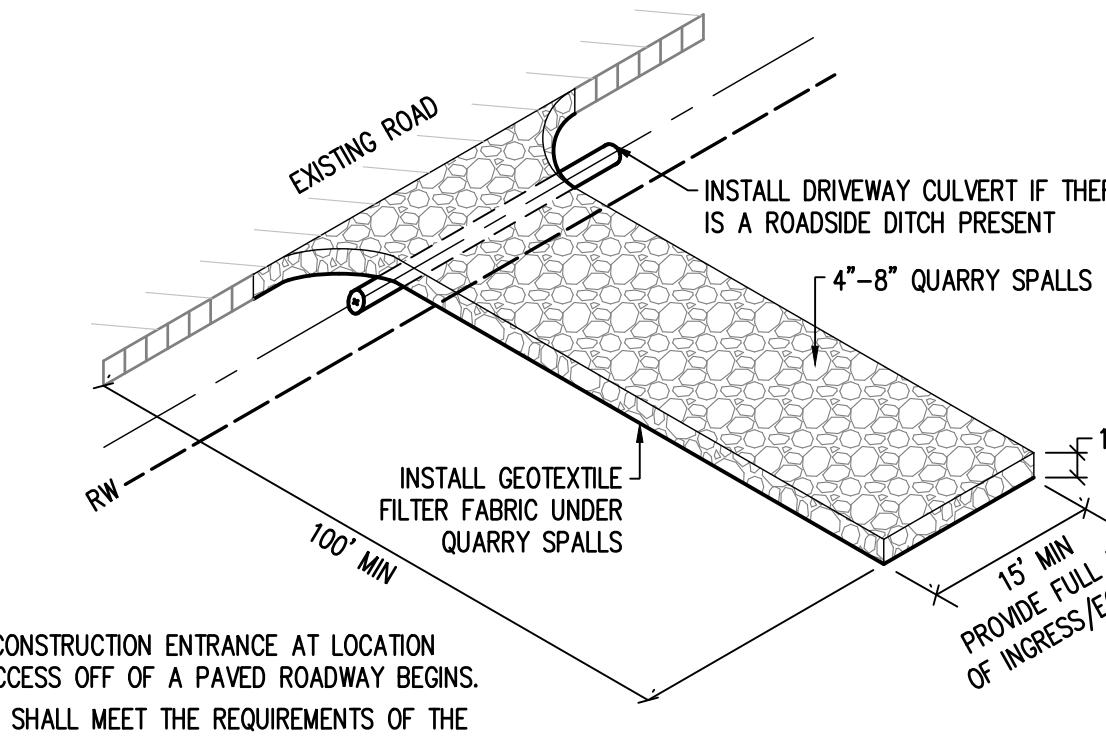
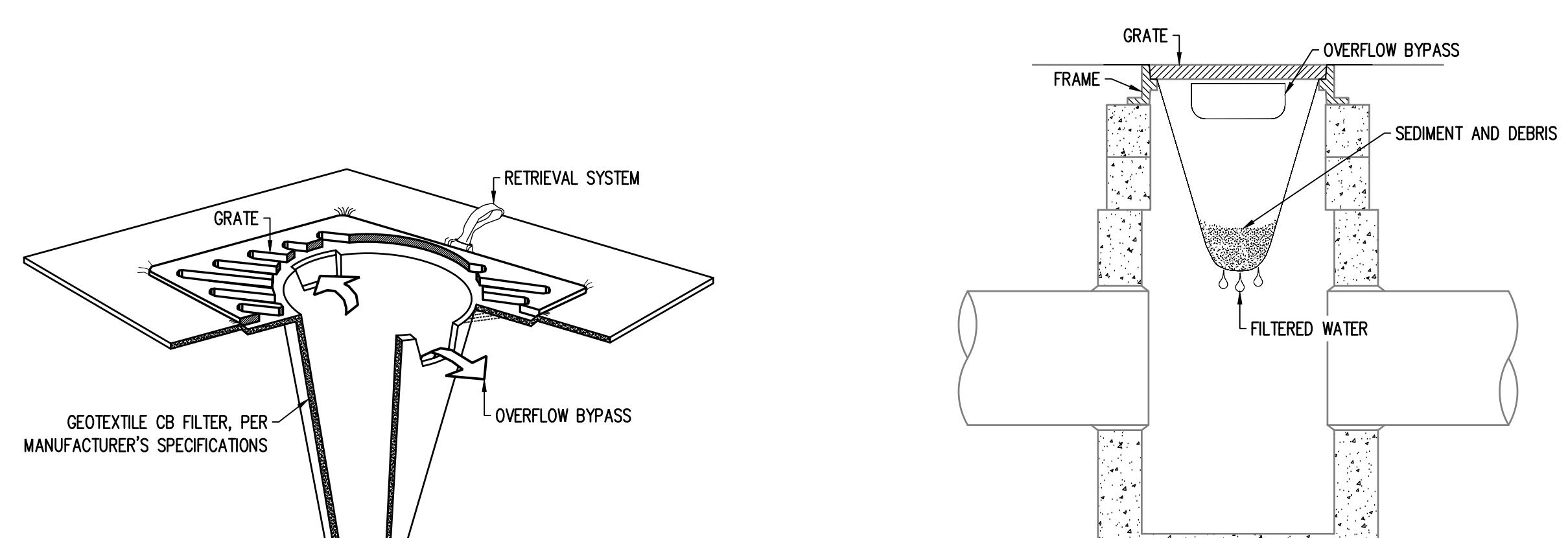
REQUIRED EROSION CONTROL MEASURES

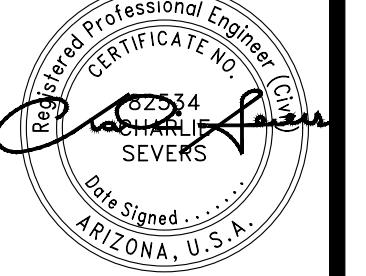
REQUIRED EROSION CONTROL MEASURES

CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES FOR ALL SLOPES DURING AND AFTER CONSTRUCTION PER THE TABLE BELOW.

SLOPE	
4:1-2:1 (25%-50%)	TENSAR ROLLMAX SC150BN
2:1-1:1 (50%-100%)	TENSAR ROLLMAX C125BN

FSXX-XXXX

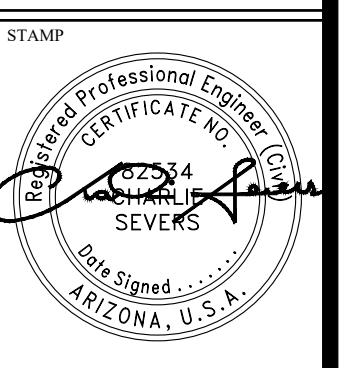
GENERAL EROSION CONTROL NOTES:						GENERAL STORM WATER POLLUTION PREVENTION PLAN NOTES:						GENERAL STORM WATER POLLUTION PREVENTION PLAN NOTES (CONTINUED):						REVISIONS					
<p>1. THE CONTRACTOR SHALL FOLLOW EROSION CONTROL PRACTICES OUTLINED IN THE MOST CURRENT EDITION OF FCDMC DRAINAGE DESIGN MANUAL FOR MARICOPA COUNTY, VOLUME III, EROSION CONTROL AND THE SWPPP.</p> <p>2. EROSION CONTROL MEASURES ARE NOT LIMITED TO THE ITEMS ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES. NO SILTATION OF EXISTING OR PROPOSED DRAINAGE FACILITIES SHALL BE ALLOWED. CARE SHALL BE TAKEN TO PREVENT MIGRATION OF SILTS TO OFF-SITE PROPERTIES.</p> <p>3. EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE BEGINNING OF CONSTRUCTION. THE PROJECT ENGINEER AND THE REVIEWING AGENCY SHALL INSPECT AND APPROVE THE INSTALLATION OF EROSION CONTROL MEASURES PRIOR TO BEGINNING CONSTRUCTION.</p> <p>A. INSTALL INLET SEDIMENTATION AS SPECIFIED AT ALL CATCH BASIN LOCATIONS IMMEDIATELY UPON ARRIVAL AT PROJECT/CONSTRUCTION SITE.</p> <p>B. STABILIZED CONSTRUCTION ENTRANCE SHALL CONFORM TO DETAIL ON THIS SHEET. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT ALL INGRESS/EGRESS POINTS TO CONSTRUCTION SITE.</p> <p>4. ALL EROSION/SEDIMENTATION FACILITIES SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTATION, MAINTENANCE, REPLACEMENT, AND ADDITIONS TO THE SYSTEM AS REQUIRED BY THE OWNER, ENGINEER, OR THE AUTHORITY HAVING JURISDICTION.</p> <p>5. THE CONTRACTOR SHALL MAKE A DAILY SURVEILLANCE OF ALL EROSION CONTROL MEASURES AND MAKE ANY NECESSARY REPAIRS OR ADDITIONS TO THE EROSION CONTROL MEASURES AS REQUIRED. THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION CONTROL MEASURES AS DETERMINED NECESSARY BY THE INSPECTOR AND/OR PROJECT ENGINEER. FAILURE TO COMPLY WITH ALL LOCAL AND STATE EROSION CONTROL REQUIREMENTS MAY RESULT IN CIVIL PENALTIES BEING LEVIED AGAINST THE CONTRACTOR.</p> <p>6. PRIOR TO CLEARING AND GRADING THE CONTRACTOR SHALL PROTECT TREES TO BE SAVED WITH HIGH VISIBILITY FENCING AT THE ROOT PROTECTION DELINEATOR OR OTHERWISE PROTECTED AS DIRECTED BY THE ENGINEER, CITY STAFF, OR OWNERS REPRESENTATIVE. CLEARING AND GRADING LIMITS SHALL BE STAKED IN THE FIELD PRIOR TO EXCAVATION.</p> <p>7. ALL STORM DRAINAGE INLETS RECEIVING RUNOFF FROM THE PROJECT DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL BE FILTERED BEFORE ENTERING THE CONVEYANCE SYSTEM.</p> <p>8. ALL OFF-SITE CATCH BASINS IMMEDIATELY ADJACENT TO THE PROPOSED SITE SHALL BE PROTECTED FROM SILTATION.</p> <p>9. THE CONSTRUCTION OF TRENCHES (E.G., PIPES, UNDERGROUND UTILITY LINES AND STRUCTURES) SHALL BE SUBJECT TO THE FOLLOWING CRITERIA:</p> <ul style="list-style-type: none"> A. NO MORE THAN 300 FEET OF TRENCH ON A DOWNSLOPE OF MORE THAN FIVE PERCENT SHALL BE OPENED AT ONE TIME. B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. 10. TRENCH Dewatering DEVICES SHALL BE DISCHARGED IN A MANNER THAT WILL NOT ADVERSELY AFFECT STREAMS, DRAINAGE SYSTEMS, OR OFF-SITE PROPERTIES. 11. TRICKLING OF SOIL, MUD, OR DEBRIS OFF-SITE IS NOT ALLOWED. SOIL, MUD, OR DEBRIS TRACKED onto A PUBLIC ROADWAY, SHALL BE REMOVED BY THE END OF THAT WORKING DAY. TO PREVENT THE TRICKLING OF SOIL, MUD, OR DEBRIS onto PUBLIC ROADWAYS, SWEEPING OR WASHING OF THE VEHICLE'S TIRES MAY BE REQUIRED PRIOR TO ENTERING A PUBLIC ROADWAY. 12. ALL DISTURBED AREAS SHALL BE HYDROSEEDED WITH EROSION CONTROL SEED MIX, INCLUDING BUT NOT LIMITED TO ROADWAY EMBANKMENTS, SHOULDERS, UTILITY EASEMENTS, STAGING AREAS, CONSTRUCTED WETLANDS AND CUT/FILL SLOPES. 13. ALL SEeded OR sodDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE VEGETATIVE COVERAGE IS COMPLETE. AREAS SHALL BE REPAVED, RESEDED, AND FERTILIZED AS REQUIRED. 14. DROP-IN CATCH BASIN FILTERS MAY BE USED IN PLACE OF OTHER STANDARD INLET PROTECTION PRACTICES. THIS INLET PROTECTION TECHNOLOGY CAN BE USED IN SITUATIONS WHERE RIGHT-OF-WAY FLOODING WOULD BE PROBLEMATIC. 15. TO MAINTAIN FUNCTION, THE CONTRACTOR SHALL REMOVE AND CLEAN OR REPLACE FILTERS AFTER EACH STORM EVENT. CONTACT THE JURISDICTION TO DETERMINE ITS ACCEPTANCE OF SPECIFIC FILTER PRODUCTS, PRIOR TO INSTALLATION. 16. NO MATERIAL SHALL BE STOCKPILED ON PAVEMENT WITHOUT AUTHORIZATION FROM THE PROJECT ENGINEER OR OWNERS REPRESENTATIVE WHICH WILL BE CONDITIONAL ON IMPLEMENTATION OF A PROCEDURE TO PREVENT SEDIMENT TRANSPORT. 17. ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED OR AFTER THE MEASURES ARE NO LONGER NEEDED. SEDIMENT COLLECTED IN TRAPS, PONDS, OR SILT FENCE SHALL BE REMOVED AND DISPOSED IN AN APPROVED MANNER OR STABILIZED ON SITE. DISTURBED SOIL AREAS RESULTING FROM SEDIMENT REMOVAL SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) DAYS. 						<p>1. WEATHER INFORMATION AND STORM PREDICTIONS CAN BE OBTAINED BY CALLING THE NATIONAL WEATHER SERVICE - PHOENIX WEATHER FORECAST OFFICE AT (602) 275-0073 OR BY VISITING THE NATIONAL WEATHER SERVICE WEBSITE AT HTTP://WWW.WRH.NOAA.GOV/PSR</p> <p>2. PERMANENT EROSION CONTROL MEASURES SHALL BE INSTALLED AS AREAS ARE DETERMINED TO BE COMPLETE.</p> <p>3. ALL DRAINAGE INLETS RECEIVING RUNOFF FROM DISTURBED SOIL AREAS SHALL BE PROTECTED WITH AN APPROVED SEDIMENT TRAP INLET PROTECTION MEASURE OR BMP.</p> <p>4. A COPY OF THE APPROVED GRADING & DRAINAGE PLAN FOR THIS PROJECT, TOGETHER WITH A COPY OF THE NOTICE OF INTENT (NOI) AND THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP), SHALL BE MAINTAINED ON THE SITE AND AVAILABLE FOR REVIEW AT ALL TIMES. THOSE ELEMENTS OF THE GRADING & DRAINAGE PLAN PERTINENT TO OR REFERENCED ON THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE CONSIDERED A PART OF THE SWPPP.</p> <p>5. THE NOTICE OF INTENT (NOI) SHALL BE COMPLETED AND SUBMITTED TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE CITY OF SURPRISE AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.</p> <p>6. THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) AND RELATED RECORDS SHALL BE MADE AVAILABLE UPON REQUEST TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE CITY OF SURPRISE.</p> <p>7. THE OWNER OR DESIGNATED CONTRACTOR SHALL OBTAIN A DUST CONTROL PERMIT FROM THE MARICOPA COUNTY AIR QUALITY DEPARTMENT. MEASURES SHALL BE PERFORMED AS REQUIRED BY THE PERMIT TO PREVENT EXCESS DUST AS INCORPORATED INTO THIS STORM WATER POLLUTION PREVENTION PLAN (SWPPP).</p> <p>8. THE OWNER OR DESIGNATED CONTRACTOR SHALL AMEND THIS PLAN AS RAINFALL EVENTS, DESIGN CHANGES AND CONSTRUCTION METHODS dictate. ALL MODIFICATIONS TO THIS PLAN SHALL BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING SERVICES FOR REVIEW AND ACCEPTANCE PRIOR TO IMPLEMENTATION.</p> <p>9. THE IMPLEMENTATION OF THESE PLANS, AND THE CONSTRUCTION, MAINTENANCE, REPLACEMENT, AND UPDATES OF THESE FACILITIES IS THE RESPONSIBILITY OF THE OWNER OR DESIGNATED CONTRACTOR UNTIL ALL CONSTRUCTION HAS BEEN APPROVED AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED TO THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND THE CITY OF SURPRISE.</p> <p>10. THE FACILITIES SHOWN ON THIS PLAN SHALL BE CONSTRUCTED IN CONJUNCTION WITH ALL CLEARING AND GRADING ACTIVITIES IN SUCH A MANNER AS TO ENSURE THAT SEDIMENT-LADEN WATER DOES NOT LEAVE THE PROJECT SITE, ENTER INTO THE DRAINAGE SYSTEM, OR VIOLATE APPLICABLE WATER QUALITY STANDARDS. ADDITIONALLY, THE FACILITIES SHALL BE INSTALLED AND OPERATIONAL PRIOR TO ANY GRADING OR LAND CLEARING ACTIVITIES.</p> <p>11. WHEN POSSIBLE, MAINTAIN ANY NATURALLY OCCURRING VEGETATION AS A EROSION CONTROL BEST MANAGEMENT PRACTICE (BMP).</p> <p>12. THE CONTRACTOR TO WHOM THE AT-RISK / FINAL GRADING & DRAINAGE PERMIT WILL BE ISSUED SHALL HAVE THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ISSUED IN THEIR NAME.</p>						<p>13. THE NOTICE OF INTENT (NOI), THE APPROVED STORM WATER POLLUTION PREVENTION PLAN (SWPPP), AND THE MARICOPA COUNTY AIR QUALITY DEPARTMENT DUST CONTROL PERMIT SHALL BE PROVIDED TO THE CITY OF SURPRISE BEFORE THE GRADING & DRAINAGE PERMIT WILL BE ISSUED.</p> <p>14. THE OWNER OR DESIGNATED CONTRACTOR OF THE PROJECT SHALL ALSO MAINTAIN RECORDS WITH THE FOLLOWING INFORMATION:</p> <ol style="list-style-type: none"> THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR IN A PARTICULAR AREA. THE DATES WHEN CONSTRUCTION ACTIVITIES CEASE IN A PARTICULAR AREA (TEMPORARILY OR PERMANENTLY). THE DATES WHEN AN AREA IS STABILIZED (TEMPORARILY OR PERMANENTLY). THE DATES ANY MAINTENANCE, REPLACEMENT, OR REMOVAL OF REQUIRED BMP'S HAS OCCURRED. <p>15. ONCE THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND THE SITE HAS MET THE FINAL STABILIZATION REQUIREMENTS OF THE PERMIT, THE AUTHORIZED SITE REPRESENTATIVE SHALL FILE A NOTICE OF TERMINATION (NOT) WITH THE ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY (ADEQ) AND PROVIDE A COPY TO THE CITY OF SURPRISE.</p> <p>16. THE PERMITTEE SHALL MAINTAIN ALL RECORDS ON FILE, INCLUDING THE NOTICE OF INTENT (NOI), THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP), THE NOTICE OF TERMINATION (NOT), AND ANY AND ALL INSPECTION REPORTS FOR A MINIMUM OF THREE (3) YEARS FROM THE FILING DATE OF THE NOTICE OF TERMINATION (NOT).</p> <p>17. THE OUTLETS OF ALL SEDIMENT BASINS, TRAPS, AND LOCATIONS OF ARTIFICIALLY CONCENTRATED FLOW SHALL BE PROVIDED WITH OUTLET PROTECTION TO PREVENT EROSION AND SCOUR.</p> <p>18. THOSE RESPONSIBLE FOR SWPPP PREPARATION, IMPLEMENTATION AND PERMIT COMPLIANCE SHALL BE PROPERLY TRAINED, AND SHALL ATTEND THE PRE-CONSTRUCTION MEETING.</p> <p>19. A CONCRETE WASHOUT SHALL BE INSTALLED FOR ALL PROJECTS THAT PROPOSE CONCRETE TO BE MIXED ON SITE OR BE DELIVERED FROM A BATCH PLANT. THE CONCRETE WASHOUT SHALL BE LOCATED A MINIMUM OF FIFTY (50) FEET FROM ANY DRAINAGE INFRASTRUCTURE OR NATURAL DRAINAGE FEATURES OR WATER BODIES AND INCORPORATE AN IMPERMEABLE LINER (6.0 MIL MINIMUM THICKNESS) TO CONTAIN THE REQUIRED VOLUME. ALL DRIED CONCRETE WASTE SHALL BE BROKEN INTO MANAGEABLE PIECES AND DISPOSED OF OFF-SITE AT AN APPROVED DISPOSAL FACILITY.</p> <p>20. THE CONTRACTOR SHALL HAVE EMERGENCY MATERIALS AND EQUIPMENT ON-SITE FOR UNFORESEEN SITUATIONS, SUCH AS DAMAGE TO UNDERGROUND WATER AND SEWER UTILITIES WHEREBY FLOWS MAY GENERATE EROSION AND SEDIMENT POLLUTION.</p> <p>21. SEDIMENT AND EROSION CONTROLS MAY BE REMOVED ONLY WHEN CONTRIBUTORY UPSTREAM AREAS BECOME STABILIZED OR ARE MANAGED UPSTREAM AND AS LONG AS SEDIMENT-LADEN RUNOFF WILL NOT DISCHARGE FROM THE SITE.</p> <p>22. THIS PLAN SHALL BE IN EFFECT UNTIL ALL DISTURBED AREAS ARE PERMANENTLY STABILIZED, TRANSFERRED TO NEW OWNERSHIP, OR DEVELOPED UNDER FUTURE PLANS WITH A NEW NOTICE OF INTENT (NOI), SWPPP, AND PERMIT.</p>											
<p>DATE REVISED: 1/2022  GENERAL STORMWATER POLLUTION PREVENTION PLAN NOTES</p>						<p>DETAIL NO: 2-10A SHEET 1 OF 2</p>						<p>DATE REVISED: 1/2022  GENERAL STORMWATER POLLUTION PREVENTION PLAN NOTES</p>						<p>DETAIL NO: 2-10A SHEET 2 OF 2</p>					
<p>SWPPP INSPECTION NOTES:</p> <ol style="list-style-type: none"> THE OWNER OR DESIGNATED CONTRACTOR SHALL PERFORM, AT A MINIMUM, A VISUAL INSPECTION OF THE PROJECT SITE ONCE EVERY SEVEN (7) DAYS AND WITHIN TWENTY-FOUR (24) HOURS OF A RAINFALL EVENT GREATER THAN OR EQUAL TO ONE HALF (½) INCH. THE OWNER OR DESIGNATED CONTRACTOR SHALL PREPARE A REPORT DOCUMENTING THE FINDINGS OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) CONTROLS AND NOTE ANY EROSION PROBLEM AREAS. THE REPORT IS TO BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT CONSTRUCTION INSPECTOR FOR REVIEW AND APPROVAL. FACILITIES SHALL BE MAINTAINED AS NECESSARY TO ENSURE THEIR CONTINUED FUNCTIONING. IN ADDITION, ALL TEMPORARY EROSION CONTROLS SHALL BE MAINTAINED IN A SATISFACTORY CONDITION UNTIL SUCH TIME THAT CONSTRUCTION IS COMPLETED, PERMANENT DRAINAGE FACILITIES ARE OPERATIONAL, AND THE POTENTIAL FOR EROSION HAS BEEN ELIMINATED AS DETERMINED BY THE PUBLIC WORKS DIRECTOR OR DESIGNEE. THE INSPECTION BY THE OWNER OR DESIGNATED CONTRACTOR SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING: <ul style="list-style-type: none"> A) CHECK DISTURBED AREAS AND ANY MATERIAL STORAGE AREAS (IF APPLICABLE) TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) FOR EVIDENCE OF OR THE POTENTIAL FOR DISCHARGE OF POLLUTANTS. B) CHECK THE SITE FOR EROSION AND SEDIMENTATION AND WHETHER THE SITES ARE FUNCTIONING AND OPERATING CORRECTLY. C) AT ACCESSIBLE DISCHARGE POINTS, DETERMINE WHETHER BMP'S ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO RECEIVING WATERS. WHERE DISCHARGE POINTS ARE INACCESSIBLE OR UNSAFE TO INSPECT, INSPECT DOWNSTREAM AREAS FOR EVIDENCE OF DISCHARGE. D) DOCUMENT SEDIMENT TRACK-OUT AT ALL INGRESS AND EGRESS LOCATIONS FROM THE PROJECT SITE. E) DOCUMENT ANY REVISIONS TO BMP'S ON THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WITHIN SEVEN (7) DAYS OF INSPECTION AND CORRECTION. F) DOCUMENT ANY INCIDENTS OF NON-COMPLIANCE OR CERTIFY THAT THE SITE IS IN COMPLIANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). G) DOCUMENT ANY ACTIVITY THAT CREATES A NON-STORM WATER DISCHARGE, INCLUDING DATE AND TIME, LOCATION, REASON FOR DISCHARGE, AMOUNT OF THE DISCHARGE, BMP MEASURES USED TO MITIGATE THE DISCHARGE, AND BMP'S USED TO PREVENT FURTHER NON-STORM WATER DISCHARGES FROM THE ACTIVITY. 						<p>EROSION AND SEDIMENT CONTROL NOTES:</p> <ol style="list-style-type: none"> PRIOR TO OR IMMEDIATELY FOLLOWING CLEARING & GRUBBING, AND AS PART OF THE INITIAL ROUGH GRADING, ALL RETENTION BASINS SHALL BE CUT TO GRADE. THE BASINS SHALL CONSTITUTE THE REQUIRED SEDIMENT BASINS. GRADES SHALL BE CUT (BERMING OR STRAW BALES MAY ALSO BE PROVIDED) PER THIS PLAN TO ASSURE THAT RUNOFF IS CONVEYED TO THE RETENTION BASINS. A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF A MINIMUM OF SIX (6) INCHES OF COARSE AGGREGATE SHALL BE INSTALLED AS SHOWN. ALL CONSTRUCTION TRAFFIC SHALL ENTER THROUGH THIS ENTRANCE. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE RE-GRADED OR REPLACED WHEN IT BECOMES SATURATED OR MATTED WITH SITE SOILS OR SEDIMENT. THE PAVED STREET ADJACENT TO THE CONSTRUCTION ENTRANCE SHALL BE SWEEPED ON A REGULAR BASIS TO REMOVE ANY ACCUMULATED MUD OR DIRT TRACKED FROM THE SITE. ANY DISTURBED AREAS WHERE CONSTRUCTION HAS PERMANENTLY OR TEMPORARILY CEASED SHALL BE STABILIZED TO PREVENT EROSION. AN ACCEPTABLE STABILIZATION METHOD IS HYDROSEEDING AND WATERING. AREAS WHICH WILL BE DISTURBED WITHIN TWENTY-ONE (21) DAYS OF CEASING CONSTRUCTION MAY BE STABILIZED BY WATERING. THE CATCH BASIN LOW POINTS SHALL ALSO ACT AS THE REQUIRED SEDIMENT BASINS FOR THE PROJECT. THEY SHALL BE INSPECTED ON A MONTHLY BASIS AND AFTER EVERY RAIN EVENT. SEDIMENT SHALL BE REMOVED FROM THE BASINS AS NECESSARY TO MAINTAIN A MINIMUM OF SEVENTY-FIVE (75) PERCENT OF REQUIRED CAPACITY OF THE BASIN DURING CONSTRUCTION AND ONE-HUNDRED (100) PERCENT OF REQUIRED CAPACITY POST-CONSTRUCTION. THE SWPPP IS USED TO MAINTAIN ALL ON-SITE STORM WATER POLLUTANTS AND SEDIMENT. HOWEVER, IF ANY OFF-SITE ACCUMULATIONS OF SEDIMENT OR POLLUTANTS OCCUR, IMMEDIATE ACTION SHALL BE REQUIRED TO REMOVE THE ACCUMULATION. 																	
<p>DATE REVISED: 1/2022  SWPPP INSPECTION NOTES</p>						<p>DETAIL NO: 2-10B</p>						<p>DATE REVISED: 1/2022  EROSION AND SEDIMENT CONTROL NOTES</p>						<p>DETAIL NO: 2-10C</p>					
 <p>HIGH VISIBILITY SILT FENCE NTS</p>						 <p>STABILIZED CONSTRUCTION ENTRANCE NTS</p>						 <p>INLET PROTECTION NTS</p>											

