

CITY OF SCOTTSDALE NOTES:

1.

ALL CONSTRUCTION IN THE PUBLIC RIGHTS-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE MUST CONFORM TO THE LATEST MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND UNIFORM STANDARD DETAILS FOR PUBLIC WORKS CONSTRUCTION AS AMENDED BY THE LATEST VERSION OGF THE CITY OF SCOTTSDALE SUPPLEMENTAL STANDARD SPECIFICATIONS AND SUPLEMENTAL STANDARD DETAILS. IF THERE IS A CONFLICT, THE CITY'S SUPPLEMENTAL STANDARD DETAILS WILL GOVERN.
2.

THE CITY ONLY APPROVES THE SCOPE, NOT THE DETAIL OF ENGINEERING DESIGNS; THEREFORE, IF CONSTRUCTION QUANTITIES ARE SHOWN ON THESE PLANS, THEY ARE NOT VERIFIED BY THE CITY.
3.

THE APPROVAL OF PLANS IS VALID FOR SIX (6) MONTHS. IF ASSOCIATED PERMIT HAS NOT BEEN ISSUED WITHIN THIS TIME FRAME, THE PLANS MUST BE RESUBMITTED TO THE CITY FOR RE-APPROVAL.
4.

A CITY INSPECTOR WILL INSPECT ALL WORKS WITHIN THE CITY OF SCOTTSDALE. NOTIFY INSPECTION SERVICES 72 HOURS BEFORE BEGINNING WORK.
5.

WHENEVER EXCAVATION IS NECESSARY, CALL THE BLUE STAKE CENTER, 811, TWO WORKING DAYS BEFORE EXCAVATION BEGINS.
6.

PERMISSION TO WORK IN THE RIGHT-OF-WAY (PWR) PERMITS ARE REQUIRED FOR ALL WORKS WITHIN THE RIGHTS-OF-WAY AND EASEMENTS GRANTED FOR PUBLIC PURPOSES. COPIES OF ALL PERMITS MUST BE RETAINED ON-SITE AND BE AVAILABLE FOR INSPECTION AT ALL TIMES. FAILURE TO PRODUCE THE REQUIRED PERMITS WILL RESULT IN IMMEDIATE SUSPENSION OF ALL WORK UNTIL THE PROPER PERMIT DOCUMENTATION IS OBTAINED.

ALL LANDSCAPE AREAS AND MATERIALS, INCLUDING THOSE LOCATED IN PUBLIC RIGHTS-OF-WAY, SHALL BE MAINTAINED IN A HEALTHY, NEAT, CLEAN, AND WEED-FREE CONDITION. ANSI A300 STANDARD PRACTICES FOR PRUNING, SUPPORT SYSTEMS, AND SAFETY SHALL BE USED FOR MAINTENANCE CRITERIA. THIS SHALL BE THE RESPONSIBILITY OF THE

PROPERTY OWNER/DEVELOPER/HOA.

AS-BUILT CERTIFICATION:

I HEREBY CERTIFY THAT THE RECORD DRAWING MEASUREMENTS WERE MADE UNDER MY SUPERVISION OR AS NOTED AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYORDATE

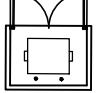
REGISTRATION NUMBERTIME

FIRM NAME

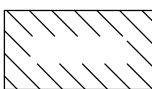
LEGEND

→ FLOW ARROW

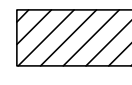
6" CURB



TRASH ENCLOSURE



BUILDING OUTLINE



ADA ACCESS



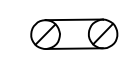
FIRE HYDRANT



CLEANOUT



WATER METER



BACKFLOW PREVENTOR

1" W

1" WATERLINE

6 SS

6" SEWER LINE

6 FL

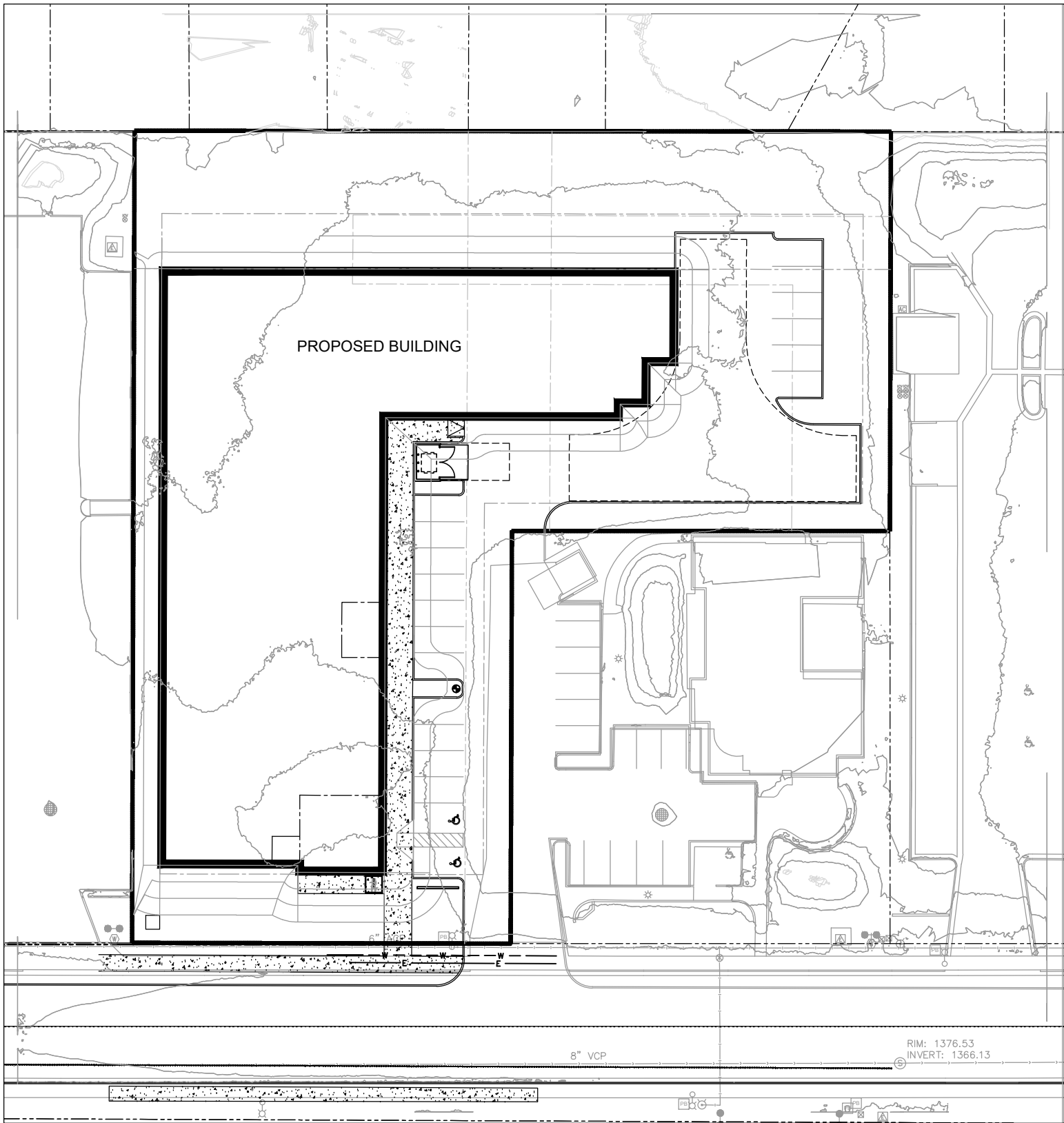
6" FIRELINE

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PROPERTY LINE

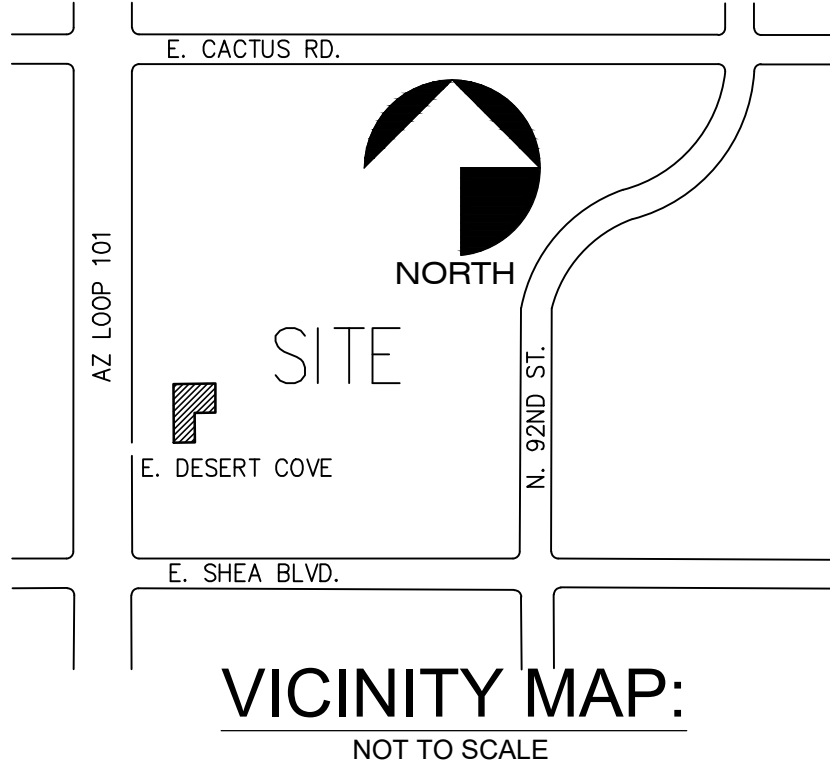
PRELIMINARY IMPROVEMENT PLANS
FOR
DESERT COVE SELF STORAGE

8888 E DESERT COVE AVE, SCOTTSDALE, AZ 85260



KEY MAP

N.T.S.



PROJECT CONTACTS:

DEVELOPER:

RAN PROPERTIES, LLC.
6501 EAST GREENWAY PKWY., 103-577
SCOTTSDALE, ARIZONA 85254
POINT OF CONTACT: RJ DELOORTO
PHONE: 480.220.2280
EMAIL: RJDELOORTO@GMAIL.COM

ENGINEER:

LARSON ENGINEERING, INC.
6380 E. THOMAS ROAD, STE 300
SCOTTSDALE, AZ 85251
TEL: 480.212.4200
EMAIL: KSMITH@LARSONENGR.COM
CONTACT: KIRK SMITH, P.E.

ARCHITECT:

EAPC ARCHITECTS ENGINEERS
901 E. MADISON ST.
PHOENIX, AZ 85034
TEL: 602.441.4505