REVISIONS	
PROJECT NO.	121044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTED DATES	
OTD DATE	-
JSA CIVIL Engineering Planning Management 111 TUMWATER BLVD SE, SUITE B203 TUMWATER, WA 98512	
 Date Signed: 03/10/2025 ARIZONA, U.S.A. 03/10/2025	
CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT 303 AUTOSHOW DRIVE SURPRISE, ARIZONA	
HillSide architecture inc. SHEET TITLE EROSION CONTROL NOTES & DETAILS SHEET C3.1 FSXX-XXXX	

REVISIONS

PROJECT NO.	121044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTED DATES	
OTD DATE	-

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512



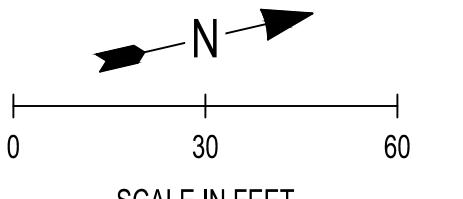
03/10/2025

CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide architectureINC

SHEET TITLE
SITE & PAVING PLAN
SHEET
C4.0

FSXX-XXXX



LEGEND

- PROPERTY LINE
- ==== EXISTING CURB & GUTTER
- ===== PROPOSED BUILDING
- TYPE 2 WALL: SEE ARCHITECTURAL PLANS
- CEMENT CONCRETE BARRIER CURB SEE C4.2
- CEMENT CONCRETE VALLEY GUTTER SEE C4.2
- ← DITCH: SEE C4.2
- CEMENT CONCRETE SIDEWALK PER MAG DETAIL NO. 230: SEE C4.3
- CEMENT CONCRETE PAVEMENT PER SECTION ON C4.2
- TRAFFIC CLASS I ASPHALT PAVEMENT PER SECTION ON C4.2
- TRAFFIC CLASS II ASPHALT PAVEMENT PER SECTION ON C4.2
- "I TOP" TRENCH REPAIR PER MAG DETAIL NO. 200-1 AND 200-2: SEE C4.3
- (XX) STALL COUNT

CONSTRUCTION NOTES

1. PROPOSED BUILDING: SEE ARCHITECTURAL PLANS
2. TRASH ENCLOSURE: SEE ARCHITECTURAL PLANS
3. CAR DETAIL AND HANDWASH STATION: SEE ARCHITECTURAL & PLUMBING PLANS
4. BICYCLE PARKING: SEE ARCHITECTURAL PLANS
5. ACCESSIBLE PARKING STALLS: SEE C4.2
6. TYPICAL PARKING STALL
TWO (2) COATS OF TRAFFIC WHITE PAINT
W/ 7MIL DFT PER COAT
7. DOUBLE STACK PARKING STALL
TWO (2) COATS OF TRAFFIC WHITE PAINT
W/ 7MIL DFT PER COAT
8. PRECAST CEMENT CONCRETE WHEEL STOP: SEE C4.2
9. SIGN: SEE ARCHITECTURAL PLANS
11. GATE: SEE ARCHITECTURAL PLANS
12. PEDESTRIAN PATH: SEE C4.2
13. CEMENT CONCRETE PAD FOR ROLL-OFF DUMPSTER
14. CURB TERMINATION PER MAD STD. DETAIL 222: SEE C4.3
15. SINGLE DIRECTION CURB RAMP PER MAG DETAIL NO. 237-3: SEE C4.3
REPLACE RAMP WING WITH TYPE "B" SINGLE CURB WHERE SHOWN
PER MAG DETAIL NO. 222: SEE C4.3
16. SIDEWALK
17. MATCH INTO EXISTING SIDEWALK
18. "I TOP" TRENCH REPAIR PER MAG DETAIL NO 200-1 AND 200-2: SEE C4.3
19. MATCH INTO EXISTING CURB, GUTTER, AND SIDEWALK
20. CEMENT CONCRETE VALLEY GUTTER: SEE C4.2
21. FIRE RISER ROOM: SEE ARCHITECTURAL PLANS
22. FDC: SEE C8.0
23. KNOX BOX PER FIRE DEPARTMENT REQUIREMENTS
24. EXISTING FIRE HYDRANT
25. RESTORE PAVING & SIDEWALK AROUND PROPOSED CURB INLET TO PRE-CONSTRUCTION CONDITION

TOTAL AREA OF SITE	153,141 SF
TOTAL IMPERVIOUS AREA OF SITE	117,400 SF
TOTAL PERVIOUS AREA OF SITE	35,741 SF
PERCENTAGE OF IMPERVIOUS AREA	76.7%

GENERAL NOTES

1. REFER TO TOPOGRAPHIC SURVEY FOR BOUNDARY DIMENSIONS: SEE C2.0

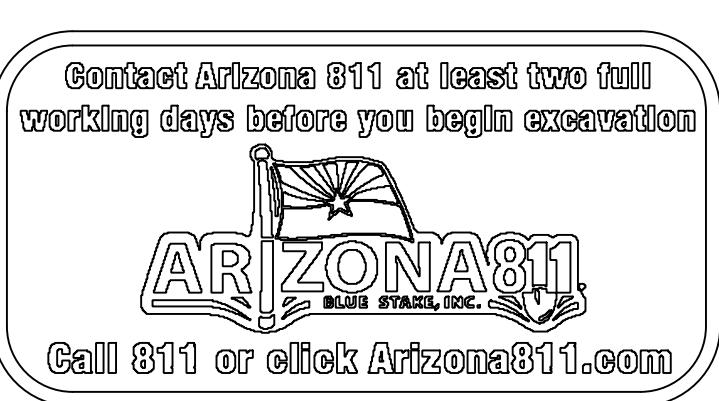
ADMINISTRATIVE APPROVAL

COMMUNITY DEVELOPMENT DIRECTOR

DATE

CITY ENGINEER

DATE



CALL BEFORE YOU DIG

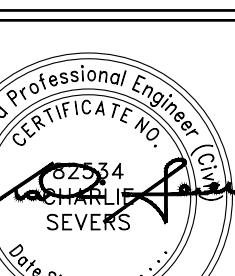
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



REVISIONS

PROJECT NO.
121044
DRAWN
C. DAHM
CHECKED
D. PHILLIPS
SUBMITTED DATES
OTB DATE
-

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE SUITE B203
TUMWATER, WA 98512



03/10/2025

CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

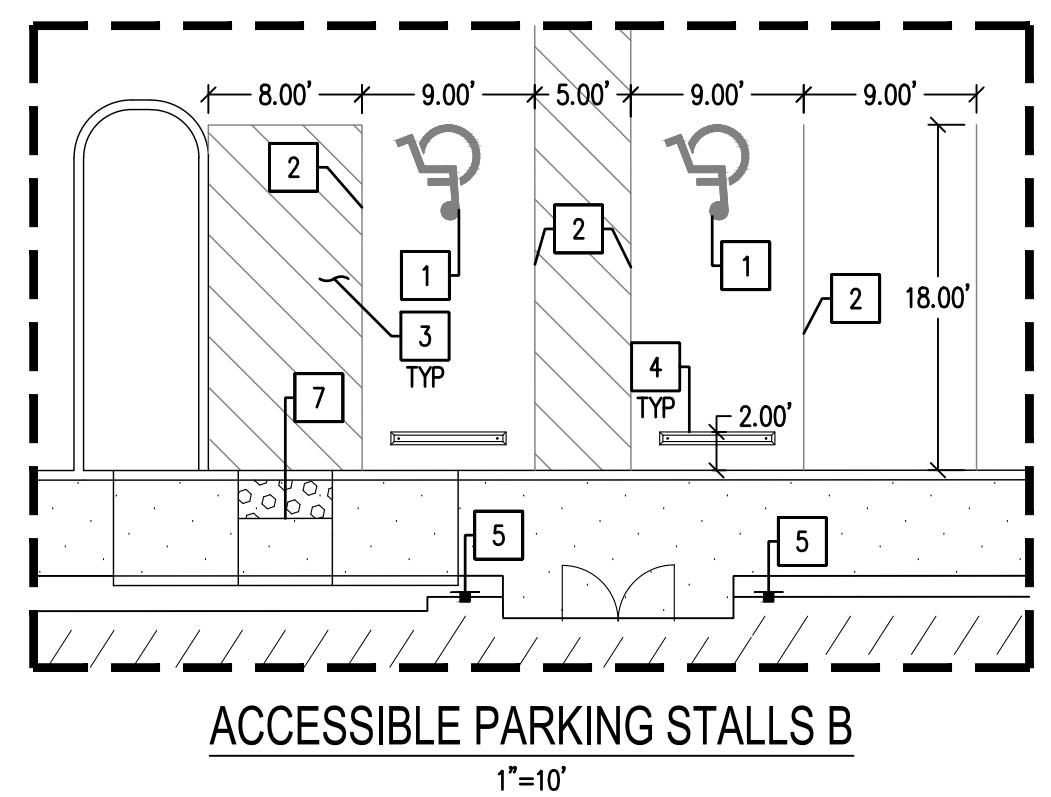
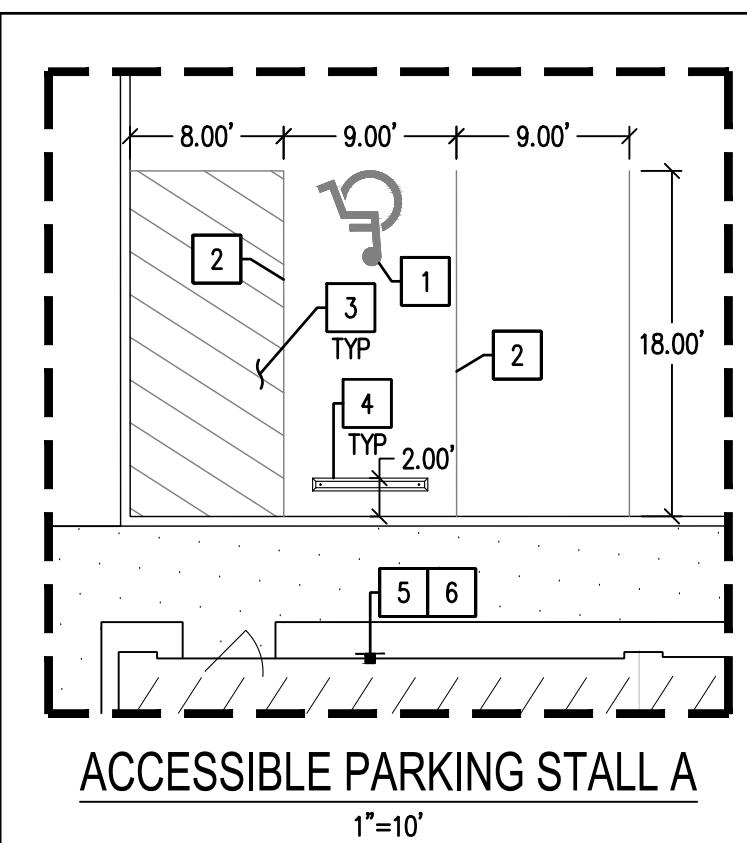
HillSide
architectureINC

SHEET TITLE
SITE & PAVING
DETAILS

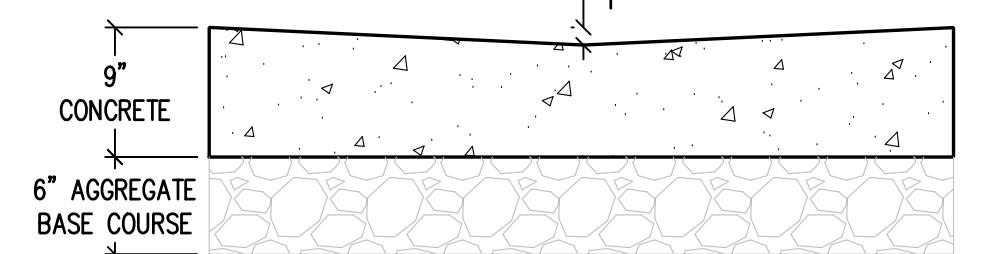
SHEET

C4.2

FSXX-XXXX

**CONSTRUCTION NOTES**

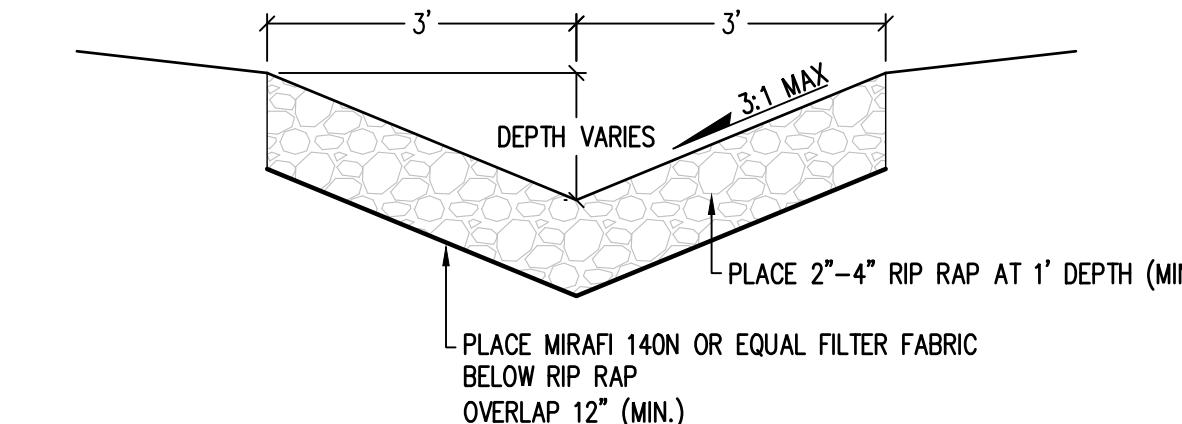
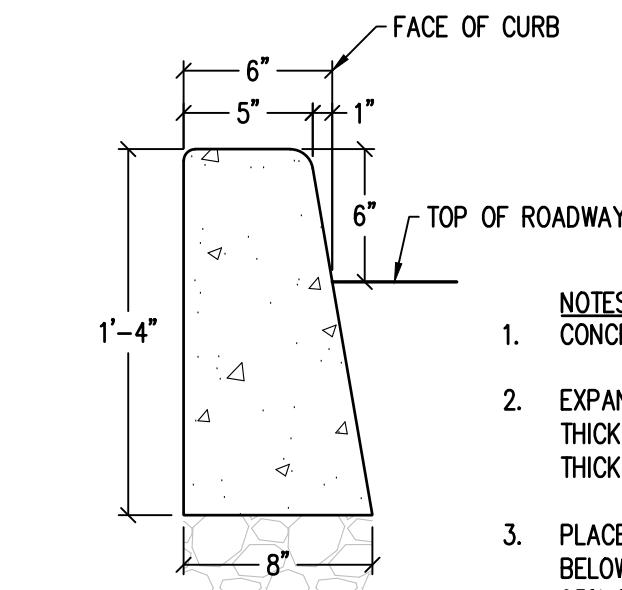
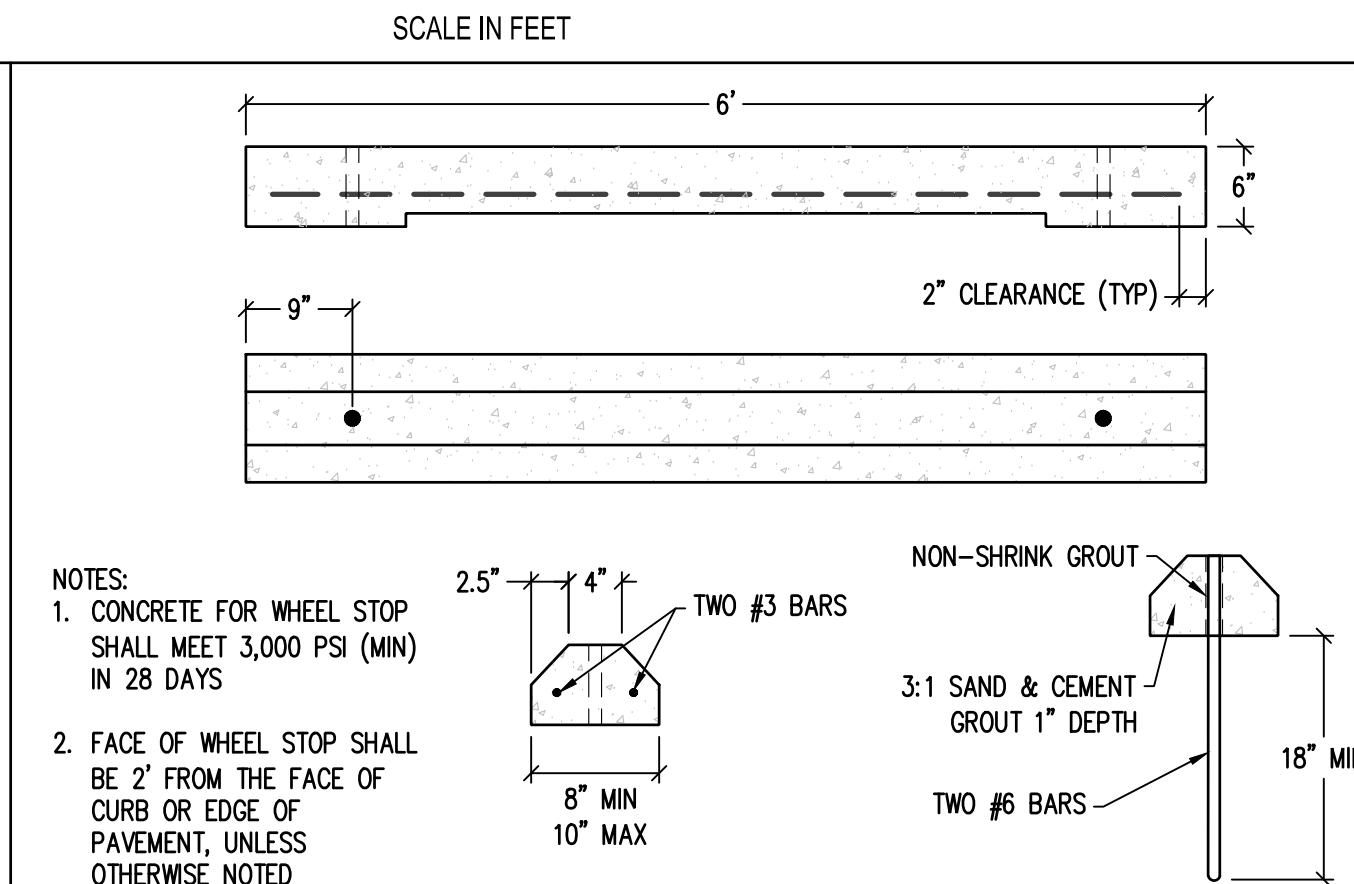
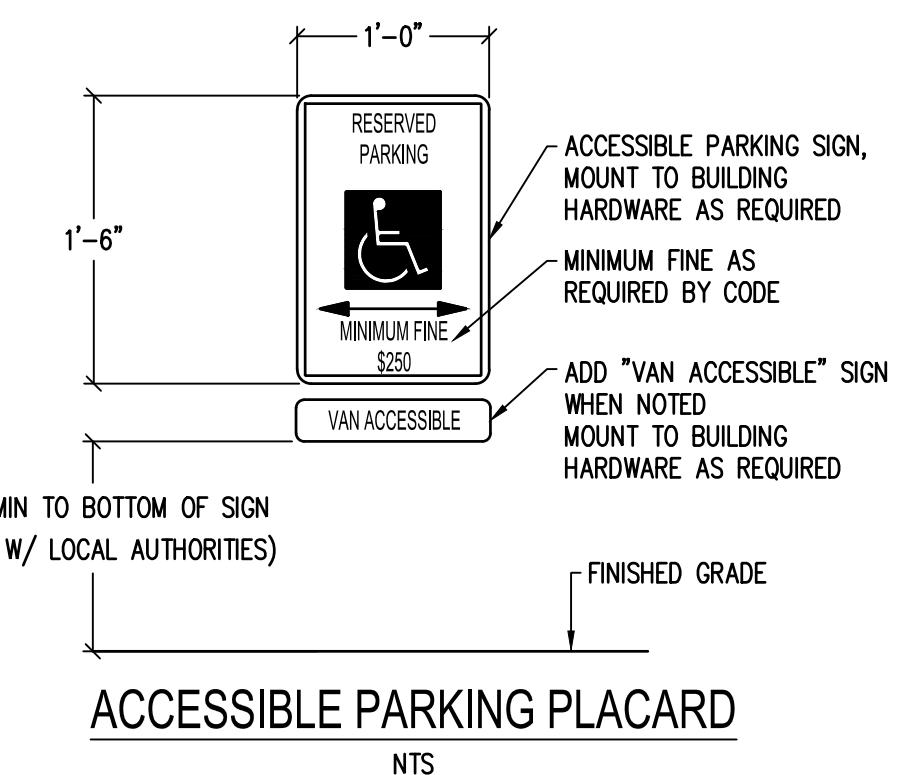
- ACCESSIBILITY SYMBOL: PER DETAIL THIS SHEET
- 4" STALL STRIPING TWO (2) COATS OF TRAFFIC WHITE PAINT W/ 7MIL DFT PER COAT
- 4" DIAGONAL STRIPING AT 18" O.C. TWO (2) COATS OF TRAFFIC WHITE PAINT W/ 7MIL DFT PER COAT
- PRECAST CEMENT CONCRETE WHEEL STOP: PER DETAIL THIS SHEET
- ACCESSIBLE PARKING PLACARD AFFIXED TO BUILDING PER DETAIL THIS SHEET
- ADD "VAN ACCESSIBLE" SIGN
- SINGLE DIRECTION CURB RAMP PER MAG DETAIL NO. 237-3; SEE C4.3 REPLACE RAMP WING WITH TYPE "B" SINGLE CURB WHERE SHOWN PER MAG DETAIL NO. 222; SEE C4.3



- NOTES
- CONCRETE SHALL BE CLASS 'AA' PER MAG SS SECTION 725.
 - EXPANSION JOINTS SHALL CONFORM TO MAG SS SECTION 340, SPACE EVERY 15'.
 - CONTRACTION JOINTS SHALL CONFORM TO MAG SS SECTION 340.
 - A SEPARATE CONCRETE PAD PER MAG DETAIL NO. 240 IS REQUIRED AT ALL EXPANSION JOINTS AND ALL CONSTRUCTION JOINTS.
 - SUBGRADE PREPARATION SHALL BE PER MAG SS SECTION 301.

CONCRETE VALLEY GUTTER

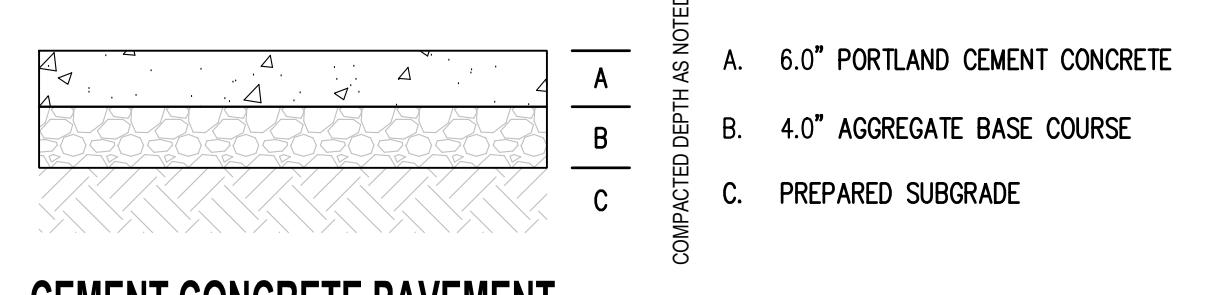
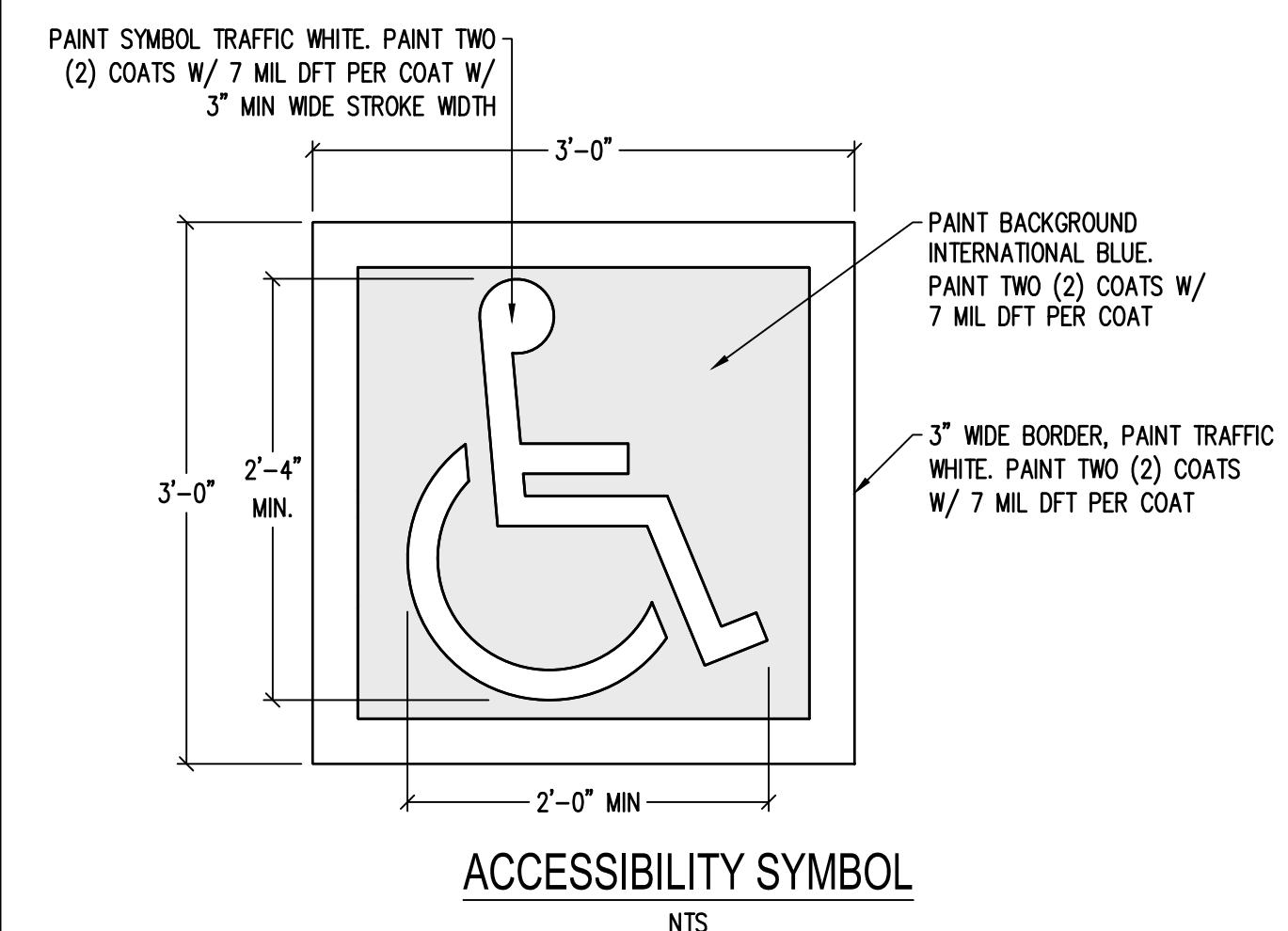
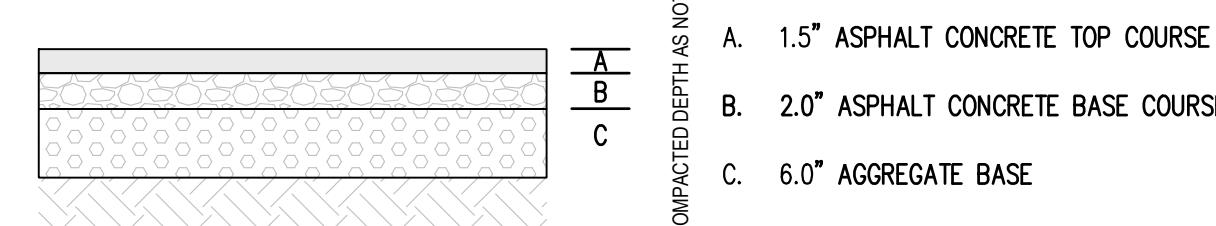
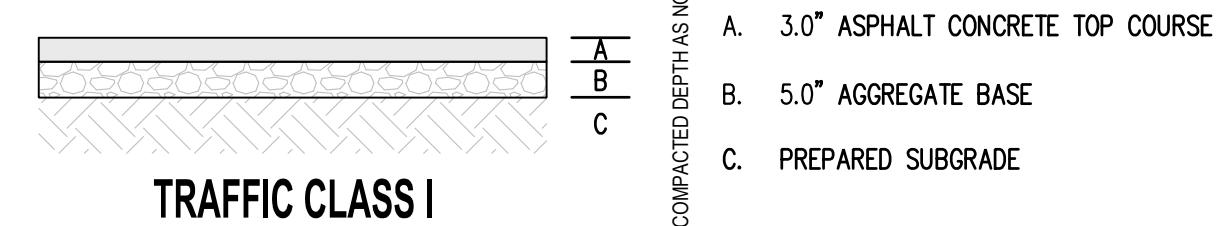
NTS

**CEMENT CONCRETE BARRIER CURB**

NTS

DITCH

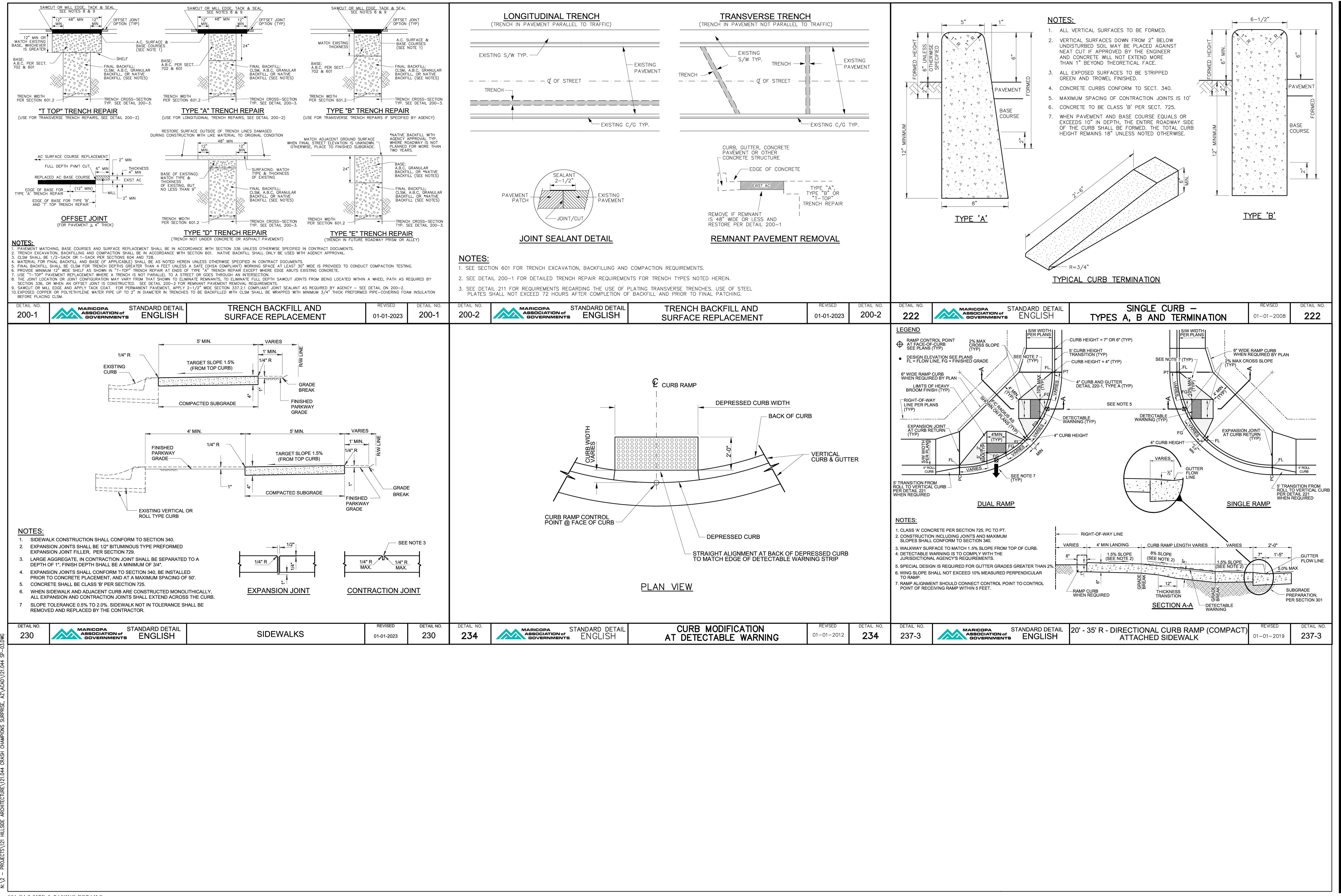
NTS

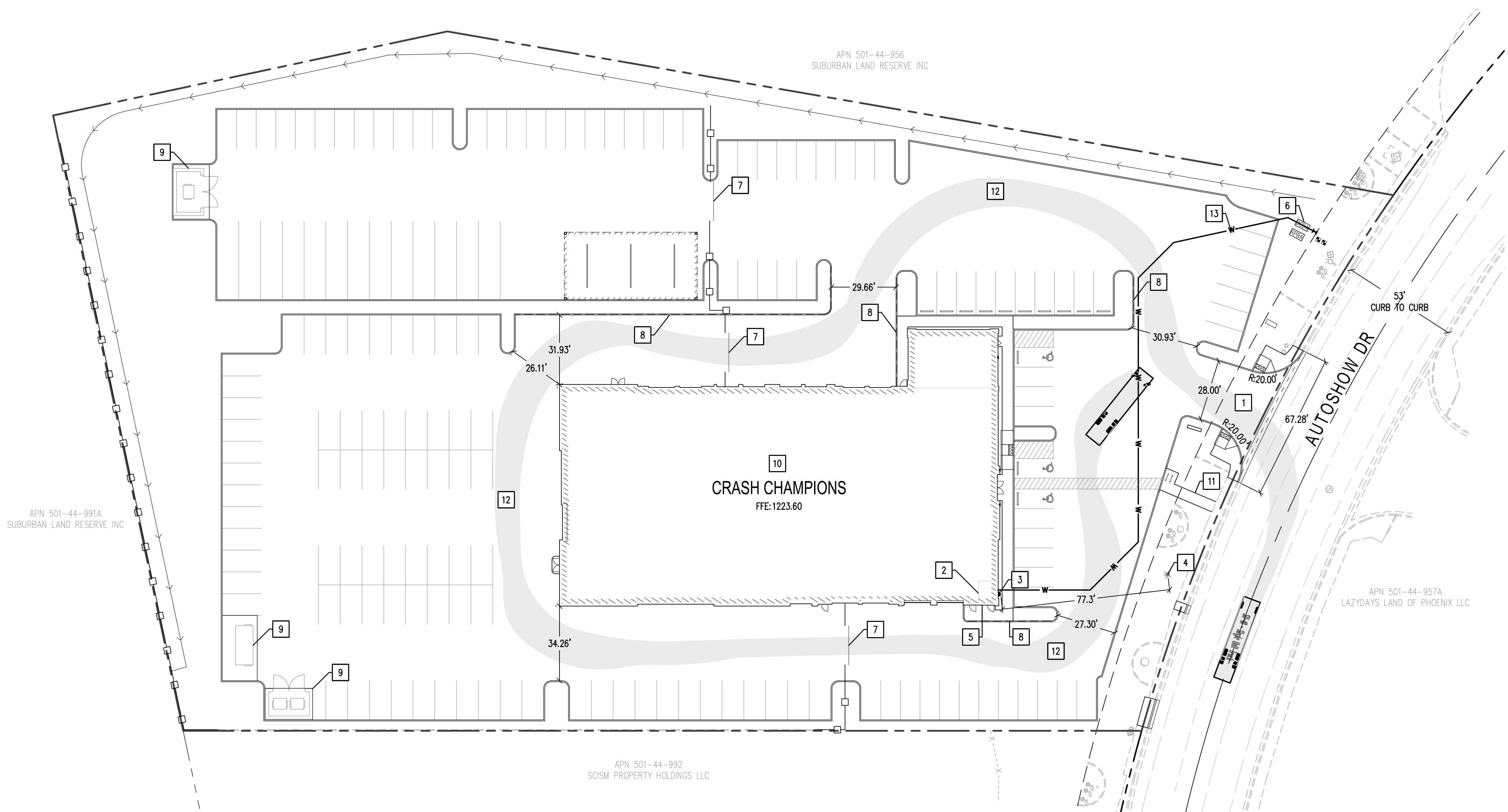
**CEMENT CONCRETE PAVEMENT****TRAFFIC CLASS II
ASPHALT PAVEMENT****TRAFFIC CLASS I
ASPHALT PAVEMENT****PAVING NOTES:**

- THE ACTUAL POINT OF PAVEMENT MATCHING AND/OR TERMINATION, SHALL BE DETERMINED IN THE FIELD BY A CITY OF SURPRISE FIELD INSPECTOR.
- ALL FRAMES, COVERS, VALVE BOXES, AND MANHOLE COVERS SHALL BE ADJUSTED TO FINISH GRADE AFTER COMPLETION OF PAVING OR RELATED CONSTRUCTION.
- CONSTRUCTION OF SURFACE IMPROVEMENTS SHALL NOT BEGIN UNTIL CONFLICTING UNDERGROUND UTILITY CONSTRUCTION IS COMPLETED AND SERVICE CONNECTIONS TO ALL PLATTED LOTS HAVE BEEN ADEQUATELY EXTENDED TO THE RIGHT-OF-WAY OR PUBLIC UTILITY EASEMENT.
- THE PERMITTEE SHALL ARRANGE FOR THE RELOCATION COSTS OF ALL UTILITIES, INCLUDING ANY STREET LIGHTS, AND SUBMIT A UTILITY RELOCATION SCHEDULE PRIOR TO THE ISSUANCE OF A CONSTRUCTION PERMIT.
- TREES AND SHRUBBERY IN THE RIGHT-OF-WAY THAT CONFLICT WITH PROPOSED IMPROVEMENTS SHALL NOT BE REMOVED WITHOUT APPROVAL FROM THE CITY. THE PERMITTEE SHALL BE RESPONSIBLE FOR OBTAINING AUTHORIZATION FROM CITY OF SURPRISE COMMUNITY DEVELOPMENT AT 623-222-3000 TO REMOVE AND/OR RELOCATE SAME TREES AND SHRUBBERY.
- DAMAGED AND/OR DISPLACED CONCRETE CURB, GUTTER, SIDEWALK, OR DRIVEWAY SLAB THAT IS WITHIN THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED BEFORE FINAL ACCEPTANCE OF THE WORK.
- GRADING BETWEEN BACK OF CURB AND PROPERTY LINE SHALL BE LIMITED TO 4:1 SLOPE. PROTECT SLOPES FROM EROSION AND/OR TRANSPORTING SILT ONTO STREETS OR ADJACENT PRIVATE PROPERTY.
- ALL FIRE HYDRANTS SHALL HAVE A TWO-WAY BLUE REFLECTOR INSTALLED PER MAG STANDARD DETAIL 122.
- STREET SIGNS SHALL BE FURNISHED AND INSTALLED BY THE DEVELOPER AT THE LOCATIONS SHOWN ON THE SIGNAGE, STRIPING, OR PAVING PLAN. ALL STREET SIGNS SHALL BE INSTALLED PER CITY OF SURPRISE STREET SIGN AND STREET SIGN BASE DETAIL 4-22.
- ASPHALT MIX DESIGN SHALL BE SUBMITTED TO THE CITY OF SURPRISE ENGINEERING DEVELOPMENT SERVICES DIVISION PRIOR TO THE PLACEMENT OF ANY ASPHALT.