EMAIL: MICHELLE.BACH@EAPC.NET
CONTACT: MICHELLE BACH

SHEET INDEX

C1	COVER SHEET
C2	GRADING & DRAINAGE PLAN
C3	UTILITY PLAN
C4	NOTES & DETAILS
C5	NOTES & DETAILS

SITE DATA:

SITE ADDRESS:
8888 E DESERT COVE AVE
SCOTTSDALE, AZ 85260

APN: 217-25-002Q

EXISTING ZONING: I-1

NET SITE AREA: 60,297 SF
1.38 ACRES

GROSS SITE AREA: 64,479 SF
1.48 ACRES

DISTURBED AREA: 60,000 SF
1.38 ACRES

QUANTITIES CUT/FILL:

CUT = 873 CY
FILL = 3033 CY
NET FILL = 1,189 CY

SEWER QUANTITIES:

6" SDR 35 PVC SEWER PIPE	67 LF
SANITARY SEWER CLEANOUT	1 EA

WATER QUANTITIES:

2" TYPE K COPPER LINE, MAINTAIN 3' COVER MIN.	24 LF
INSTALL 6" D.I.P. FIRELINE	104 LF
2" WATER METER	1 EA
2" BACKFLOW PREVENTOR	1 EA
PAVEMENT REPLACEMENT PER COS STD DTL 2200	32 SY
FIRE HYDRANT COMPLETE ASSEMBLY PER MAG STD DTL 360-3	1 EA
TAPPING SLEEVE & VALVE	2 EA

BENCHMARK:

CITY OF SCOTTSDALE BENCHMARK #8194 BRASS CAP IN HANDHOLE AT INTERSECTION OF NORTH 92ND STREET AND EAST CHOLLA STREET. ELEVATION = 1388.481 (NAVD88 DATUM).

I HEREBY CERTIFY THAT ALL ELEVATIONS REPRESENTED ON THIS PLAN ARE BASED ON NAVD1988 AND MEET THE FEMA BENCHMARK MAINTENANCE (BMM) CRITERIA.

KIRK SMITH, P.E.	9.08.22
NAME & TITLE	SIGNATUREDATE

ASSESSOR PARCEL NUMBERS:

APN: 217-25-002Q

ZONING:

ZONED I-1

LEGAL DESCRIPTION:

THAT PORTION OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER (GOVERNMENT LOT 4) OF SECTION 19, TOWNSHIP 3 NORTH, RANGE 5 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 19, FROM WHICH THE SOUTHWEST CORNER OF SAID SECTION 19 BEARS SOUTH 00 DEGREES 20 MINUTES 21 SECONDS WEST, 1320.40 FEET;

THENCE SOUTH 89 DEGREES 52 MINUTES 33 SECONDS EAST, ALONG THE NORTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SAID SECTION 19, A DISTANCE OF 365.39 FEET TO THE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 89 DEGREES 52 MINUTES 33 SECONDS EAST, 237.99 FEET TO THE NORTHWEST CORNER OF EDWARDS BUSINESS PARK, A SUBDIVISION RECORDED IN BOOK 287 OF MAPS, PAGE 20, MARICOPA COUNTY RECORDS;

THENCE SOUTH 00 DEGREES 11 MINUTES 34 SECONDS WEST, ALONG THE WEST LINE OF SAID EDWARDS BUSINESS PARK, 145.00 FEET;

THENCE NORTH 89 DEGREES 52 MINUTES 33 SECONDS WEST, PARALLEL WITH THE NORTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER, 137.00 FEET;

THENCE SOUTH 00 DEGREES 11 MINUTES 34 SECONDS WEST, A DISTANCE OF 180.00 FEET;

THENCE NORTH 89 DEGREES 52 MINUTES 33 MINUTES WEST, PARALLEL WITH THE NORTH LINE OF THE NORTHWEST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, A DISTANCE OF 136.99 FEET;

THENCE NORTH 00 DEGREES 11 MINUTES 34 SECONDS EAST, 325.00 FEET TO THE POINT OF BEGINNING.

NOTE: ALL WORK PERFORMED SHALL MEET THE STANDARDS OUTLINED IN THE ENCLOSED PLANS AND SPECIFICATIONS UNLESS NOTED OTHERWISE.

G:\Projects\2022 Projects\6222 - 2022 - CIVIL\62220035.000 - Desert Cove Self Storage - Scottsdale\4-Design\Cover Sheet.dwg

Larson Engineering, Inc.
6380 E. Thomas Rd., Suite 300
Scottsdale, AZ 85251
480.212.4200
www.larsonengr.com
Project # 62220035
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EAPC ARCHITECTS ENGINEERS
901 E. MADISON ST.
PHOENIX, AZ, 85034

DESERT COVE SELF STORAGE
8888 E DESERT COVE AVE, SCOTTSDALE, AZ 85260



Rev.	Date	Description

Project #: 6220035
Drawn By: JL
Checked By: DC
Issue Date: 09.08.2022

Sheet Title:

TITLE SHEET

C1

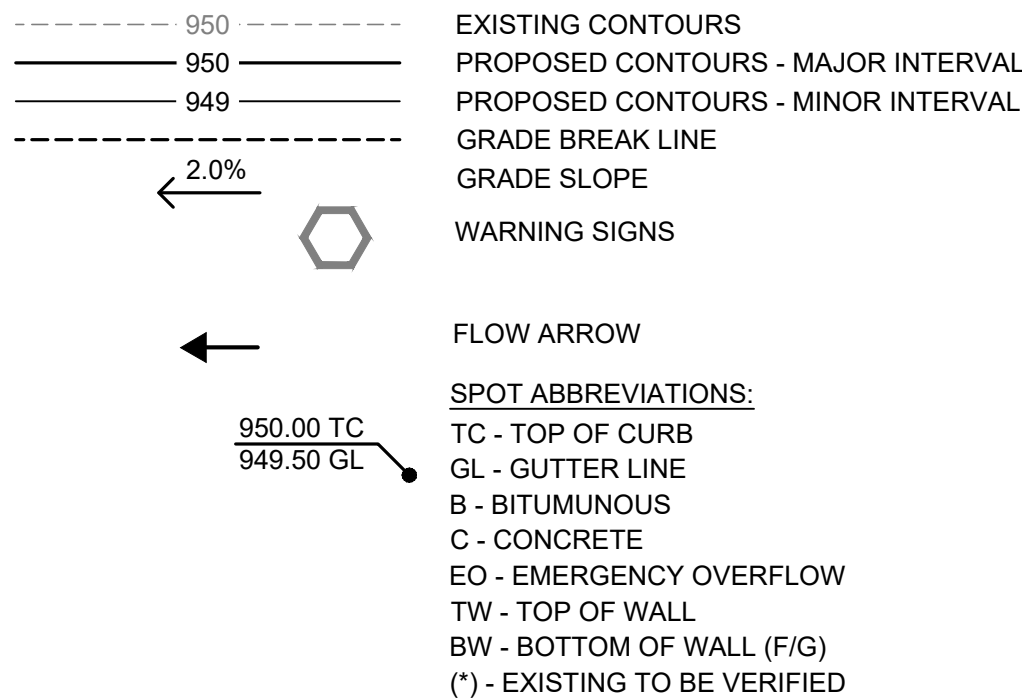
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*D from City of Scottsdale Isopluvial Map located in Appendix, C factor from Scottsdale Design Standards Manual Page 20 Included in Appendix