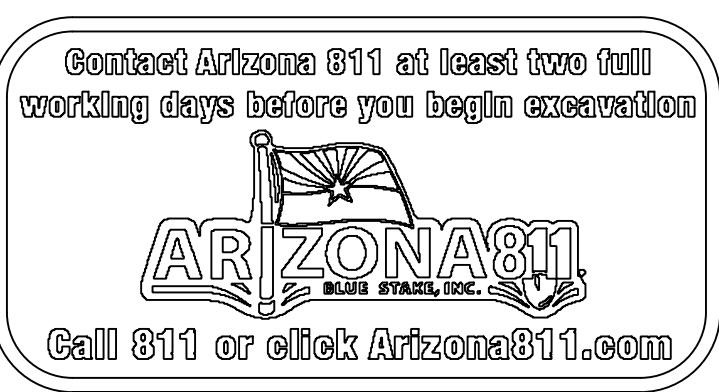
DATE REVISED: 1/2022

**PAVING NOTES**DETAIL NO:
2-06



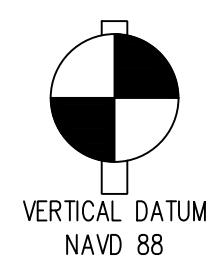


Mar 13, 2025 2:03:15pm – User CiaraDahn
N:\2 – PROJECTS\121 HILLSIDE ARCHITECTURE\121.044 CRASH CHAMPIONS SURPRISE, AZ\ACAD\121.044 SP-05.DWG



CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



□
VERTICAL DATA
NAVD 88

SU-40 - Single Unit Truck
Overall Length
Overall Width
Overall Body Height
Min Body Ground Clearance
Track Width
Lock-to-lock time
Max Steering Angle (Virtual)

SU-40 DESIGN VEHICLE DIMENSIONS

NTSC

39,500 ft
8,000 ft
13,500 ft
1,367 ft
8,000 ft
5,005°
31.80°

CONSTRUCTION NOTES

1. FULL ACCESS DRIVEWAY
 2. FIRE RISER ROOM
 3. FIRE DEPARTMENT CONNECTION
 4. EXISTING FIRE HYDRANT
 5. KNOX BOX
 6. FIRE LINE DOUBLE CHECK DETECTOR ASSEMBLY
 7. 18' MANUAL GATE WITH KNOX PADLOCK
 8. CURB TO BE PAINTED RED AND LABELED "FIRE LANE NO PARKING"
 9. REFUSE/RECYCLING ACCUMULATION AREA
 10. ±21,000 SF BUILDING
 11. PEDESTRIAN ACCESS TO PUBLIC WAY
 12. SU-40 DESIGN VEHICLE BODY OUTLINE
 13. 6" UNDERGROUND FIRE LINE

BUILDING INFORMATION

BUILDING INFORMATION	
BUSINESS NAME	CRASH CHAMPIONS
OWNER	LRG INVESTORS
BUILDING SQUARE FOOTAGE	21,000
BUILDING HEIGHT	28'-0" (MAX)
CONSTRUCTION TYPE	VB
ROOF TYPE	STANDING SEAM ROOF, MBCI CONCEALED FASTENER SYSTEM, ULTRA-DEK ROOF PANEL
BUILDING OCCUPANCY AND HAZARDS	B, S1

WATER INFORMATION¹

WATER INFORMATION	
STATIC PRESSURE	72 PSI
FLOWING GPM	1,126 GPM
RESIDUAL PRESSURE	68 PSI
FLOWING GPM @ 20 PSI RESIDUAL PRESSURE	4,860 GPM
FLOW TEST HYDRANT LOCATION	78' NORTH OF PROPOSED BUILDING

1. VALUES ARE CALCULATED AT THE FLOWED HYDRANT, 78' NORTH OF PROPOSED BUILDING.

ADMINISTRATIVE APPROVAL

COMMUNITY DEVELOPMENT DIRECTOR

DATE

CITY ENGINEER

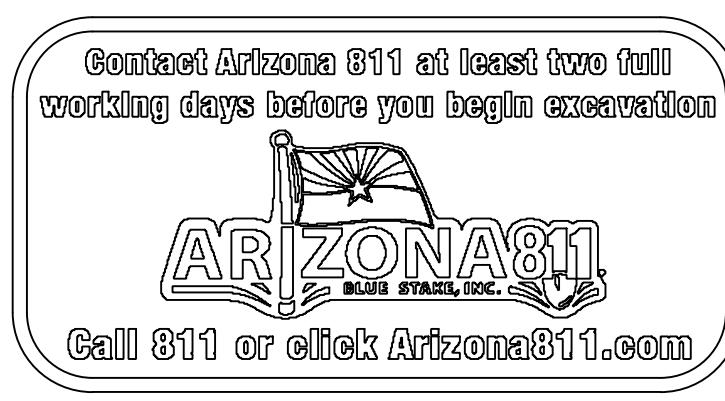
SHEET TITLE

PUBLIC SAFETY SITE PLAN

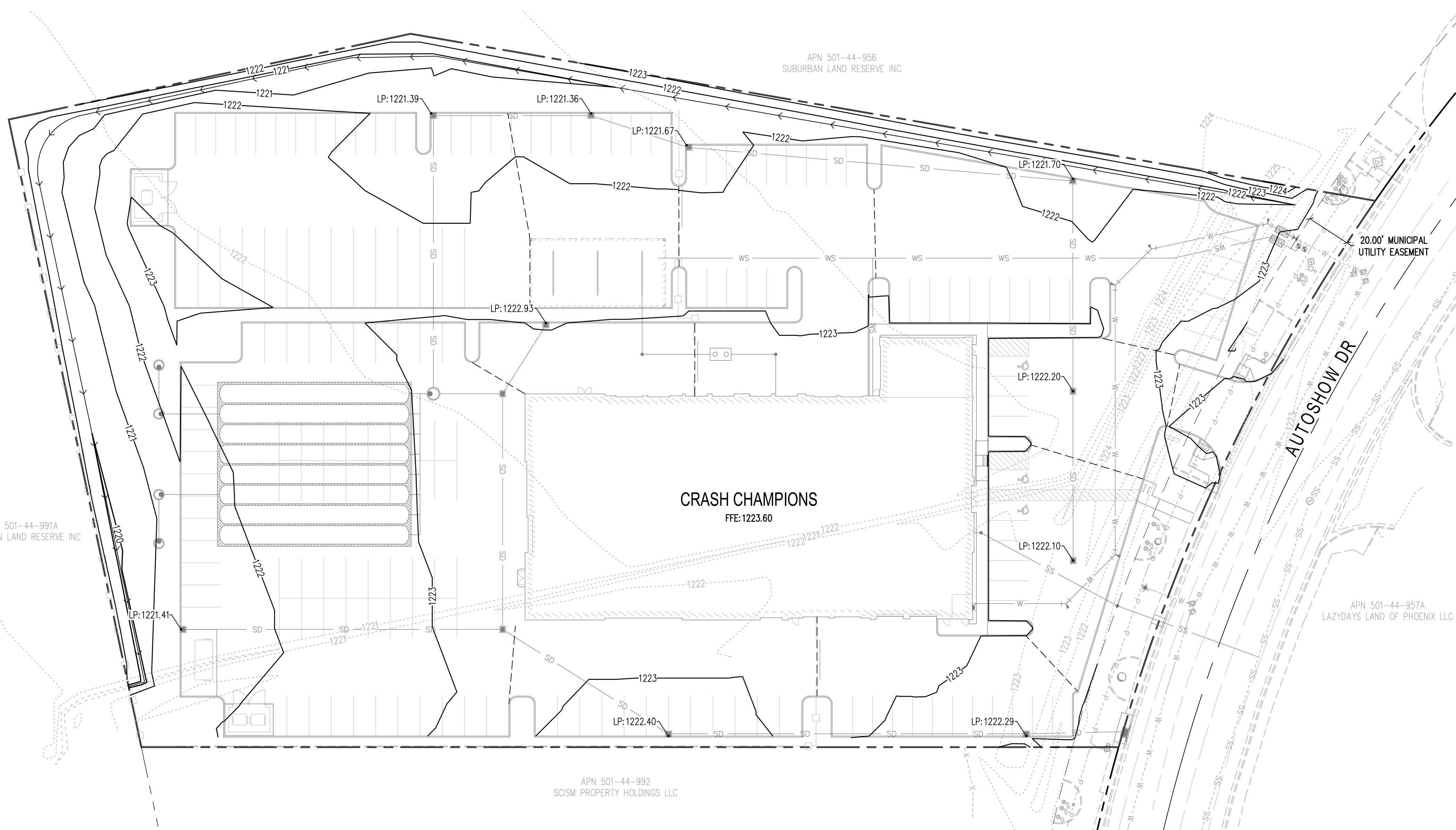
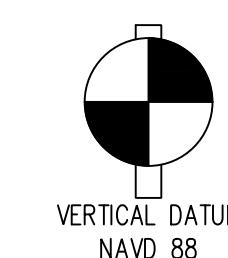
SHEET

C4.4

FSXX-XXXX



CALL BEFORE YOU DIG
 THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



N
0 30 60
SCALE IN FEET

LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- GRADE BREAK
- EXISTING CURB & GUTTER
- PROPOSED BUILDING
- CEMENT CONCRETE BARRIER CURB
- DITCH
- STORM LINE
- CATCH BASIN

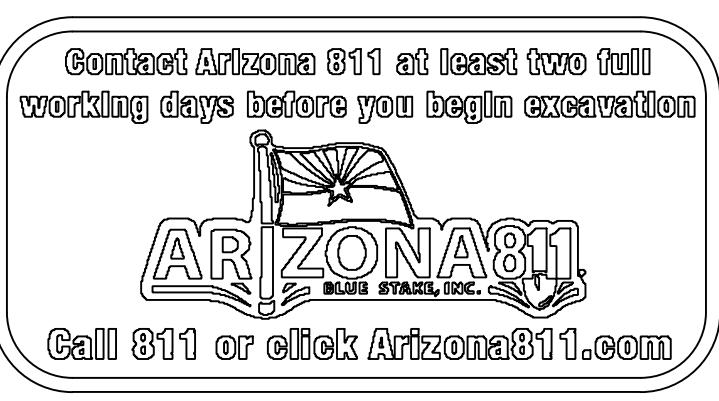
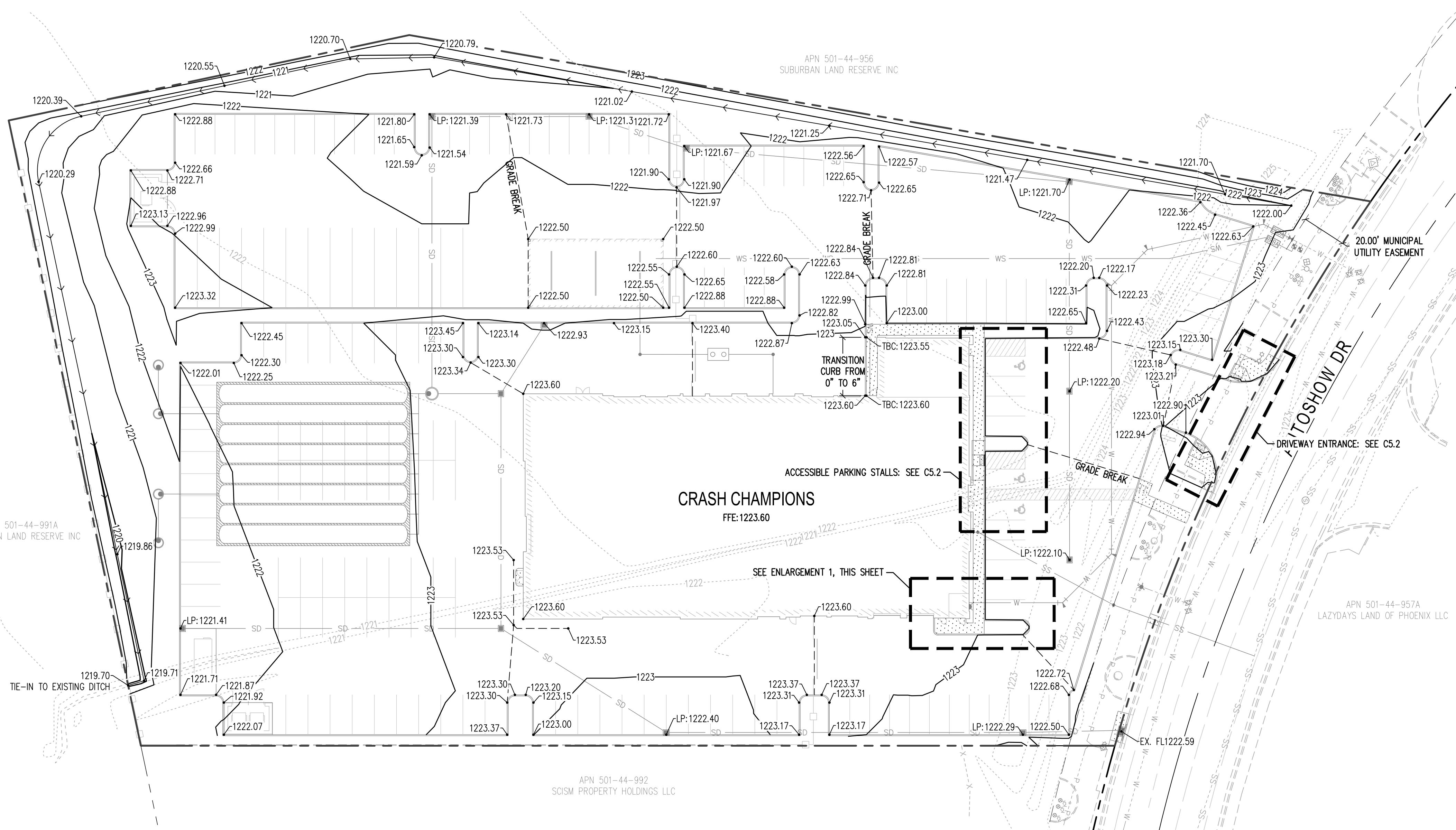
REVISIONS	
PROJECT NO.	121044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTAL DATES	
OTD DATE	-
STAMP	 Registered Professional Engineer CERIFICATE NO. CAROLYN SEVERS Date Signed: 03/10/2025
SHEET TITLE	CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT 303 AUTOSHOW DRIVE SURPRISE, ARIZONA
SHEET	C5.0

JSA CIVIL

Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512

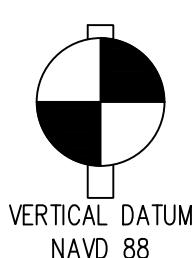
HillSide architectureINC

SHEET TITLE
GRADING PLAN
SHEET
C5.0
FSXX-XXXX

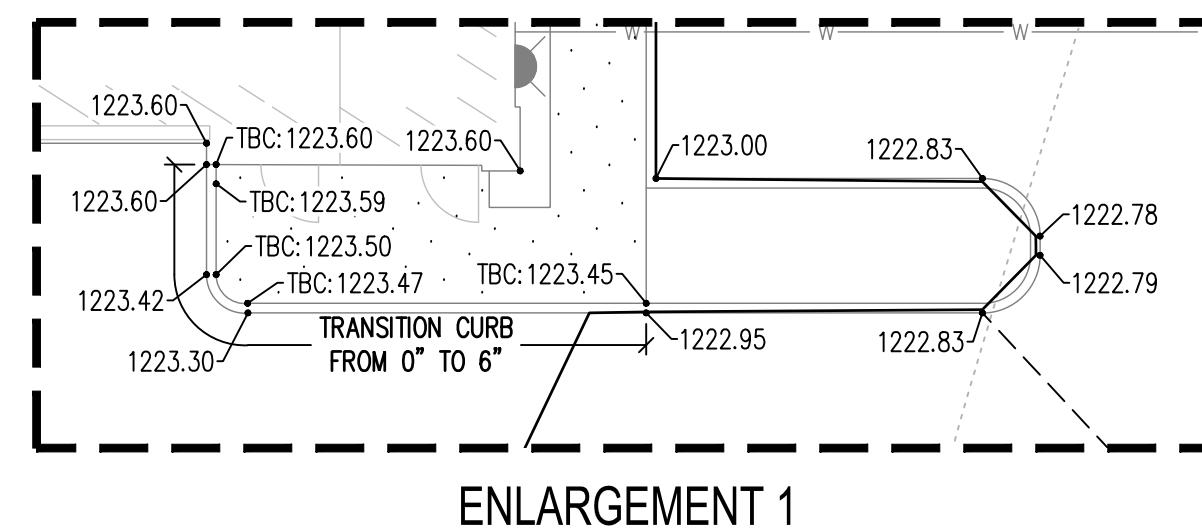


CALL BEFORE YOU DIG

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

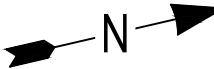
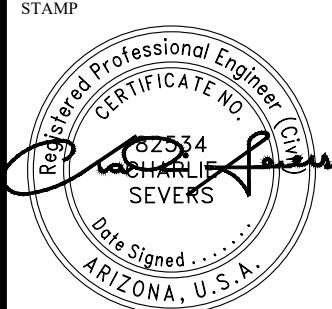


VERTICAL DATUM
NAVD 88



ENLARGEMENT

1" =

REVISIONS	
PROJECT NO.	121.044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTAL DATES	
OTB DATE	-
JSA CIVIL Engineering Planning Management 111 TUMWATER BLVD SE, SUITE B203 TUMWATER, WA 98512	
	
0 30 60	
SCALE IN FEET	
LEGEND	
— - - - -	PROPERTY LINE
--- - - - -	EXISTING CONTOURS
XX XX	PROPOSED CONTOURS
— - - - -	GRADE BREAK
XX.XX	SPOT ELEVATION
-X.X%	SLOPE ARROW
=====	EXISTING CURB & GUTTER
	PROPOSED BUILDING
=====	CEMENT CONCRETE BARRIER CURB
=====	CEMENT CONCRETE SIDEWALK
→ -----	DITCH
----- SD -----	STORM LINE
□	CATCH BASIN
GENERAL NOTES	
SPOT ELEVATIONS REPRESENT FINISHED GRADE AT FLOW LINE UNLESS OTHERWISE NOTED	
CATCH SLOPES TO EXISTING GRADE SHALL NOT EXCEED 3:1	
CONTRACTOR SHALL NOT ALLOW WATER TO POND AT SUBGRADE OR BASE MATERIAL ADJACENT TO CURB INLETS AND CATCH BASINS PRIOR TO PLACEMENT OF PAVEMENT. TEMPORARY PROVISIONS SUCH AS DEWATERING AND INSTALLATION OF SUBDRAINS SHALL BE TAKEN TO KEEP THE SUBGRADE DRY DURING CONSTRUCTION.	
ACRONYMS FOR SPOT ELEVATIONS: DW = BOTTOM OF WALL	
03/10/2025	
	

**CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA**

HillSide
architecture llc

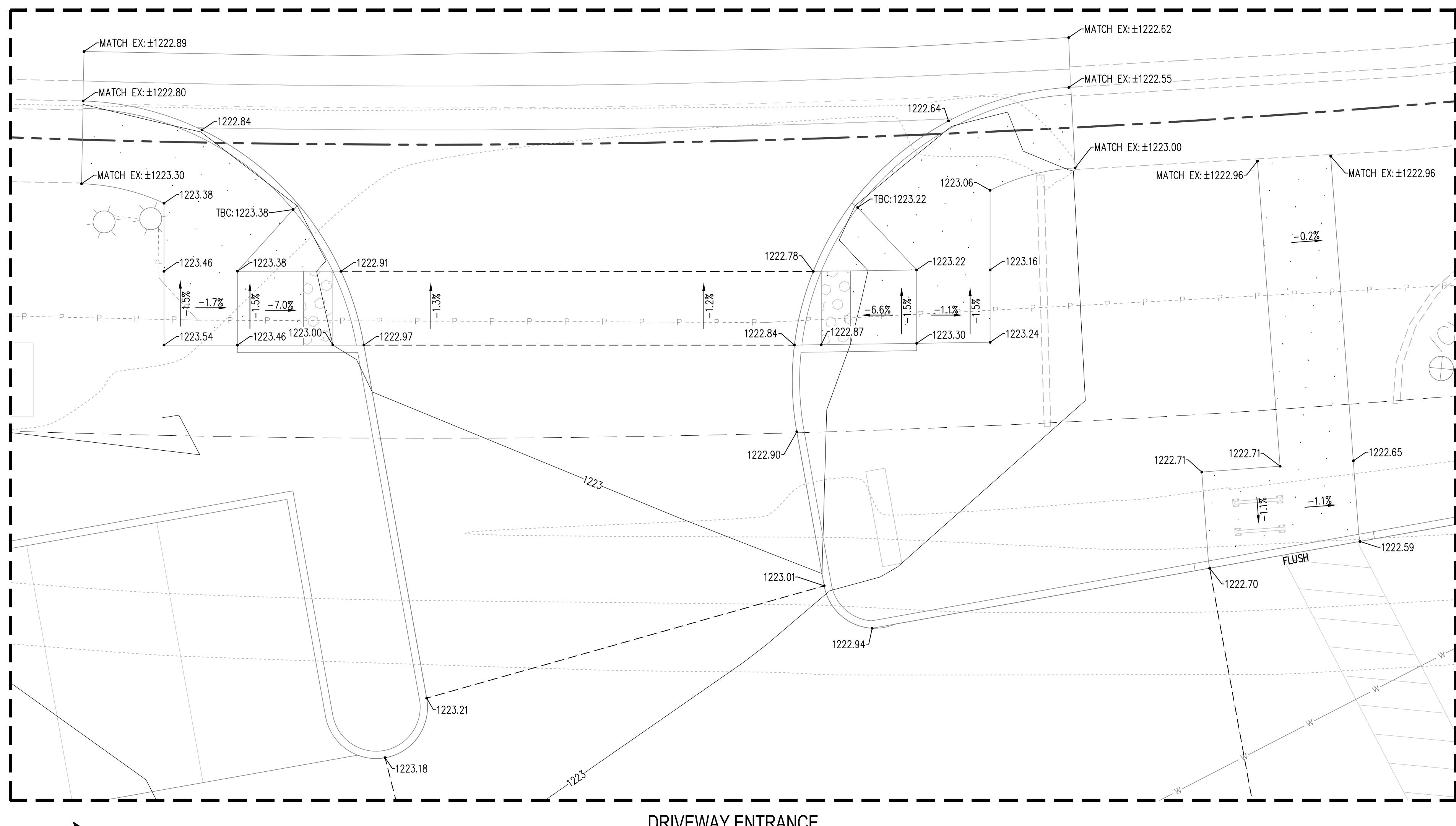
SHEET TITLE

DETAILED GRADING PLAN

SHEET

C5.1

FSXX-XXXX



LEGEND

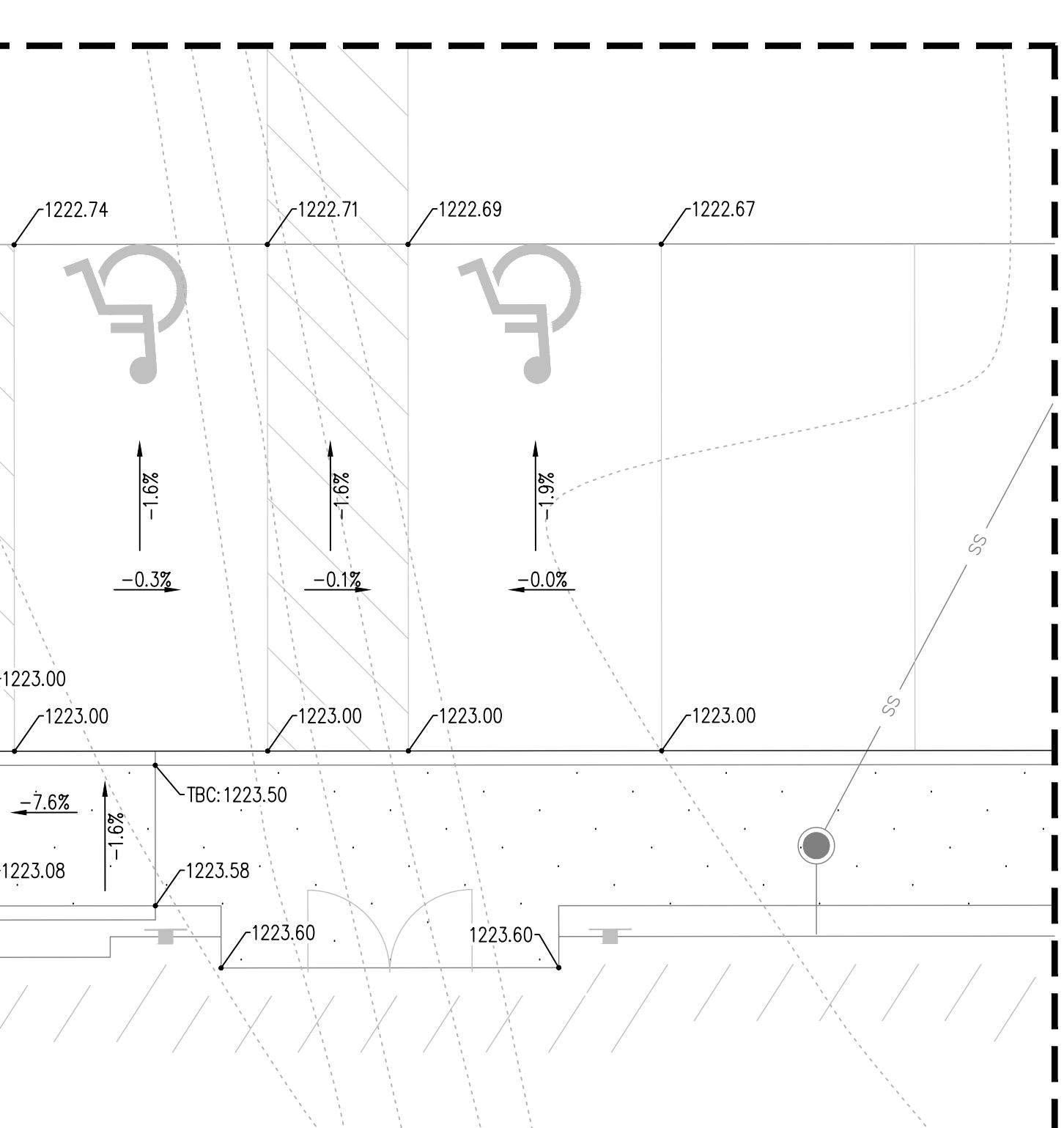
	PROPERTY LINE
	EXISTING CONTOURS
	PROPOSED CONTOURS
	GRADE BREAK
	SPOT ELEVATION
	SLOPE ARROW
	EXISTING CURB & GUTTER
	CEMENT CONCRETE BARRIER CURB
	CEMENT CONCRETE SIDEWALK