****Retention required = $C \cdot D / 12 \cdot A$**

LEGEND



GRADING NOTES

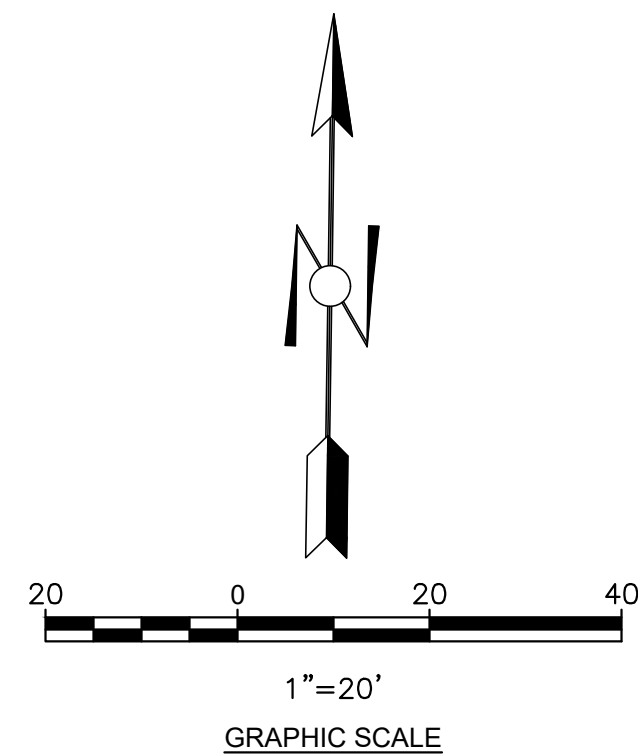
1. Tree protection consisting of snow fence or safety fence installed at the drip line shall be in place prior to beginning any grading or demolition work at the site.
2. All elevations with an asterisk (*) shall be field verified. If elevations vary significantly, notify the Engineer for further instructions.
3. Grades shown in paved areas represent finish elevation.
4. Restore all disturbed areas with 4" of good quality topsoil and seed,
5. All construction shall be performed in accordance with state and local standard specifications for construction.

○ GRADING CONSTRUCTION NOTES

- ① INSTALL MAXWELL PLUS DUAL CHAMBER DRYWELL. REFER TO ATTACHED CONTECH DETAILS SHEET C4-P5
- ② INSTALL ACCESS COVER WITH MARKINGS. REFER TO ATTACHED CONTECH DETAILS. C4-P4
- INSTALL CONTECH 10" DIAMETER UNDERGROUND CORRUGATED STEEL PIPE 75 LF TOP=76.75 - BTM=66.75. PIPE TO HAVE SMOOTH INTERIOR FINISH BOTTOM PER MANUFACTURER'S SPECIFICATIONS ON CONTECH DETAILS PER MAG STD DTL 2254. ACCESS MANHOLE MARKINGS PER CONTECH DETAILS. SEE CONTECH DETAILS FOR PROFILE BOTTOM OF PIPE TO BE SLOPED TO DRYWELL BLEED OFF PIPE. SEE DETAIL ON PAGE C4 - P2.
- ④ INSTALL 12" PVC STORM DRAIN PIPE, LENGTH PER PLAN
- ⑤ CONNECT 12" HDPE OR CSP OUTLET W/ SMOOTH SLEEVE ADAPTOR FITTING
- ⑥ INSTALL GRATED ACCESS COVER/INLET. REFER TO ATTACHED CONTECH DETAIL ON PAGE C5.
- ⑦ INSTALL MAG 535 CATCH BASIN
- INSTALL CONTECH 10" DIAMETER UNDERGROUND CORRUGATED STEEL PIPE 65 LF TOP=76.77 - BTM=66.77. PIPE TO HAVE SMOOTH INTERIOR FINISH BOTTOM PER MANUFACTURER'S SPECIFICATIONS ON CONTECH DETAILS PER MAG STD DTL 2254. ACCESS MANHOLE MARKINGS PER CONTECH DETAILS. SEE CONTECH DETAILS FOR PROFILE BOTTOM OF PIPE TO BE SLOPED TO DRYWELL BLEED OFF PIPE. SEE DETAIL ON PAGE C4 - P2.

BENCHMARK:

CITY OF SCOTTSDALE BENCHMARK #8194 BRASS CAP IN HANDHOLE AT INTERSECTION OF NORTH 92ND STREET AND EAST CHOLLA STREET. ELEVATION = 1388.481 (NAVD88 DATUM).



Desert Cove Self Storage			
Retention Calculations			
Volume Storage (CF)	Percolation Rate Drywell (cfs)	Percolation Time (hours)	Drywells Req'd (EA)
10996	0.10	30.5	1.0

Desert Cove Self Storage					
Underground Storage Tanks					
Pipe Diameter (ft)	Volume per LF (cf)	Retention Req'd (cf)	Length Pipe Req'd (LF)	Total Length of Pipe Prov'd (lf)	Total Volume Prov'd
10	78.5	10,498	133.7	140	10,996



**Larson
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Project # 62220035

**EAPC ARCHITECTS
ENGINEERS**
901 E. MADISON ST.
PHOENIX, AZ. 85034

Client:

DESERT COVE SELF STORAGE

Project Title:

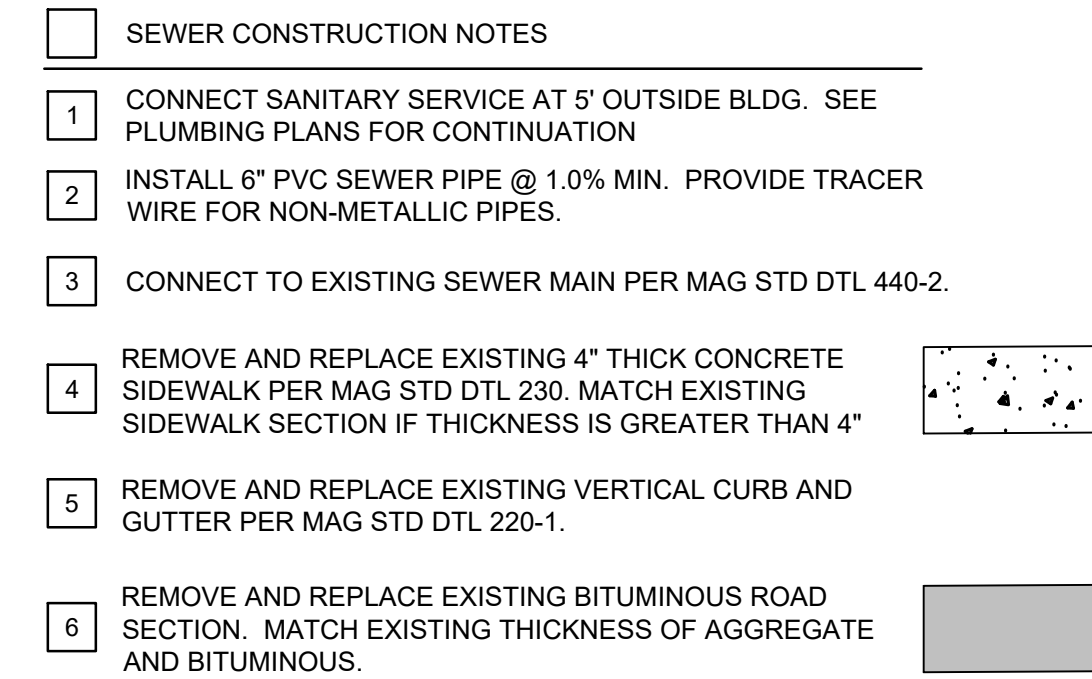
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Project #: 6220035
 Drawn By: JL
 Checked By: DC
 Issue Date: 09.08.2022
 Sheet Title:

GRADING PLAN

C2

Sheet:



- WATER CONSTRUCTION NOTES

① INSTALL 2" TYPE 'K' COPPER WATER LINE

② CONNECT WATER SERVICE AT 5' OUTSIDE BLDG. SEE PLUMBING PLANS FOR CONTINUATION

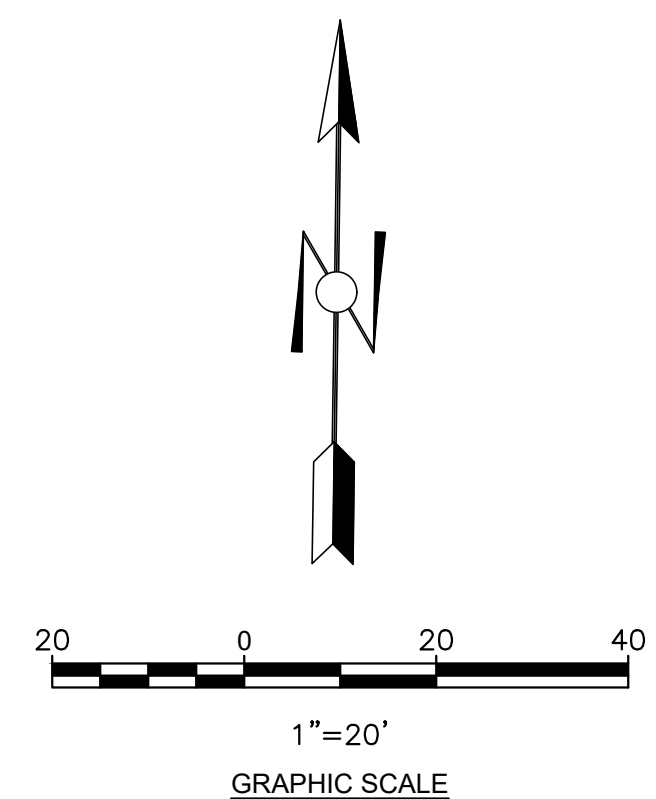
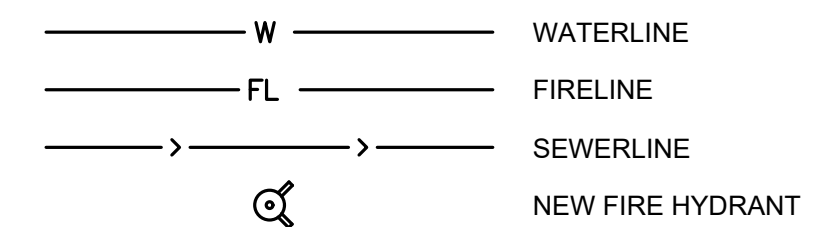
③ INSTALL 2" WATER METER WITH 2" BACKFLOW PREVENTOR AND CAGE PER MAG STD DTL 320

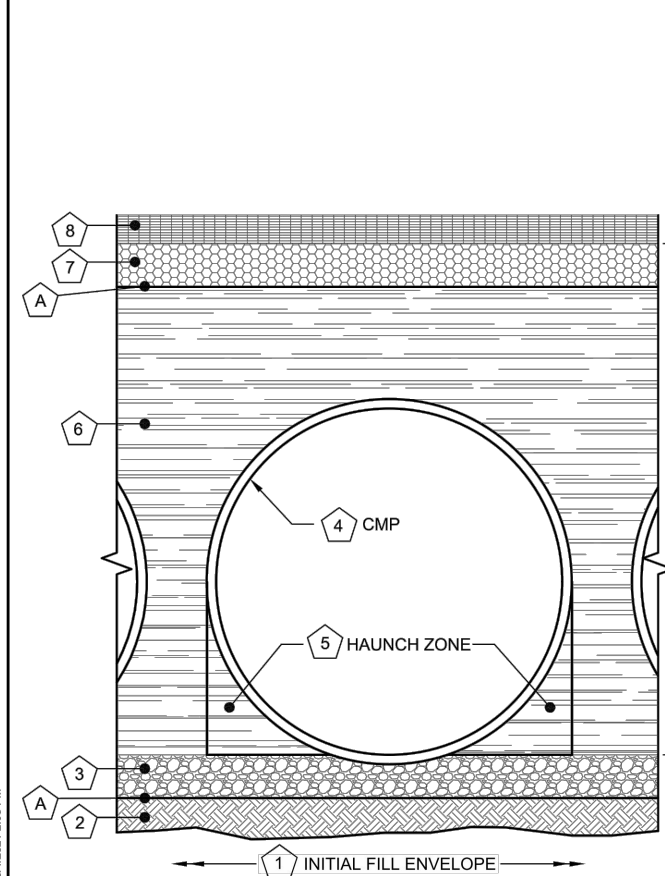
④ INSTALL TAPPING SLEEVE WITH VALVE BOX AND COVER PER MAG STD DTL 340. CONTRACTOR TO VIF SIZE AND LOCATION OF EXISTING WATERMAIN.