GENERAL NOTES

- SPOT ELEVATIONS REPRESENT FINISHED GRADE AT FLOW LINE UNLESS OTHERWISE NOTED
- CATCH SLOPES TO EXISTING GRADE SHALL NOT EXCEED 3:1
- CONTRACTOR SHALL NOT ALLOW WATER TO POND AT SUBGRADE OR BASE MATERIAL ADJACENT TO CURB INLETS AND CATCH BASINS PRIOR TO PLACEMENT OF PAVEMENT. TEMPORARY PROVISIONS SUCH AS Dewatering AND INSTALLATION OF SUBDRAINS SHALL BE TAKEN TO KEEP THE SUBGRADE DRY DURING CONSTRUCTION.
- ACRONYMS FOR SPOT ELEVATIONS:
 - BW: BOTTOM OF WALL
 - HP: HIGH POINT
 - LP: LOW POINT
 - MATCH EX: MATCH EXISTING GRADE
 - TBC: TOP BACK OF CURB
 - TW: TOP OF WALL
 - SW: SIDEWALK

REVISIONS	
PROJECT NO.	121044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTAL DATES	
OTD DATE	
STAMP	
Engineering Planning Management	111 TUMWATER BLVD SE SUITE B203 TUMWATER, WA 98512

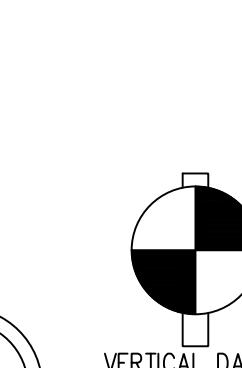
CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA



SHEET TITLE
GRADING DETAILS
SHEET
C5.2
FSXX-XXXX

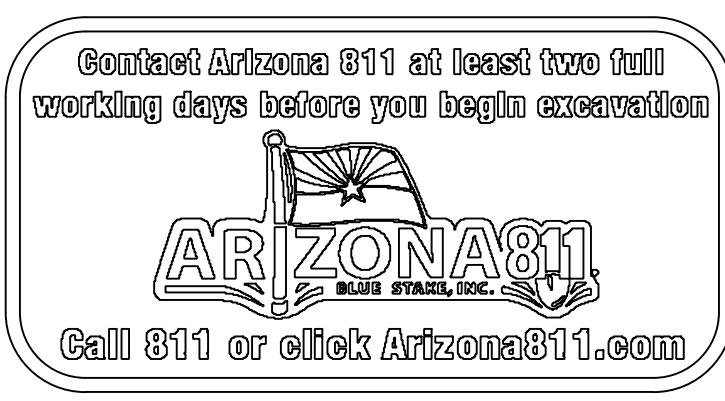
DRIVEWAY ENTRANCE
1'=5'

0 5 10
SCALE IN FEET



CALL BEFORE YOU DIG

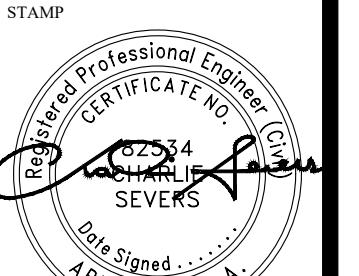
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



REVISIONS

PROJECT NO.
121044
DRAWN
C. DAHM
CHECKED
D. PHILLIPS
SUBMITTED DATES
OTD DATE
—

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512

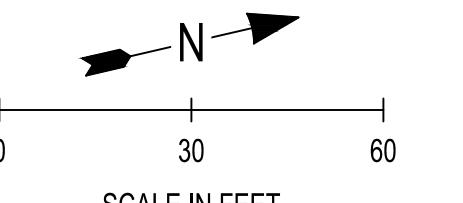


03/10/2025

CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide
architectureINC

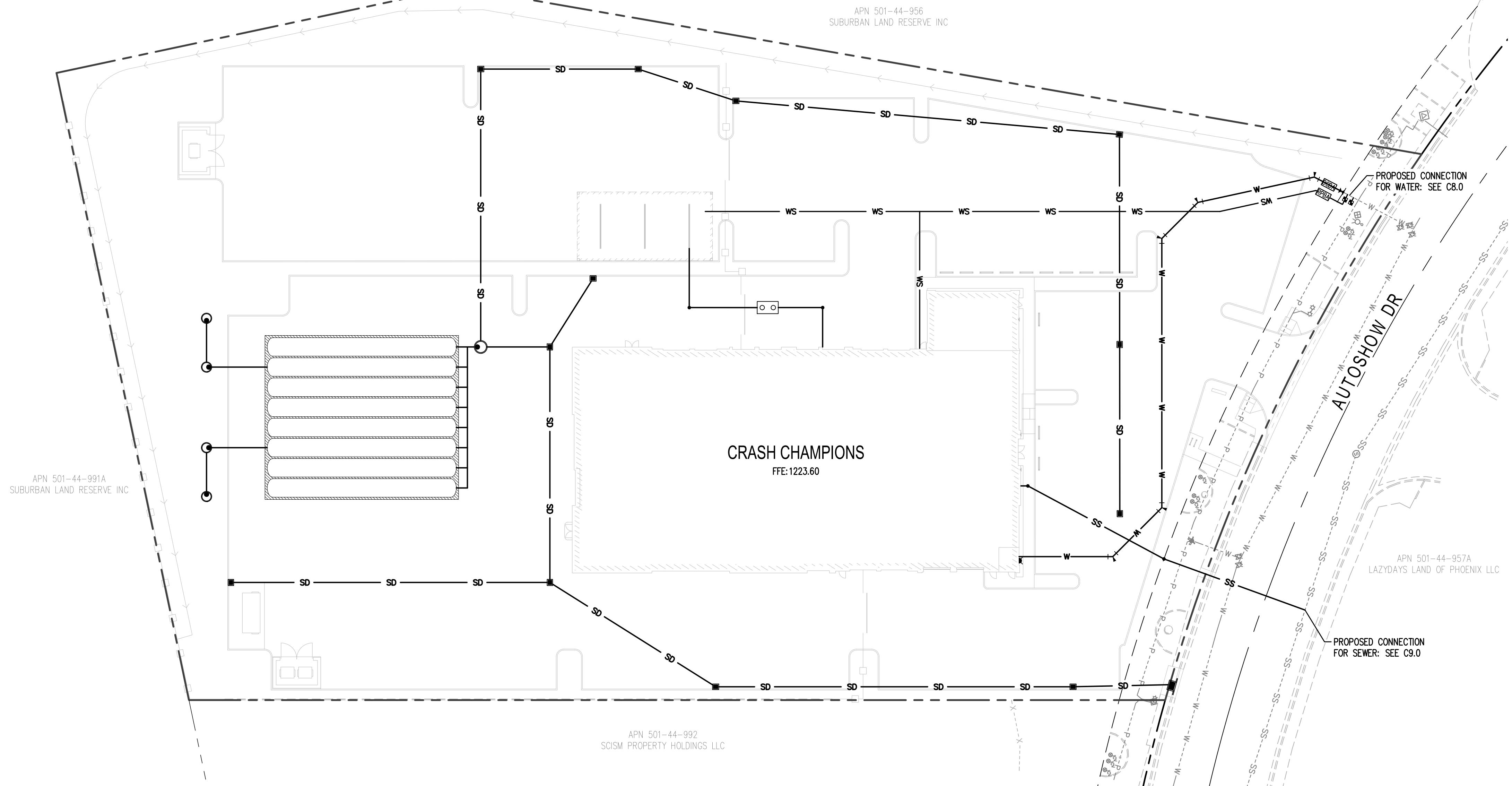
SHEET TITLE
UTILITY PLAN
SHEET
C6.0
FSXX-XXXX



SCALE IN FEET

LEGEND

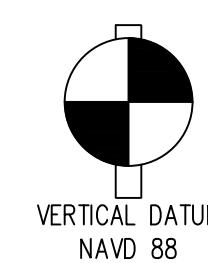
- PROPERTY LINE
- ==== EXISTING CURB & GUTTER
- W----- EXISTING WATER LINE
- P----- EXISTING POWER LINE
- SS----- EXISTING SEWER LINE
- ◎ CV EXISTING IRRIGATION CONTROL VALVE
- ※ EXISTING FIRE HYDRANT
- 田 EXISTING WATER METER
- ◎ EXISTING MANHOLE
- EXISTING LUMINAIRE
- △ EXISTING TRANSFORMER
- ||||| PROPOSED BUILDING
- CCCC CEMENT CONCRETE BARRIER CURB
- SD STORM LINE
- W WATER LINE
- WS WATER SERVICE LINE
- SS SEWER LINE



Mar 13, 2025 2:05:12pm User: CahnDahn
File: 121044 - PROJECTS\121044 CRASH CHAMPIONS SURPRISE, AZ\ACAD\121044_UT-01.DWG



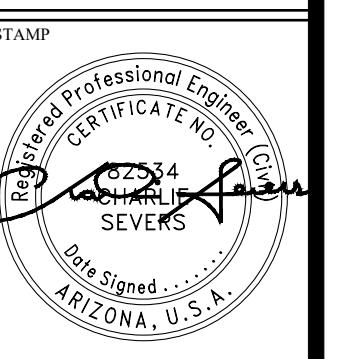
CALL BEFORE YOU DIG
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.



REVISIONS

PROJECT NO.
121044
DRAWN
C. DAHM
CHECKED
D. PHILLIPS
SUBMITTED DATES
OTB DATE
-

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512



CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide
architectural inc.

SHEET TITLE
STORMWATER PLAN

SHEET
C7.0
FSXX-XXXX

0 30 60
SCALE IN FEET

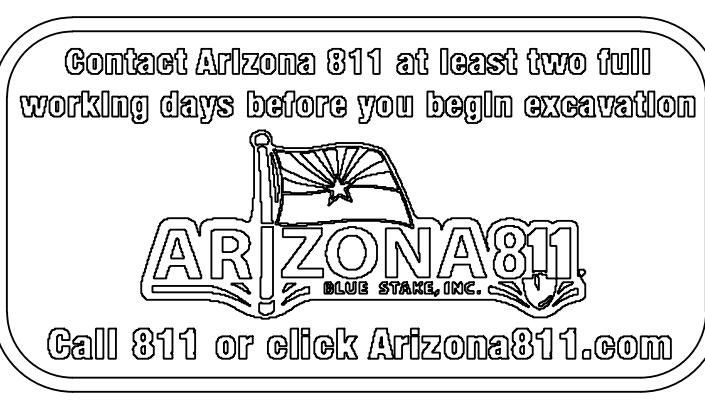
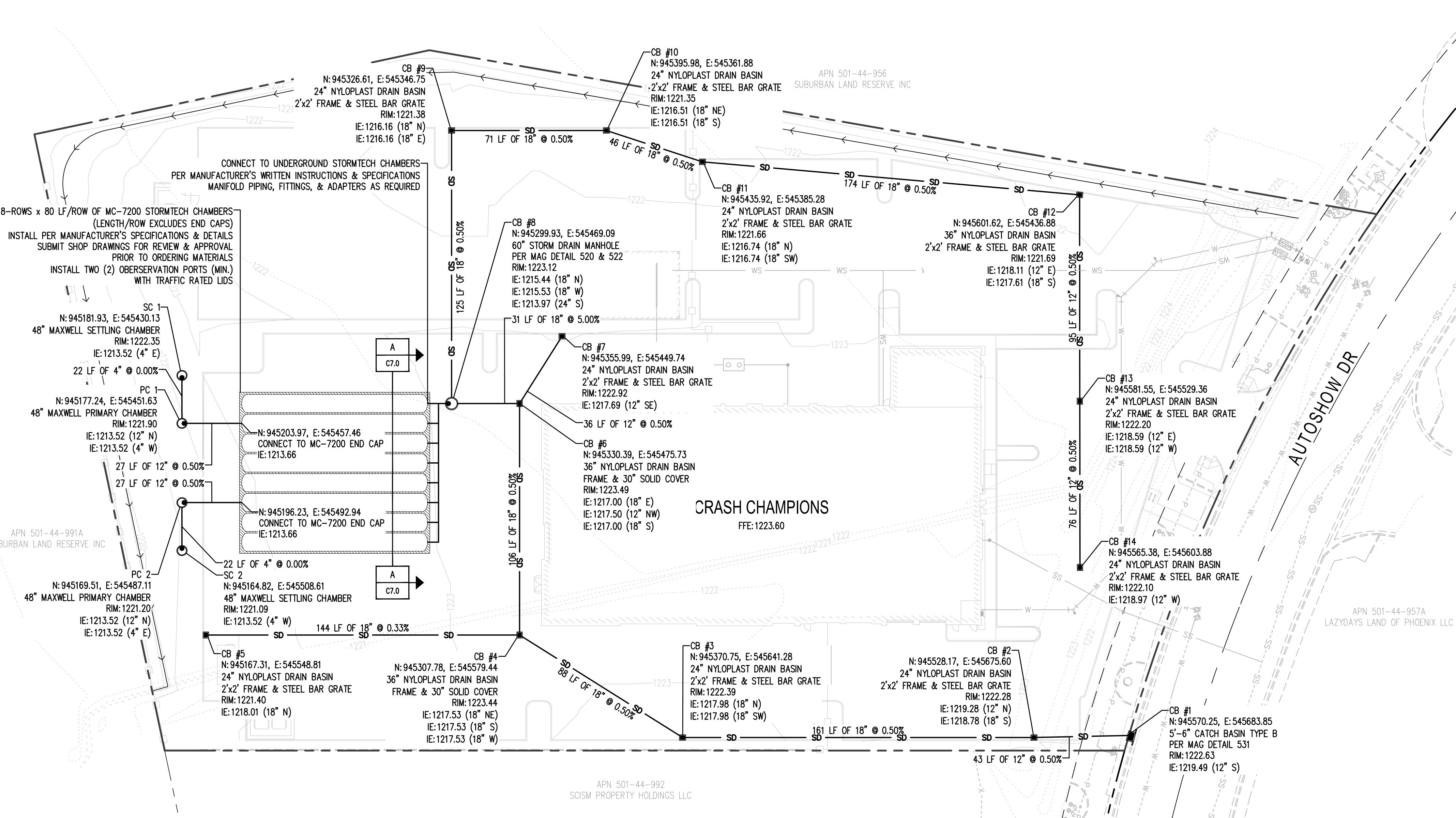
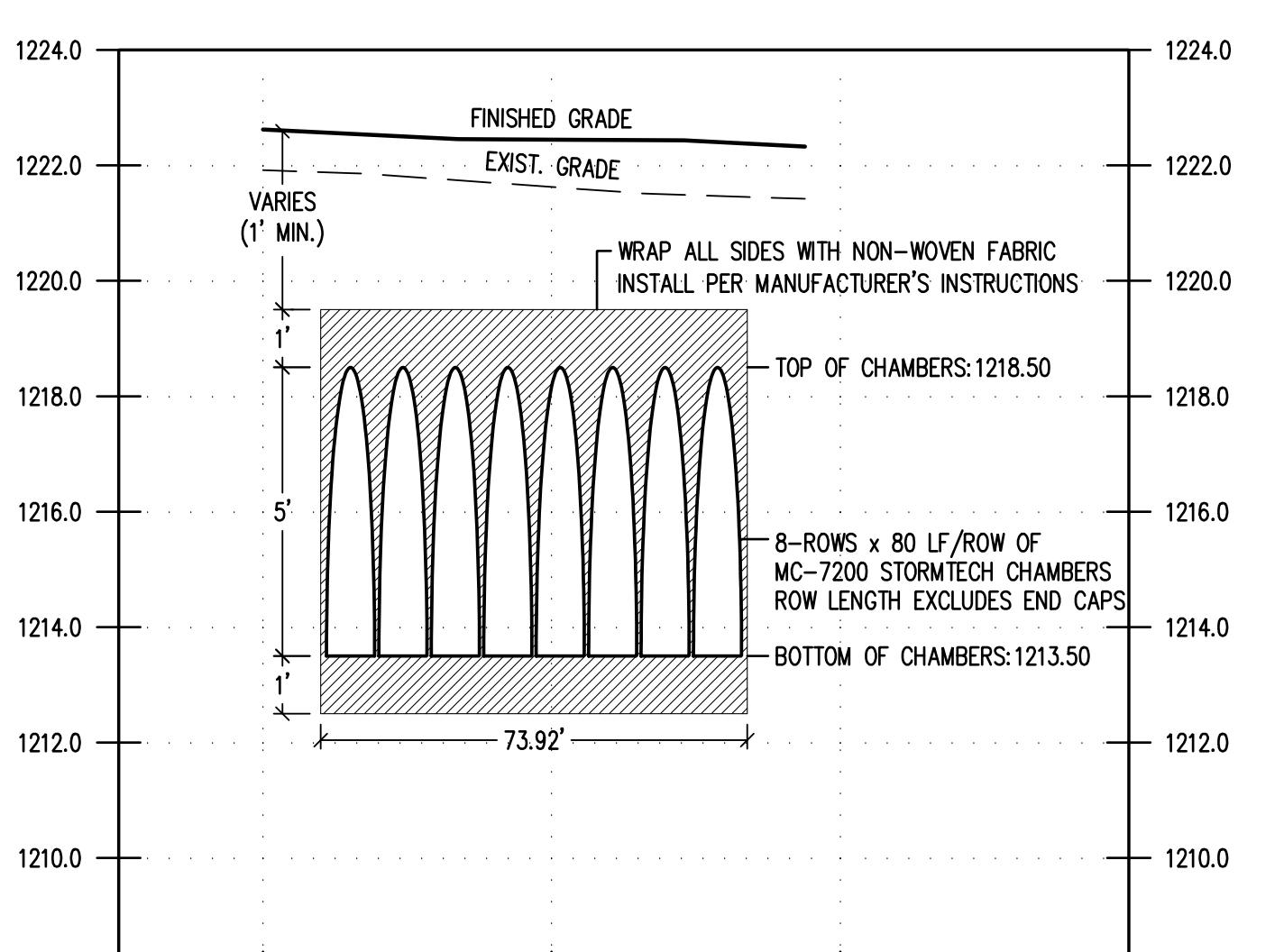
LEGEND

- PROPERTY LINE
- EXISTING CONTOURS
- PROPOSED CONTOURS
- EXISTING CURB & GUTTER
- PROPOSED BUILDING
- CEMENT CONCRETE BARRIER CURB
- WATER LINE
- WATER SERVICE LINE
- SEWER LINE
- SD ADS N-12 WT (WATER TIGHT) IB STORM LINE UNLESS OTHERWISE NOTED
- NYLOPLAST DRAIN BASIN: SEE C7.2 SIZE AS NOTED

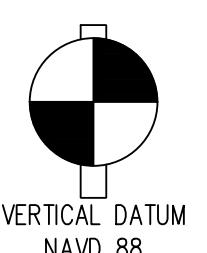
NYLOPLAST DRAIN BASIN: SEE C7.2 SIZE AS NOTED

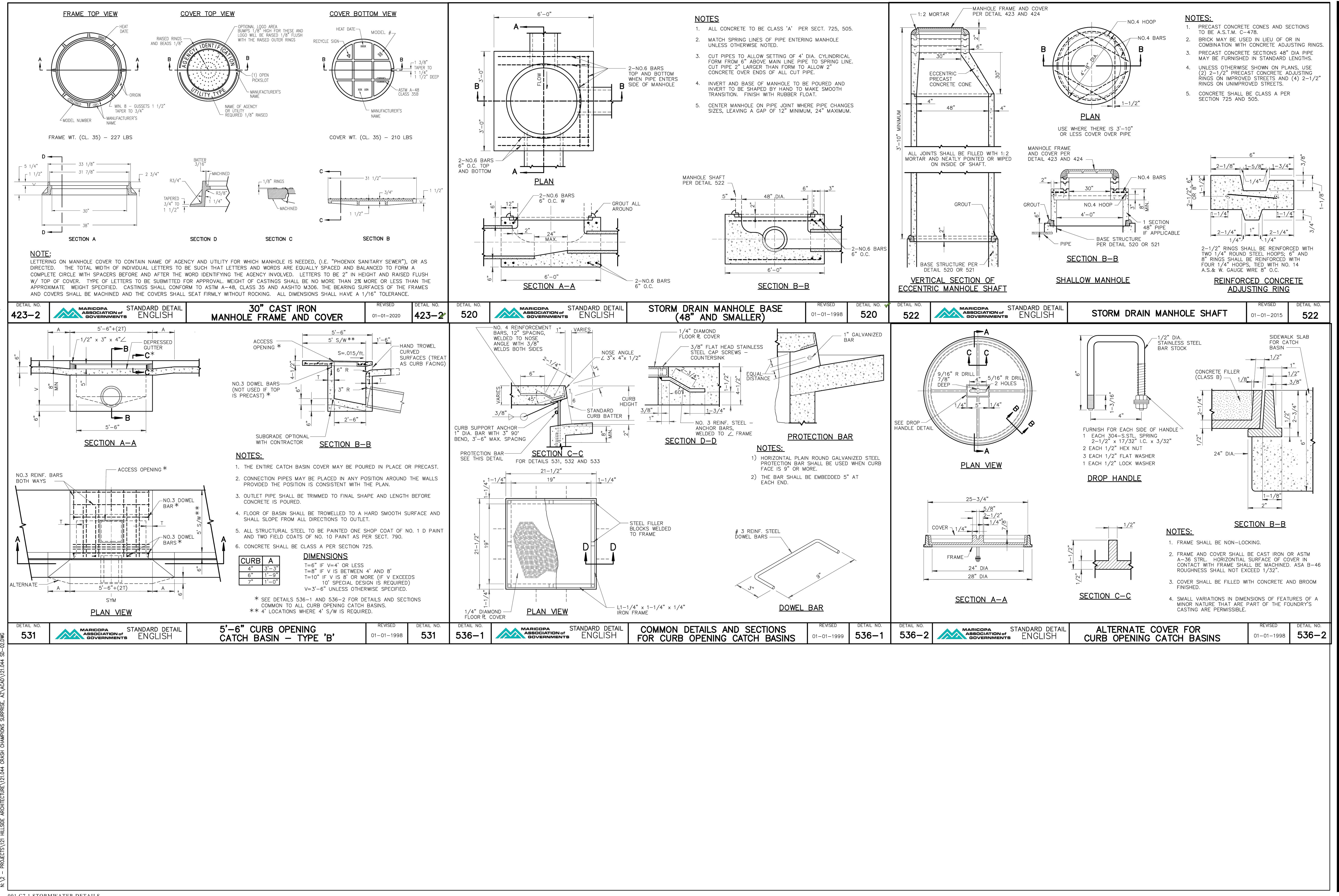
GENERAL NOTES

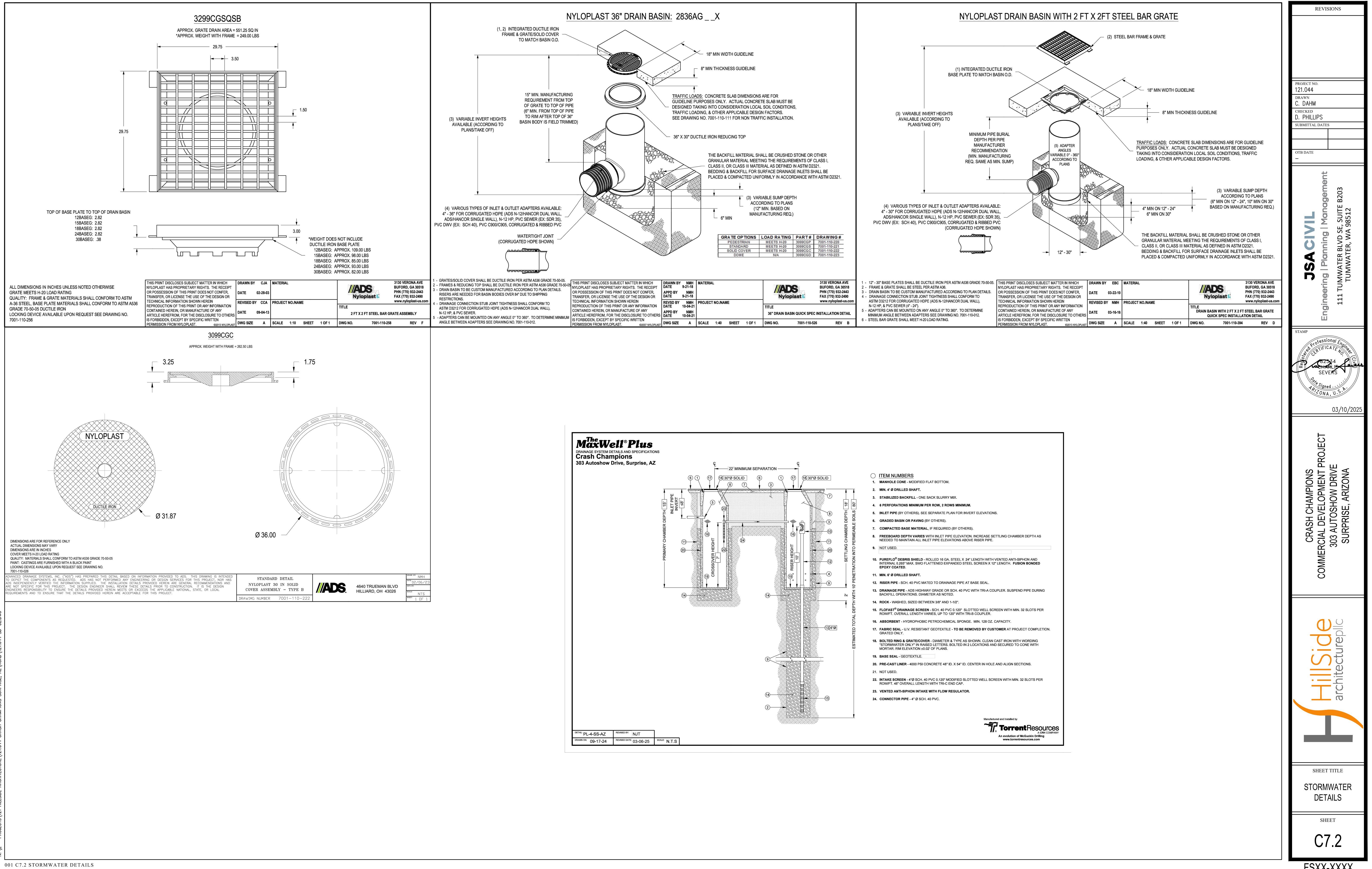
- ALL UNDERGROUND STORAGE FACILITIES AND DISPOSAL FACILITIES SHOWN ON THIS PROJECT SHALL BE MAINTAINED BY THE OWNERS. THESE UNDERGROUND STORAGE FACILITIES SHALL BE MODIFIED, UPGRADED, OR REPLACED WITH SIMILAR OR OTHER APPROPRIATE DEVICES/MEASURES BY THE OWNERS WHEN THEY CEASE TO DRAIN THE WATER WITHIN A 36-HOUR PERIOD. REGULAR MAINTENANCE OF THE SILTING CHAMBER IS REQUIRED TO ACHIEVE THE BEST OPERATION OF THE DRYWELL/UNDERGROUND PERCOLATION CHAMBER(S).
- DURING SITE DEVELOPMENT, ALL DRYWELLS/UNDERGROUND PERCOLATION CHAMBERS SHALL BE SECURELY COVERED WITH FILTER CLOTH OR OTHER MATERIAL TO PREVENT THE INTRODUCTION OF EXCESSIVE SEDIMENT INTO THE SETTLING CHAMBER.
- STRUCTURES PC 1, PC 2, SC 1, AND SC 2 ARE PART OF A DRYWELL SYSTEM. THE DRYWELL SYSTEM SHALL BE A DUAL CHAMBER MAXWELL PLUS DRYWELL SYSTEM: SEE C7.2
- MATERIALS AND METHODS FOR THE DRYWELL CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, PRECAST CONCRETE COMPONENTS, CASTINGS, ROCK BACKFILL, PIPE, DRAINAGE SCREEN, AND ALL OTHER COMPONENTS REQUIRED TO CONSTRUCT THE DRYWELLS SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS FOR MAXWELL PLUS DRYWELLS BY TORRENT RESOURCES, INC.
- THE CONTRACTOR SHALL EMPLOY, AT THE CONTRACTOR'S EXPENSE A QUALIFIED, LICENSED CONTRACTOR TO CONSTRUCT AND INSTALL THE DRYWELLS WHICH SHALL BE TORRENT RESOURCES, INC., CALIFORNIA OR A PRIOR APPROVED A-GENERAL ENGINEERING CONTRACTOR WITH NOT LESS THAN THREE SUCCESSFULLY COMPLETED CONTRACTS WITH SIMILAR SOIL CONDITIONS, DEPTHS AND VOLUMES OF WORK CONTAINED IN THIS PROJECT. SUBMIT SATISFACTORY COMPLIANCE TO OWNER PRIOR TO ISSUANCE OF CONTRACT.
- THE DRYWELLS SHALL BE CONSTRUCTED TO A FINAL DEPTH THAT PENETRATES, AT A MINIMUM, TEN FEET INTO CLEAN PERMEABLE POROUS SOILS TO THE TERMINATION OF THE WELL.
- THE DRYWELLS SHALL BE DRILLED TO A SUFFICIENT DEPTH TO ACHIEVE A PERCOLATION RATE OF 0.1 CFS OR GREATER.



CALL BEFORE YOU DIG
THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.









A QR code located in the bottom right corner of the page, which links to the SiteASSIST app's installation instructions.

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-7200.
 2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
 3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101.
 4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
 5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
 6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
 7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

1. STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
 2. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
 4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
 5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEALED PRIOR TO PLACING STONE.
 6. MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
 7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
 8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
 9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
 10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
 11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
 12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE

NOTES FOR CONSTRUCTION EQUIPMENT

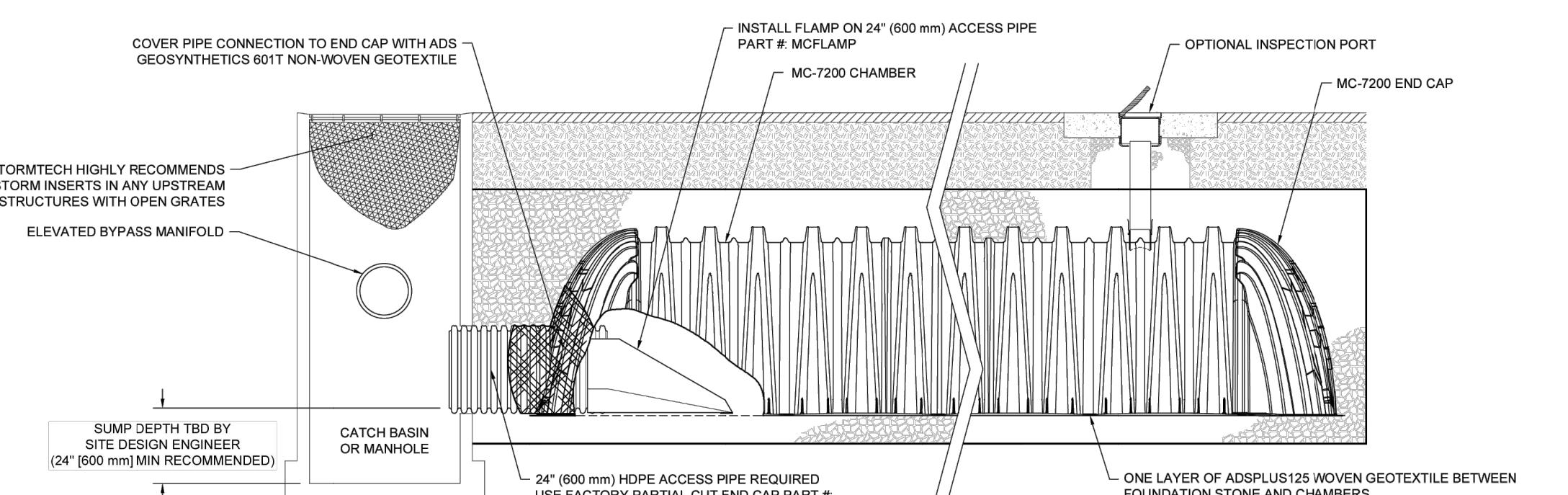
1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
 2. THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".

- WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".

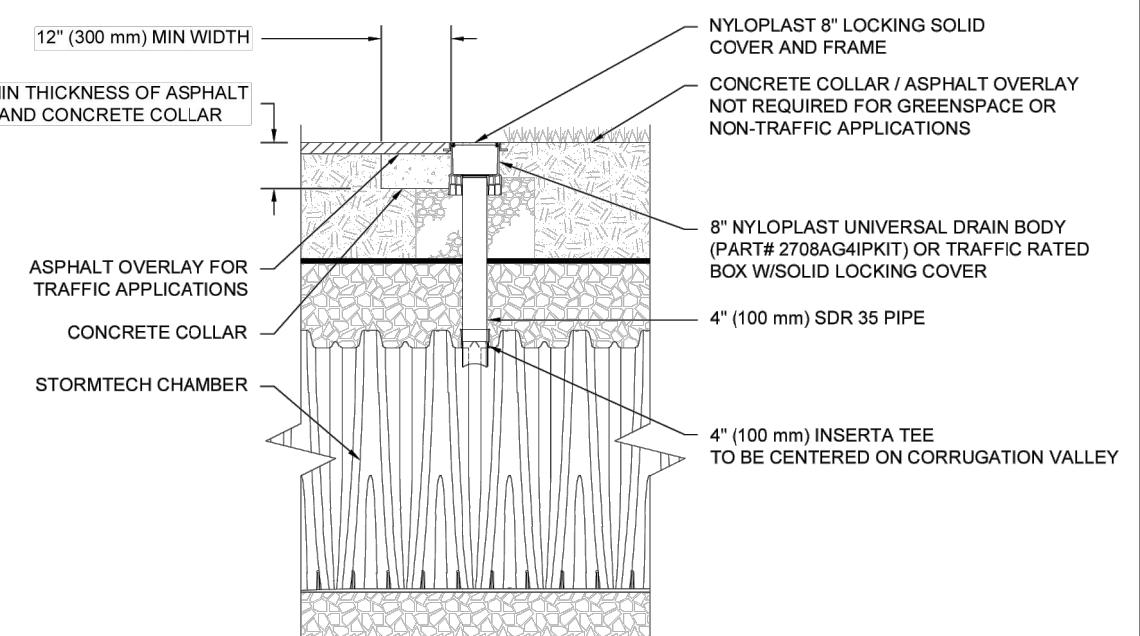
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

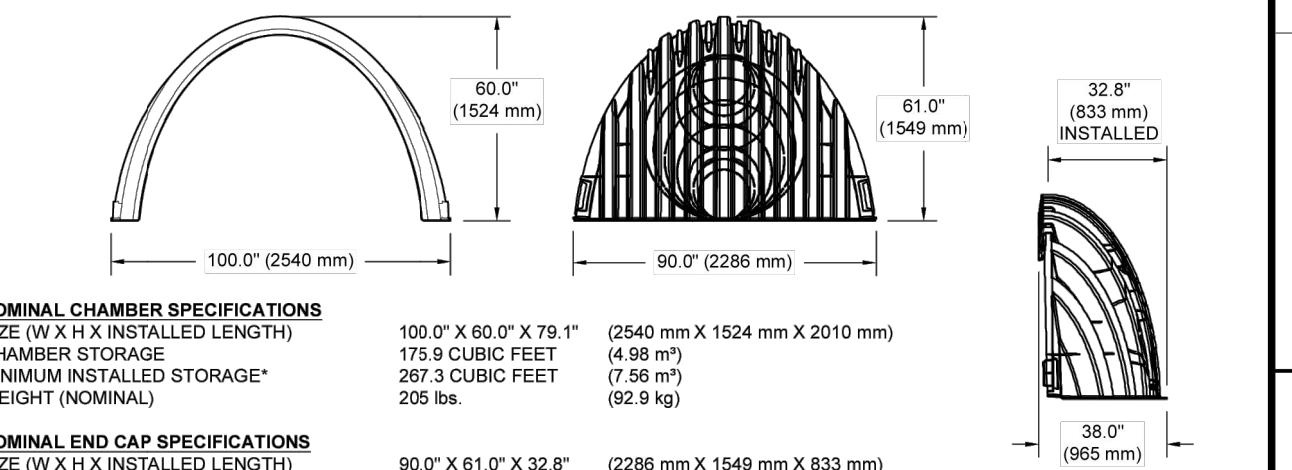
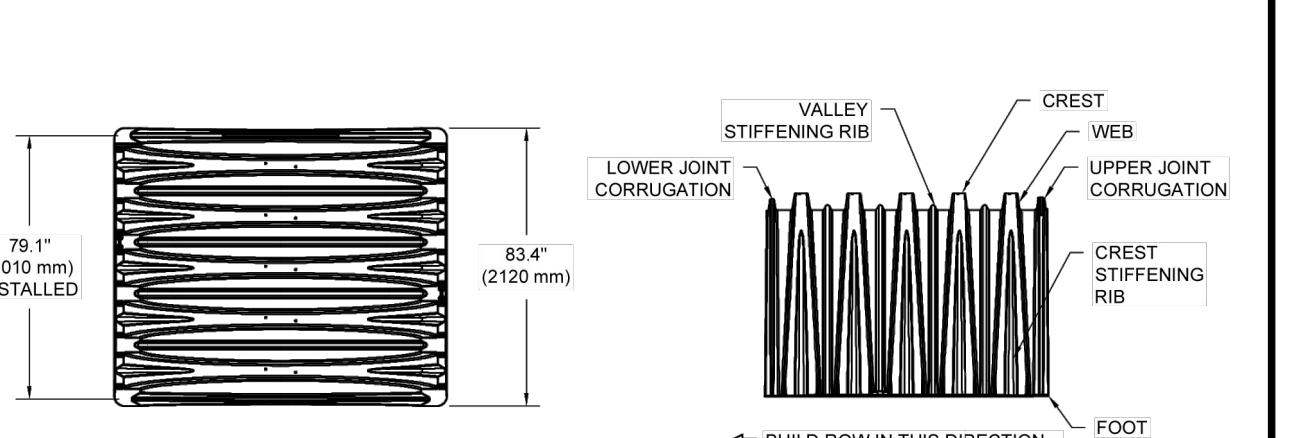
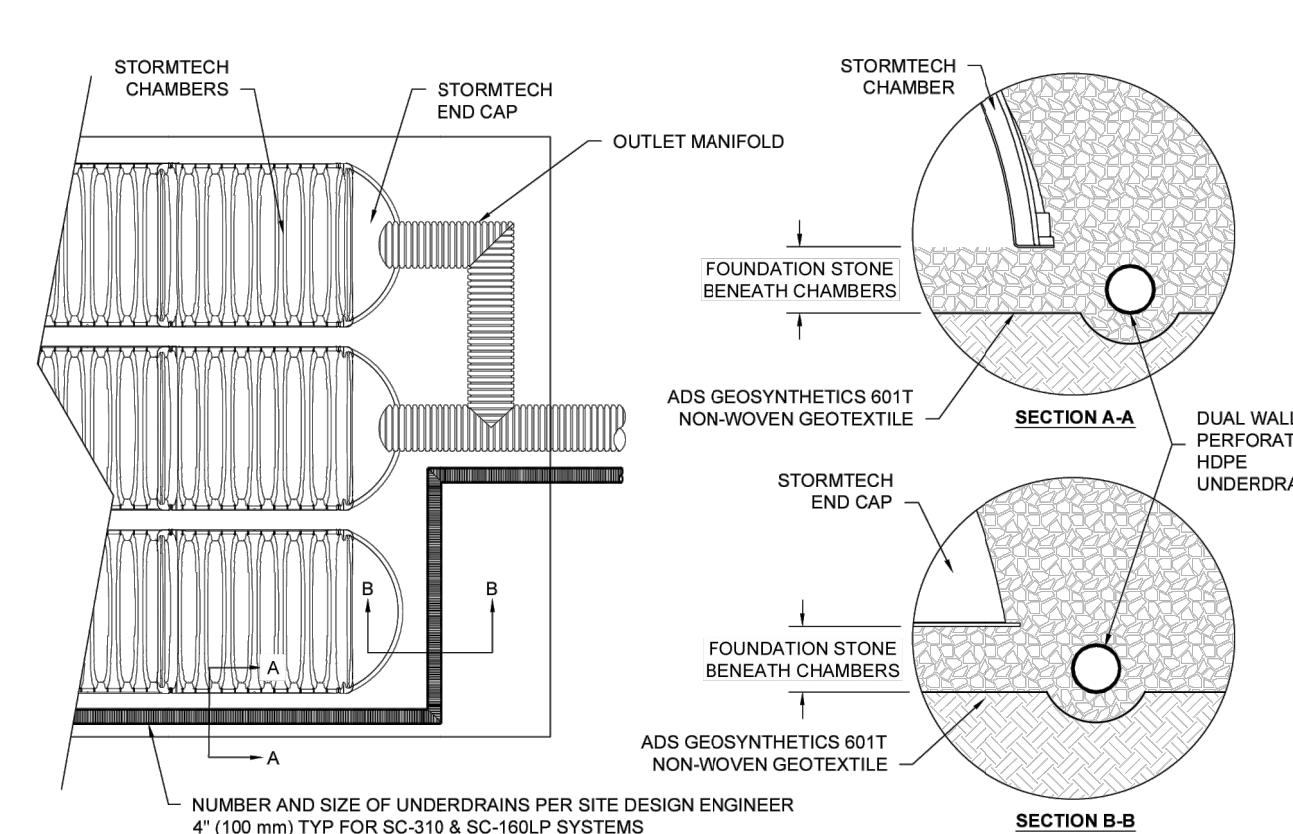


3 MC-7200 ISOLATOR ROW PLUS DET.

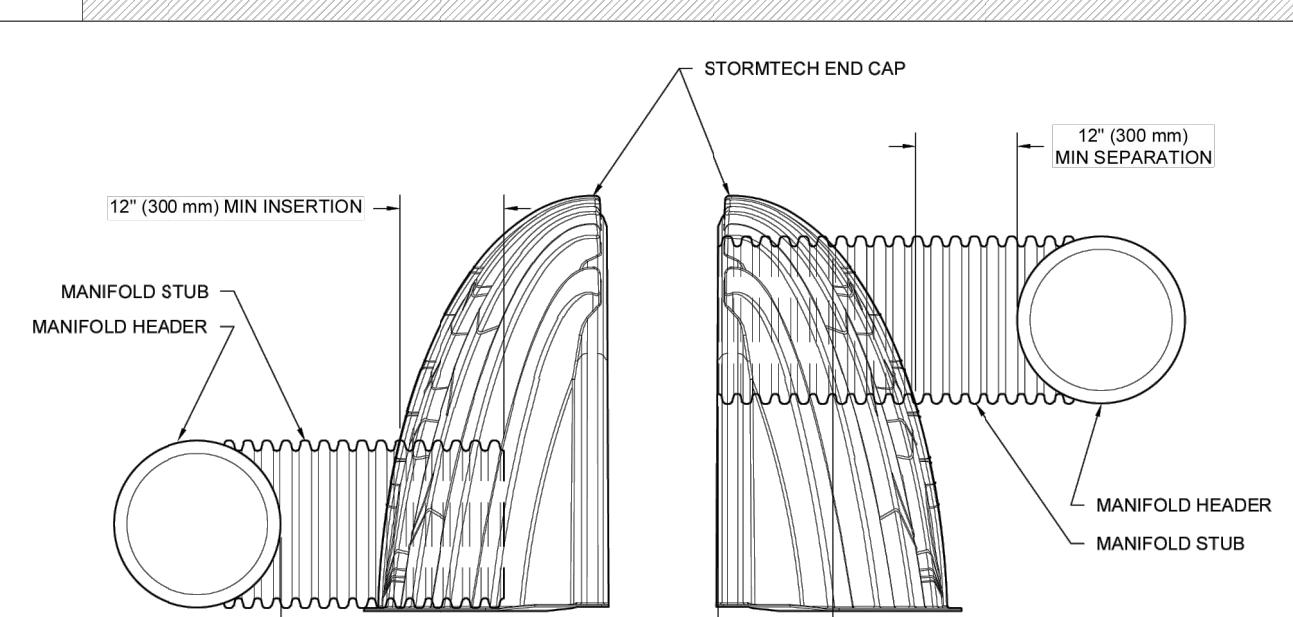


4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)

V:\\2 - PROJECTS\\121 HILLSIDE ARCHITECTURE\\121.044 CRASH CHAMPIONS SURPRISE, AZ\\ACAD\\121.044 SD-02.DWG



5 UNDERDRAIN DETAIL



NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-7200 TECHNICAL SPECIFICATIONS

NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

PART #	STUB	B	C
MC7200IEPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200IEPP06B		---	0.86" (22 mm)
MC7200IEPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC7200IEPP08B		---	1.01" (26 mm)
MC7200IEPP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200IEPP10B		---	1.33" (34 mm)
MC7200IEPP12T	12" (300 mm)	35.69" (907 mm)	---
MC7200IEPP12B		---	1.55" (39 mm)
MC7200IEPP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200IEPP15B		---	1.70" (43 mm)
MC7200IEPP18T	18" (450 mm)	29.36" (746 mm)	---
MC7200IEPP18TW		---	1.97" (50 mm)
MC7200IEPP18B	24" (600 mm)	23.05" (585 mm)	---
MC7200IEPP18BW		---	2.26" (57 mm)
MC7200IEPP24T	30" (750 mm)	---	2.95" (75 mm)
MC7200IEPP24TW		---	3.25" (83 mm)
MC7200IEPP24B	36" (900 mm)	---	3.55" (90 mm)
MC7200IEPP24BW		---	3.55" (90 mm)
MC7200IEPP30BW	42" (1050 mm)	---	3.55" (90 mm)
MC7200IEPP36BW	42" (1050 mm)	---	3.55" (90 mm)
MC7200IEPP42BW	42" (1050 mm)	---	3.55" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

**PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "W"**

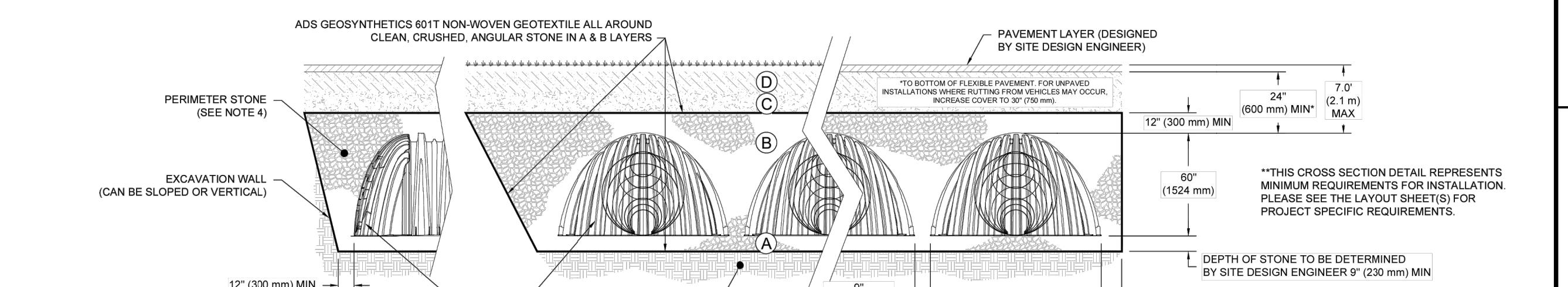
**CUSTOM PREFABRICATED INVERTS
ARE AVAILABLE UPON REQUEST.
INVENTORIED MANIFOLDS INCLUDE
12-24" (300-600 mm) SIZE ON SIZE
AND 15-48" (375-1200 mm)
ECCENTRIC MANIFOLDS. CUSTOM
INVERT LOCATIONS ON THE MC-7200
END CAP CUT IN THE FIELD ARE NOT
RECOMMENDED FOR PIPE SIZES
GREATER THAN 10" (250 mm). THE
INVERT LOCATION IN COLUMN 'B'
ARE THE HIGHEST POSSIBLE FOR
THE PIPE SIZE.**

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTION AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

PLEASE NOTE:

1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

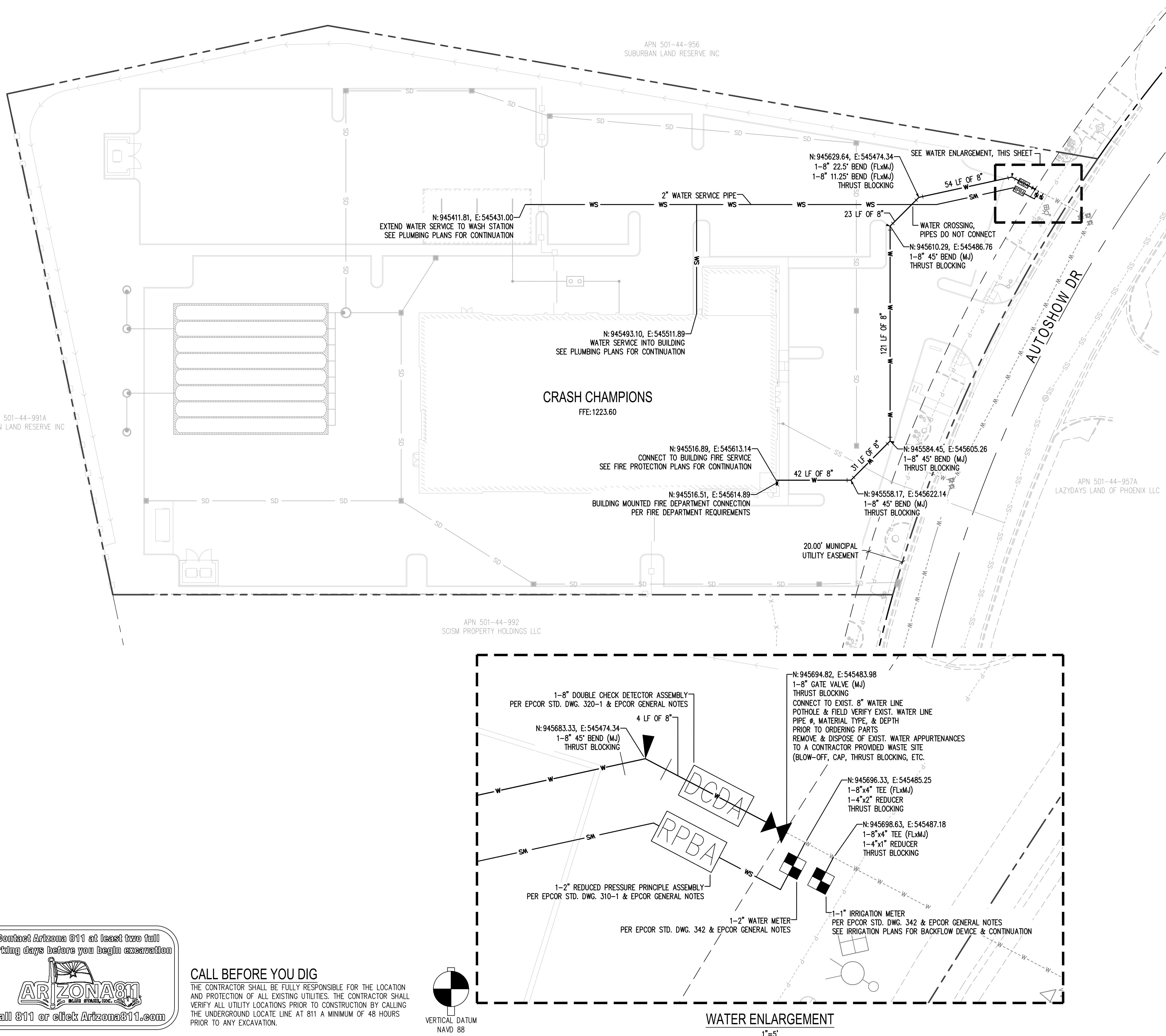
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

4. PERIMETER STOKE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALLS OR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/FT/%.
AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

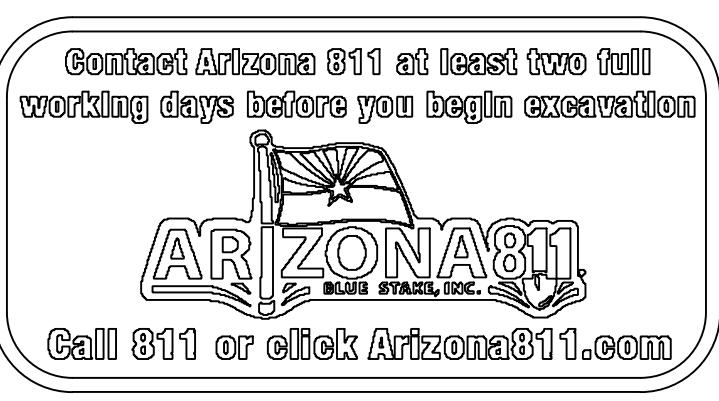
1 MC-7200 CROSS SECTION DETAIL



FSXX-XXXX



Mar 13, 2023 2:01:42pm - User Giardamini N:\2 - PROJECTS\121 HILLSIDE ARCHITECTURE\121.044 CRASH CHAMPIONS SURPRISE, AZ\ACAD\121.044 WT-01.DWG



CALL BEFORE YOU DI

THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE LOCATION AND PROTECTION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION BY CALLING THE UNDERGROUND LOCATE LINE AT 811 A MINIMUM OF 48 HOURS PRIOR TO ANY EXCAVATION.

A black circle with a white square at the bottom center, representing the vertical datum indicator.

VERTICAL DATA
NAVD 88

WATER ENLARGEMENT

LEGEND

GENERAL WATER NOTES:

1. JOINT RESTRAINT SHALL BE USED AT ALL WATER LINE FITTINGS, BENDS, TEES, ETC. JOINT RESTRAINT ONSITE SHALL BE PER MAG DETAIL NO. 303 OR MAG DETAIL NO. 380. WHEN USING MAG DETAIL NO. 303 THE CONTRACTOR SHALL COORDINATE WITH THE JOINT RESTRAINT MANUFACTURER AND SUPPLIER TO DETERMINE THE NUMBER OF JOINTS REQUIRED TO BE RESTRAINED AT EACH FITTING.
 2. THRUST BLOCKS ARE NOT ALLOWED IN THE RIGHT-OF-WAY. JOINT RESTRAINT IN THE RIGHT-OF-WAY, IF REQUIRED, SHALL BE PER MAG DETAIL NO 303.
 3. MAINTAIN 3 FT COVER OVER ALL WATER LINES (TYP)

REVISIONS	
PROJECT NO.	
1.044	
DAWN	
DAHM	
CHECKED	
PHILLIPS	
SUBMITTAL DATES	
STB DATE	
 JSACIVIL Engineering Planning Management	
111 TUMWATER BLVD SE, SUITE B203 TUMWATER, WA 98512	
AMP  <p>REGISTERED PROFESSIONAL ENGINEER CIVIL CHARLIE SEVERS Date Signed..... ARIZONA, U.S.A. CIVIL CERTIFICATE NO. 1234567890 03/10/2025</p>	

CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide
architecturepc

SHEET TITLE

WATER PLAN

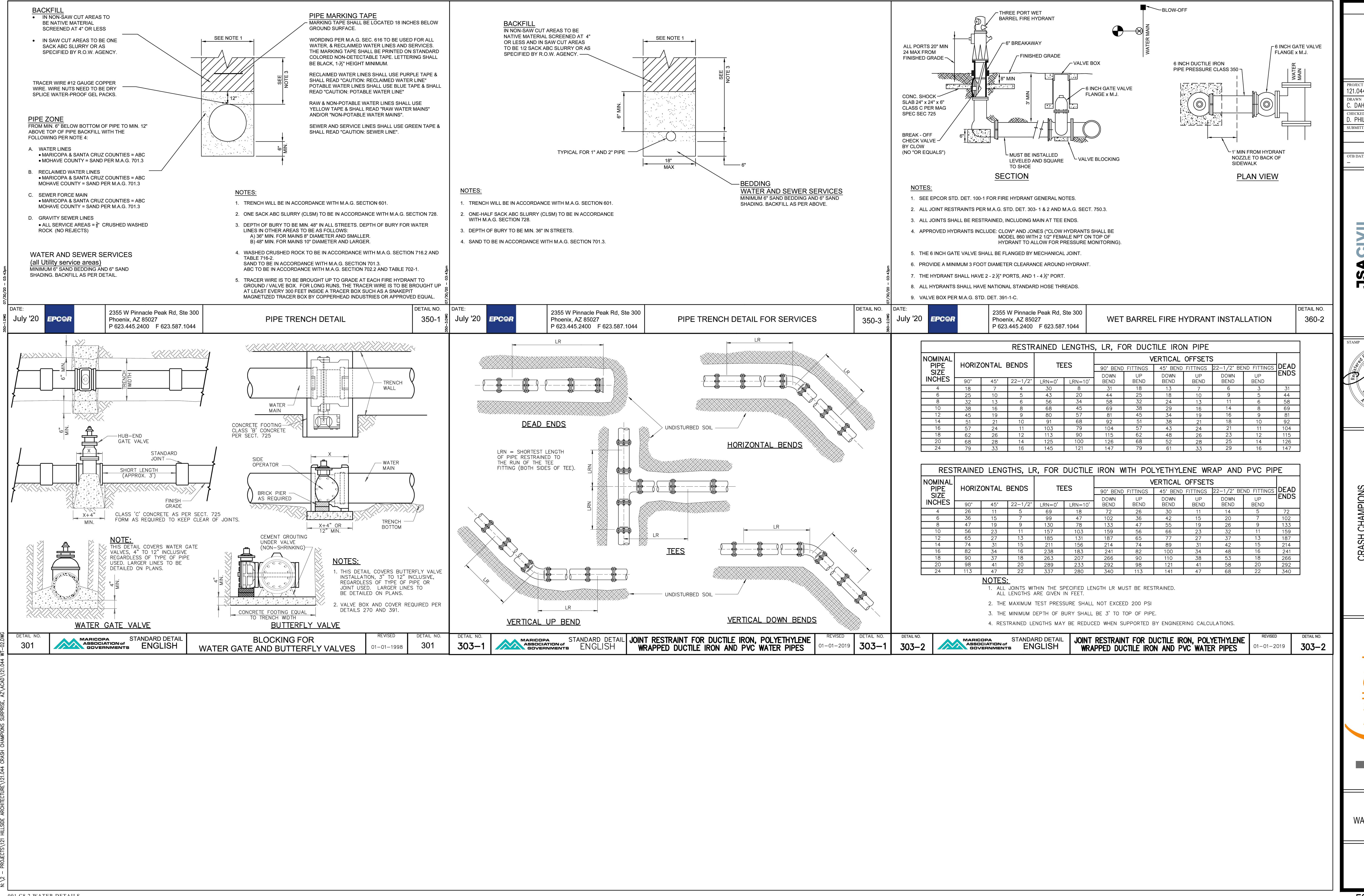
SHEET

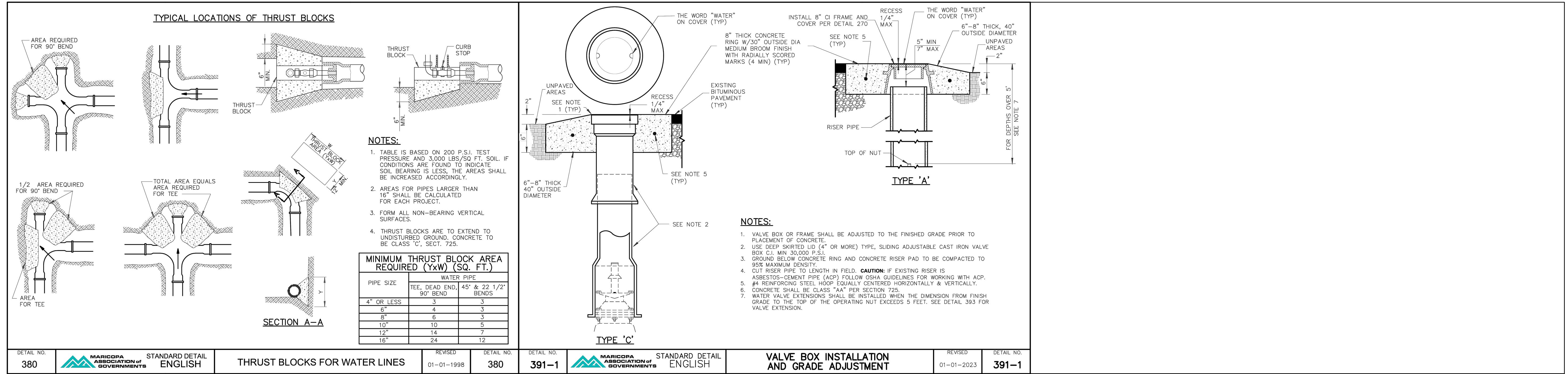
C8.0

FSXX-XXXX

<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> Any changes from approved plans must be submitted to EPCOR for written approval prior to installation. Contractor shall keep a clean, current set of contract drawings as a record of the location of all work completed as part of the project. Additions, and deletions shall be amend the original set of contract drawings. Record drawings and elevation data for survey-grade GPS equipment is used to record nothing, easings, and elevation data for certain buried appurtenances. For water mains, appurtenances to be located include valves, crosses, tees, bends, reducers, and other fittings required by the construction inspector. For sewer mains, appurtenances include the manhole and invert elevations of manholes, and inspection ports as required. EPCOR's "Water Material Specifications" and MAG SEC. 630.3. Contractor shall notify EPCOR Construction Inspections Department 48 hours in advance of any construction. Use the Contact List in EPCOR's Developer Guide to schedule inspections. (EPCOR general phone number is 623-445-2400). When appointments for inspection are arranged at least 48 hours in advance, the inspection/test will be conducted as scheduled; otherwise the request will be scheduled based on availability. Contractor shall be responsible for obtaining required permits and inspections from appropriate governmental agencies for all work in public rights-of-way (Maricopa County Department of Transportation, City Engineering Department, etc.). Inspections by EPCOR do not relieve contractor of responsibility to obtain required inspections from other interested governmental agencies (Building Fire, District, etc.). All work and testing shall be in accordance with Maricopa Association of Governments (MAG) Standard Specifications and Details unless otherwise stated on plans. All services 2 inches and smaller shall be in accordance with EPCOR STD. DET. 342-2. All plastic waterlines and fittings shall have NSF-PW seal. All materials and products in the water delivery system shall conform to NSF Standards 60 and 61 in accordance with AAC R18-4-213. All materials shall be lead-free as defined in AAC R18-4-101 and R18-4-107. Pipe Separation: <ol style="list-style-type: none"> Separation between water and sewer lines will be a minimum of 6 feet from outside edge to outside edge of pipe. Two feet separation is required between water lines, storm drains, and utility lines. Vertical and horizontal separation of pipes and pipe crossings of varying degrees of water quality shall be in accordance with State & local government requirements. Dip Section: All dip sections shall be constructed of restrained ductile iron pipe (DIP) per EPCOR's STD. DET. 370-1. All dip sections shall joint restrained DIP with polyethylene wrap for the entire length per MAG SEC. 610.6. Joint restrained lengths will follow AAC R18-4-303-1 and 303-2. Anchor thrust blocks must be installed for vertical bends per MAG STD. DET. 381. Air/vacuum release valves are required at all highpoints and at vertical realignments of the water line. 										<p>GENERAL NOTES (CONTINUED)</p> <ol style="list-style-type: none"> Concrete Encasement: All water and sewer encasements shall follow MAG STD. DET. 404-1. When a water line must be constructed under a sewer or reclaimed water line, the water line must be a minimum of 2' below the sewer or reclaimed water line and the elevation is required. Protection of sewer lines should be provided with mechanical joint or restrained joint ductile iron pipes for a distance of ten feet on both sides of the water main. A full length of DIP will be centered over/under the water main. When DIP is not used for the sewer main, both the water and sewer lines will be encased in concrete for a length of 10' on both sides of the crossing, per MAG STD. DET. 404-2. Refer to MAG STD. DET. 404-1 regarding force mains. All encasements will be in US feet. Prior to completion of the work, provide the red-lined drawings to the Engineer of record for preparation of the project Record Drawings. Final completion will not be made until the Engineer of record receives satisfactory red-lined drawings. Reclaimed waterlines shall be installed in accordance with MAG SEC. 601, 610 and 616. Testing shall be in accordance with MAG SEC. 610 and 611 including disinfection/chlorination. Final flushing and bacteriological testing as specified in MAG SEC. 611.15 shall not be required. Any shutdown to EPCOR's system requires a minimum of 48 hours notice to EPCOR's Inspector. Shutdowns will only be allowed on Tuesdays, Wednesdays and Thursdays. Time restrictions may also apply. Composed Pick-hole Manhole Covers: Concealed Pick-hole manhole covers are required when the edges of the manholes covers are constructed within 3 feet of the edge of gutter, in areas that are unpaved, and areas prone to flooding. Manholes should be set 2-tenths above finish grade in all unpaved areas. Concrete collar with carbonte marker is required on all manhole locations outside of right-of-way. Concealed Pick-hole manhole covers are required for all manholes in Mohave County. Water Pressure Testing: All water lines will be tested per MAG SEC. 610.15. Modifications to these specifications include, the testing to be at a minimum of 200 psi, higher test pressures may be required in certain circumstances, and loss/leakage calculations will be based upon a maximum of 1500-foot, starting with the smallest diameter pipe. The Contractor is required to uniform slope test all sewer lines by video and vacuum test all manholes in accordance with AAC R18-9-E301. Deflection testing shall be performed at a minimum of 615.11. Testing documentation and flash drives shall be submitted to EPCOR Developer Services Project Manager for approval prior to acceptance. All required repairs are the responsibility of the contractor and must be coordinated with EPCOR inspectors. Sewer Testing: All sewer mains and laterals shall be pressure tested and video tested. All sewer mains shall also be mandrel tested. The maximum allowable sag is 0.5 inches. When using mechanical plugs to test sewer mains/manholes contractor must follow EPCOR STD. DET. 420. In Mohave County, solid sleeves are not allowed as a remedy to a failed pressure test on a new line. 									
<p>APPROVAL PROCESS FOR BACKFLOW PREVENTION ASSEMBLIES:</p> <ol style="list-style-type: none"> All new backflow prevention assemblies (BPA's) shall be tested and functioning as designed prior to Approval in accordance with AAC R18-4-215. Developer/Contractor/Customer shall forward passing test report with required BPA information to EPCOR Cross Connection Specialist, marked pending approval. EPCOR Cross Connection Specialist (Backflow Prevention) will notify Developers Services that an approved backflow prevention assembly test has been received, and this project is ready for an approval inspection. A Construction Inspector then schedules an Approval Inspection with the Developer/Contractor/Customer. EPCOR Construction Inspector confirms presence of BPA, and confirms proper installation guidelines have been followed. Backflow Prevention approval process complete. Approval may be granted provided all other required Operation Inspection items have no deficiencies. 										<p>WATER SYSTEM MATERIAL SPECIFICATION</p> <p>DISTRIBUTION PIPING</p> <ul style="list-style-type: none"> C900 Polyvinyl Chloride (PVC): In accordance with American Water Works Association (AWWA) Standard C900 for pipe diameters thru 12" DR=14, elastomeric-gasket bell-end. Tubac District requires meter setters on all projects. 2" meter setters are required for critical service developments in Paradise Valley and Anthem Districts. Approved Saddles, all Iron Pipe Thread Tap and bronze strap. For PVC, Jones J-995, Jones J-996, Mueller H-13000 Series; For Ductile Iron Pipe, Ford 202B, Jones J-975, Mueller BR2B Series, Mueller BR2S Series. All brass fittings must be manufactured by Ford, Mueller, or James Jones. All angle meter stops must include locking wings. All corp stops and angle valves must be ball style. All fittings must be "pac-joint" type. All brass lead free. <p>FIRE HYDRANTS</p> <ul style="list-style-type: none"> All hydrants will be Wet Barrel (unless Dry barrel hydrants are required by local jurisdiction) and be manufactured by Clow or Jones. Break-off check valve shall be Clow. All hydrants shall be equipped with national standard hose threads. <p>TRACER WIRE</p> <ul style="list-style-type: none"> See EPCOR's STD. DET. 350-1. Tracer wire must be used for all water lines. <p>DIP SECTIONS</p> <ul style="list-style-type: none"> All dip sections shall be constructed of restrained ductile iron pipe (DIP) per EPCOR's STD. DET. 370-1. All dip sections shall be joint restrained DIP with polyethylene wrap for the entire length per MAG SEC. 610.6. Joint restrained lengths will follow MAG STD. DET. 303-1 and 303-2. Anchor blocks/thrust blocks must be installed for vertical bends per MAG STD. DET. 381. <p>CONTROL VALVES (MOHAVE COUNTY ONLY)</p> <ul style="list-style-type: none"> The external tubing needs to be stainless steel, not copper. CLA-VAL is the only acceptable manufacturer. <p>TAPPING SLEEVES & VALVE</p> <ul style="list-style-type: none"> Stainless Steel - Approved manufacturers are Cascade, JCM, and Smith-Blair. Paradise Valley District may require a bypass on valves on 12" or larger pipe. Contact EPCOR for approval on a case-by-case basis. <p>MARKING TAPE</p> <ul style="list-style-type: none"> See EPCOR's STD. DET. 350-1. Marking tape must be used for all water lines and services. <p>MARKING POSTS</p> <ul style="list-style-type: none"> Carbonte marking posts are required for all water valves located outside of ROW and outside of paved areas, installed with concrete collar. <p>ALL OTHER ITEMS</p> <ul style="list-style-type: none"> In accordance with MAG Specifications. Where MAG standards are specified, those standards are applicable. 									
<p>GENERAL NOTES</p> <p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044</p>										<p>GENERAL NOTES (CONTINUED)</p> <p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044</p> <p>BACKFLOW PREVENTION GENERAL NOTES</p> <p>BACKFLOW PREVENTION APPROVAL PROCESS NOTES</p> <p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044</p> <p>WATER SYSTEM MATERIAL SPECIFICATION</p> <p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044</p>									
<p>NOTES:</p> <ol style="list-style-type: none"> SEE EPCOR'S STD. DET. 100-2 FOR BACKFLOW PREVENTION GENERAL NOTES. TO CONNECT TO GALVANIZED LINES, USE A BRASS FITTING. FOR PVC LINES USE A COPPER FEMALE ADAPTER X PVC MALE ADAPTER FITTING (OR A SCH 80 PVC NIPPLE). 										<p>NOTES:</p> <ol style="list-style-type: none"> SEE EPCOR'S STD. DET. 100-2 FOR BACKFLOW PREVENTION GENERAL NOTES. FOR FIRE LINES, A REDUCED PRESSURE DETECTOR ASSEMBLY WITH METER IS REQUIRED. METER SHALL HAVE AN AMR REGISTER. 									
<p>MATERIAL LIST:</p> <ol style="list-style-type: none"> U.S.C. (ALSO ULFM FOR FIRELINES) APPROVED ASSEMBLY. (SUBMIT TO EPCOR FOR APPROVAL). TEST COCKS WITH BRASS PLUGS (4). 3 PC BRASS UNION 12" MAX FROM ASSEMBLY ALL COPPER FITTINGS, TYPE 'K' COPPER TUBING VANDALISM AND/OR FREEZE PROTECTION ENCLOSURE (OPTIONAL) 4" CONCRETE SLAB W/ PVC SLEEVES FOR ENCLOSURE (OPTIONAL) 										<p>MATERIAL LIST:</p> <ol style="list-style-type: none"> U.S.C. (ALSO ULFM FOR FIRELINES) APPROVED ASSEMBLY. (SUBMIT TO EPCOR FOR APPROVAL). TEST COCKS WITH BRASS PLUGS (4). FLANGED DUCTILE IRON PIPE & FITTINGS ABOVE GROUND MEGALUG RECOMMENDED BELOW GROUND. MEGALUG MJ. FITTING-FOR AC PIPE USE F.C.A. ADJUSTABLE PIPE SUPPORTS (2) CONCRETE SLAB MINIMUM 6" THICK x 24" WIDE CONCRETE THRUST BLOCK-12" WIDE x 12" THICK MINIMUM TO UNDISTURBED EARTH. USE 2 3/4" ZINC COATED, THREADED RODS, BOLTED TO FLANGES, BOTH SIDES TYPICAL; (4 TOTAL). NOTE: IN LIEU OF CONCRETE THRUST BLOCK, A 3 3/4" STEEL ANGLE, AS SHOWN IN EPCOR STD. DET. 345-2, MAY BE USED. JOINT RESTRAINTS PER MAG. STD. DET. 303-1 & 303-2. 									
<p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044 1/2" - 2" REDUCED PRESSURE PRINCIPLE ASSEMBLY DETAIL NO. 310-1</p>										<p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044 1" - 10" DOUBLE CHECK DETECTOR ASSEMBLY DETAIL NO. 320-1</p>									
<p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044 1" THRU 2" SERVICE W/ CORRESPONDING METER DETAIL NO. 342</p>										<p>DATE: July '20 EPCOR 2355 W Pinnacle Peak Rd, Ste 300 Phoenix, AZ 85027 P 623.445.2400 F 623.587.1044 POTABLE WATER SERVICE CONNECTION DETAIL NO. 342</p>									

REVISIONS	
PROJECT NO. 121,044	
DRAWN C. DAHM	
CHECKED D. PHILLIPS	
SUBMITTED DATES	
OTD DATE -	
JSA CIVIL Engineering Planning Management 111 TUMWATER BLVD SE SUITE B203 TUMWATER, WA 98512	
 03/10/2025	
CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT 303 AUTOSHOW DRIVE SURPRISE, ARIZONA	
HillSide architecture inc. SHEET TITLE WATER DETAILS SHEET C8.1 FSXX-XXXX	

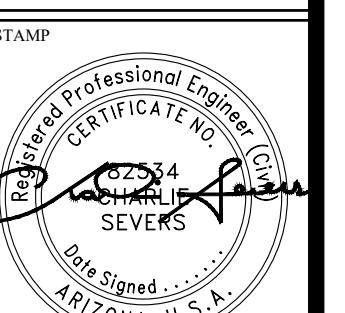




REVISIONS

PROJECT NO. 121,044
DRAWN C. DAHM
CHECKED D. PHILLIPS
SUBMITTAL DATES
OTD DATE -

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE SUITE B203
TUMWATER, WA 98512

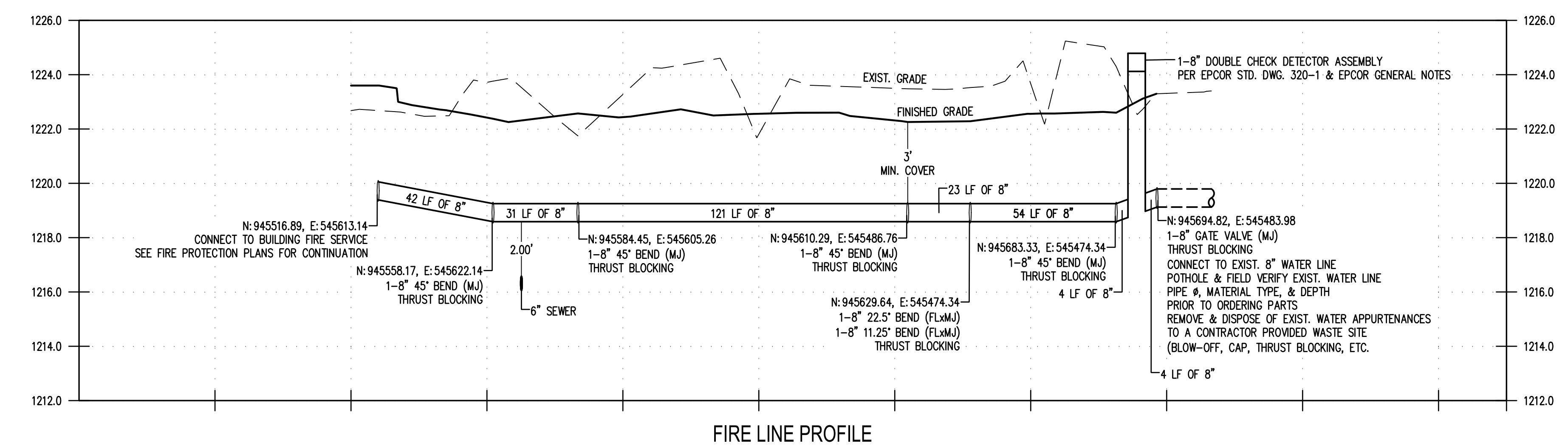


03/10/2025

CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA



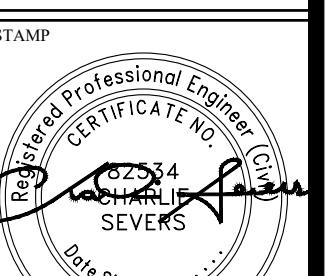
SHEET TITLE
WATER DETAILS
SHEET
C8.3
FSXX-XXXX



REVISIONS

PROJECT NO.
121044
DRAWN
C. DAHM
CHECKED
D. PHILLIPS
SUBMITTAL DATES
OTB DATE
—

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512



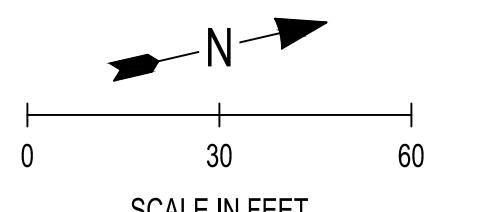
03/10/2025

CRASH CHAMPIONS
COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide
architectureINC

SHEET TITLE
SEWER PLAN

SHEET
C9.0
FSXX-XXXX



SCALE IN FEET

N

0

30

60

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

30

60

0

SANITARY SEWER NOTES: <p>1. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING REQUIRED PERMITS AND INSPECTIONS FROM APPROPRIATE GOVERNMENTAL AGENCIES FOR ALL WORK IN THE PUBLIC RIGHT-OF-WAY.</p> <p>2. ANY WORK PERFORMED WITHOUT THE APPROVAL OF THE CITY ENGINEER AND/OR ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THE SPECIFICATION IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.</p> <p>3. THE CONTRACTOR SHALL UNCOVER ALL EXISTING UTILITY LINES BEING TIED TO AND VERIFY THEIR LOCATION PRIOR TO TRENCHING. THE CONTRACTOR SHALL LOCATE OR HAVE LOCATED ALL EXISTING UNDERGROUND PIPELINES, TELEPHONE AND ELECTRICAL CONDUIT AND STRUCTURES IN ADVANCE OF CONSTRUCTION AND SHALL OBSERVE ALL POSSIBLE PRECAUTIONS TO AVOID DAMAGE TO THE SAME. CALL ARIZONA 811 FOR FIELD LOCATION.</p> <p>4. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD BEFORE THE SANITARY SEWER FITTINGS ARE COVERED. FITTINGS SHALL NOT BE COVERED UNTIL SURVEYS HAVE BEEN COMPLETED. THE ENGINEER SHALL MAKE FIELD AS-BUILT MEASUREMENTS OF THE SANITARY SEWER WORK UPON NOTIFICATION BY THE SEWER CONTRACTOR THAT THE PIPE WORK IS COMPLETE AND READY FOR AS-BUILT SURVEY.</p> <p>5. AS-BUILT PLANS CERTIFIED FOR CORRECTNESS BY A PROFESSIONAL CIVIL ENGINEER OR LAND SURVEYOR IN THE STATE OF ARIZONA ARE REQUIRED PRIOR TO FINAL APPROVAL OF ALL WATER, SEWER, RECLAIMED WATER AND STORM WATER CONSTRUCTION.</p> <p>6. THE FOLLOWING DETAIL IS SPECIFICALLY NOT APPROVED: MAG STANDARD DETAIL 425 (24-INCH ALUMINUM, MANHOLE FRAME AND COVER).</p> <p>7. A TWO (2) INCH BY FOUR (4) INCH WOOD OR METAL POST PAINTED GREEN WITH BLACK LOT NUMBERS IS TO BE INSTALLED AT THE END OF ALL SEWER SERVICES.</p> <p>8. FOR RESIDENTIAL CONSTRUCTION, SEWER SERVICES SHALL BE SIX (6) FEET BELOW FINISH GRADE AT THE PUBLIC UTILITY EASEMENT AND FOUR (4) FEET BELOW THE FINISH GRADE AT FOUR (4) FEET PAST THE PUBLIC UTILITY EASEMENT.</p> <p>9. ANY MANHOLE IN A GUTTER LINE MUST BE WATERTIGHT PER MAG STANDARD DETAIL 424.</p> <p>10. THE MANHOLE COVERS SHALL READ "SURPRISE SANITARY SEWER" PER DETAIL 7-01.</p> <p>11. MANHOLES TEN (10) FEET OR DEEPER SHALL BE A MINIMUM OF FIVE (5) FEET IN DIAMETER.</p> <p>12. ALL MANHOLE SECTIONS SHALL BE SEALED WITH BOTH MASTIC (RAMNECK OR APPROVED EQUAL) AND GROUT PLACED INSIDE EACH MANHOLE SECTION KEY. THE INSIDE JOINTS SHALL BE GROUT-FINISHED.</p> <p>13. UPON THE COMPLETION OF THE SEWER, THE TOP EIGHT (8) FEET OF ALL MANHOLES ARE TO BE SPRAYED WITH INSECTICIDE BY A CERTIFIED COMPANY OR INDIVIDUAL FOR ROACH CONTROL. A VERIFICATION LETTER IS TO BE FURNISHED TO THE CITY OF SURPRISE.</p> <p>14. MARKING TAPE AND MARKER BALLS SHALL BE INSTALLED AT ALL SEWER LINE FITTINGS AND EVERY 100 FEET IF THE DISTANCE BETWEEN FITTINGS IS GREATER THAN 100 FEET PER DETAIL 7-03.</p> <p>15. SHORT TERM DEFLECTION TESTING SHALL BE PERFORMED ON ALL SEGMENTS OF PLASTIC SEWER PIPE EIGHT (8) INCHES IN DIAMETER AND LARGER AFTER COMPLETION OF BACKFILL AND COMPACTION, BUT PRIOR TO INSTALLATION OF FINISH SURFACE MATERIAL. A SHORT-TERM DEFLECTION IN EXCESS OF FIVE (5) PERCENT SHALL BE CONSIDERED UNSERVICEABLE AND SHALL BE REPAIRED OR REPLACED AND RETESTED.</p>										SANITARY SEWER NOTES (CONTINUED): <p>16. LOW-PRESSURE AIR TESTING IS REQUIRED FOR ONE HUNDRED (100) PERCENT OF THE LINE INSTALLATION PER MAG SPECIFICATION 615.11.</p> <p>17. ONE HUNDRED (100) PERCENT OF BRANCH, MAIN, AND TRUNK SEWER LINES ARE TO BE INSPECTED BY VIDEO CAMERA. TWO COPIES OF COMPLETED DVD ALONG WITH OPERATOR NOTES ARE TO BE FURNISHED TO THE CITY OF SURPRISE UPON COMPLETION OF THE FIRST VIDEO. IF THERE ARE NEGATIVE RESULTS THEN THE AFFECTED SEWER LINES WILL BE REPAIRED AND REVIDEOED ACCORDINGLY.</p> <p>18. ALL SEWER MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIREMENTS, USING THE WATER TIGHTNESS OR AIR PRESSURE METHODS AS PUBLISHED IN TITLE 18 ENVIRONMENTAL QUALITY.</p> <p>19. THE MINIMUM COVER FOR SEWER MAIN PIPES SHALL BE SIX (6) FEET FROM TOP OF PIPE TO FINISHED GRADE. SEWER PIPE BEDDING SHALL BE ONE HUNDRED (100) PERCENT ABC MATERIAL, PER MAG SPECIFICATIONS, PLACED AND COMPACTED FROM FOUR (4) INCHES BELOW PIPE TO TWELVE (12) INCHES ABOVE PIPE. FOR SEWER LINE CONSTRUCTION THE PIPE BEDDING SHALL BE PLACED IN TWO LIFTS PER MAG SPECIFICATIONS.</p> <p>20. PIPE BEDDING, BACKFILLING AND COMPACTION SHALL BE PER MAG STANDARD DETAIL 200-1.</p> <p>21. SEWER LINES SHALL CONSIST OF POLYVINYL CHLORIDE (PVC) SOLID WALL PLASTIC SEWER PIPE AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM D-3034, SDR-35 OR C900.</p>																																																	
SANITARY SEWER NOTES <p>DATE REVISED: 1/2022</p> <p>SURPRISE ARIZONA</p> <p>DETAIL NO: 2-07</p> <p>SHEET 1 OF 2</p>										SANITARY SEWER NOTES <p>DATE REVISED: 1/2022</p> <p>SURPRISE ARIZONA</p> <p>DETAIL NO: 2-07</p> <p>SHEET 2 OF 2</p>																																																	
<p>ELECTRONIC MARKER PLACEMENT</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. ELECTRONIC MARKER SHALL BE A 3M MODEL 1424-XV/D 14" DIAMETER SELF LEVELING MARKER BALL GREEN IN COLOR OR APPROVED EQUAL AS REQUIRED BY THE LOCAL AGENCY. 2. MARKER SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS 2' BACK FROM THE END OF THE SEWER SERVICE STUB AND CINCH TIED TO PIPE OR ABOVE PIPE AS REQUIRED BY LOCAL AGENCY. AN ADDITIONAL MARKER SHALL BE INSTALLED AT EACH SERVICE STUB BEND. 3. ELECTRONIC MARKER SHALL BE RESTORED BY CONTRACTOR IF DISTURBED WHEN PRIVATE SERVICE LINE CONNECTION IS INSTALLED. 4. MARKER SHALL BE USED IN ADDITION TO A 2"x4" METAL STUD. 5. CONSTRUCTION DETAIL APPLIES WHERE CONTRACTOR BUILDS HOUSE CONNECTION, TAP EXTENDS TO PROPERTY LINE IN ALLEYS OR STREETS OR TO EASEMENT LINE. 6. SIZE OF TAP SHALL BE DESIGNATED ON PLANS. 7. CONSTRUCT TAP AT MINIMUM SLOPE IF COVER WILL BE LESS THAN 5' AT PROPERTY LINE. 8. ALL FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D-2321. THE CONTRACTOR MAY VARY FROM THE DRAWING TO USE THE APPROPRIATE WYES, TEE-WYES AND BENDS TO ENSURE NO MISALIGNMENT OF THE PIPE AND FITTINGS. BLOCK OR BRACE FITTINGS JOINTS TO ENSURE ZERO DEGREES ANGULAR JOINT DEFLECTION. 9. END OF TAP TO BE SEALED AND MARKED AS NOTED. 										<p>CLEANOUT INSTALLATION</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. THE WORD "SEWER" ON COVER. 2. UNPAVED STREETS AND ALLEYS. 3. PAVED STREETS AND ALLEYS. 4. CLASS "AA" CONC. PER SECT. 725, 6"-8" THICK, 40° DIA. 5. COMPACTED BACKFILL OR UNDISTurbed EARTH. 6. STANDARD 45° BEND. 7. VIT. CLAY PIPE PER SECT. 743. 8. TO BE LAID ON UNDISTurbed EARTH OR COMPACTED SELECT MATERIAL (TYPE B) OR A.B.C. 9. SIZE OF PIPE AS SHOWN ON PLANS. 10. STANDARD 45° BEND. 11. 8"x8" WYE. 12. FLOW LINE ELEVATION SHOWN ON PLANS TO THIS POINT. 13. STATION AND LENGTH SHOWN ON PLANS TO THIS POINT. 																																																	
<p>SEWER TAP AT CLEANOUT</p>										<p>SEWER LINE MARKER BALL AND MARKING TAPE 7-03</p>																																																	
<p>440-1 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH TYPE 'A' - SEWER BUILDING CONNECTION ELECTRONIC BALL MARKERS (STANDARD) REVISED 01-01-2007 DETAIL NO. 441 MARICOPA ASSOCIATION OF GOVERNMENTS STANDARD DETAIL ENGLISH SEWER CLEANOUT REVISED 01-01-2023 DETAIL NO. 441</p>										<p>REVISIONS</p> <table border="1"> <thead> <tr> <th>REV</th> <th>DATE</th> <th>BY</th> <th>REVISION</th> <th>DESCRIPTION OF REVISION</th> <th>REQUESTED BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>WEIGHTS</p> <table border="1"> <thead> <tr> <th>SECTION</th> <th>WEIGHT (LB)</th> <th>DESCRIPTION</th> <th>CUSTOMER</th> </tr> </thead> <tbody> <tr> <td>3.00"</td> <td>9,800</td> <td>24" x 24"</td> <td></td> </tr> <tr> <td>3.00"</td> <td>1,020</td> <td>24" x 24"</td> <td></td> </tr> <tr> <td>FLOW BAFFLE</td> <td>1,200</td> <td>4"</td> <td>0.30</td> </tr> <tr> <td>SLUDGE BAFFLE</td> <td>250</td> <td>4"</td> <td>0.50</td> </tr> <tr> <td>OIL BAFFLE</td> <td>1,200</td> <td>4"</td> <td>0.90</td> </tr> <tr> <td>PRECAST TOTAL</td> <td>12,250</td> <td></td> <td></td> </tr> </tbody> </table>										REV	DATE	BY	REVISION	DESCRIPTION OF REVISION	REQUESTED BY	1						SECTION	WEIGHT (LB)	DESCRIPTION	CUSTOMER	3.00"	9,800	24" x 24"		3.00"	1,020	24" x 24"		FLOW BAFFLE	1,200	4"	0.30	SLUDGE BAFFLE	250	4"	0.50	OIL BAFFLE	1,200	4"	0.90	PRECAST TOTAL	12,250		
REV	DATE	BY	REVISION	DESCRIPTION OF REVISION	REQUESTED BY																																																						
1																																																											
SECTION	WEIGHT (LB)	DESCRIPTION	CUSTOMER																																																								
3.00"	9,800	24" x 24"																																																									
3.00"	1,020	24" x 24"																																																									
FLOW BAFFLE	1,200	4"	0.30																																																								
SLUDGE BAFFLE	250	4"	0.50																																																								
OIL BAFFLE	1,200	4"	0.90																																																								
PRECAST TOTAL	12,250																																																										

REVISIONS

PROJECT NO.	121,044
DRAWN	C. DAHM
CHECKED	D. PHILLIPS
SUBMITTED DATES	
OTB DATE	-

JSA CIVIL
Engineering | Planning | Management
111 TUMWATER BLVD SE, SUITE B203
TUMWATER, WA 98512

STAMP

Professional Engineer (CE) CCR CERTIFICATE NO. 121,044
S. DAHM, PE, ASCE, SEVERSON, INC.
Date Signed: 03/10/2025

CRASH CHAMPIONS COMMERCIAL DEVELOPMENT PROJECT
303 AUTOSHOW DRIVE
SURPRISE, ARIZONA

HillSide architecture inc

SHEET TITLE
SEWER DETAILS
SHEET
C9.1
FSXX-XXXX