- FIRE LINE CONSTRUCTION NOTES**

 1. INSTALL 6" DUCTILE IRON FIRE SUPPRESSION SERVICE
 2. CONNECT FIRE SUPPRESSION SERVICE AT 5' OUTSIDE BLDG - SEE PLUMBING PLANS FOR CONTINUATION
 3. INSTALL TEE WITH VALVE BOX AND COVER PER COS DTL 2362-1 & DSPM 6-1.504, OR MAG STD DTL 391-1 TYPE C AND MAG STD DET 270
 4. INSTALL 6" DOUBLE CHECK BACKFLOW PREVENTOR
 5. REMOVE AND REPLACE EXISTING 4" THICK CONCRETE SIDEWALK PER MAG STD DTL 230. MATCH EXISTING SIDEWALK SECTION IF THICKNESS IS GREATER THAN 4"
 6. INSTALL FIRE HYDRANT PER MAG STD DTL 360-2
 7. INSTALL FIRE LINE VALVE BOX AND COVER PER MAG STD DTL 391-1 TYPE C AND MAG STD DET 270, SEE CITY OF SCOTTSDALE STD DET 2362-2

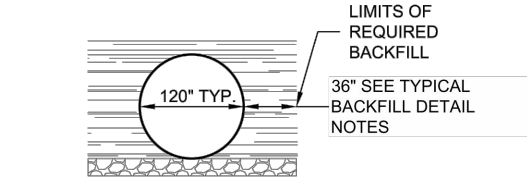
LEGEND





DETENTION SYSTEMS - CMP DETENTION / CMP DRAINAGE			
Material Location	Description	Material Designation	Designation
Right or Flexible Pavement (if applicable)			
Road Base (if applicable)			
Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types
Backfill	Well graded granular material which may contain small amounts of silt or clay	AASHTO M 145-A-1, A-2, A-3	Placed in 8" +/- loose lifts and compacted to 90% Standard Proctor Per AASHTO T 99
Bedding Stone	Well graded granular bedding material maximum particle size of 3"	AASHTO M43 - 3, 307.4, 467, 5, 56, 57	Engineer to determine if bedding is required. Pipe may be placed on the trench bottom of a relatively loose, native suitable well graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or the grade the foundation to a slight v-shape. Unsuitable material should be over-excavated and replaced with a 4" Ø" layer of well graded & granular stone per the material designation. See AASHTO 20.3.3.1/20.3.3.3 Bedding Info.
Geotextile Layer	Non-Woven Geotextile	CONTECH C-40 or C-45	Engineer Decision for consideration to prevent soil migration into varying soil types

* Note: Backfill using controlled low-strength material (CLSM, "lean" RT or "flexible" RT) when the spacing between the pipes will not allow for placement and adequate compaction of the backfill.



TYPICAL SECTION VIEW
NOT TO SCALE

SEE ENGINEERED
SITE PLANS FOR
BACKFILL DETAIL

- MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT
- FOUNDATION/BEDDING PREPARATION
- PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.
- HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMLY COMPACTED WITHOUT SOFT SPOTS.

BACKFILL

WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO (2) LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.

MARK	DATE	REVISION DESCRIPTION	BY

CONTECH
ENGINEERED SOLUTIONS LLC
www.ContechES.com
11515 NE Glenn Widing Drive, Portland, OR 97220
800-548-4667 503-240-3393 800-561-1271 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
DRAWING

120"Ø UNDERGROUND DETENTION SYSTEM - 671567-010
JOMAX STORAGE (10798 E. JOMAX RD.)
SCOTTSDALE, AZ
SITE DESIGNATION:

PROJECT No.: 671567	SEQ. No.: 010	DATE: 3/3/2021
DESIGNED: DAH	DRAWN: DAH	
CHECKED: DAH	APPROVED: DAH	
SHEET NO.: P2 OF 5		

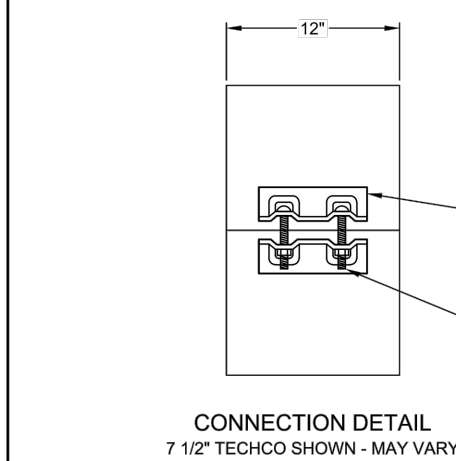
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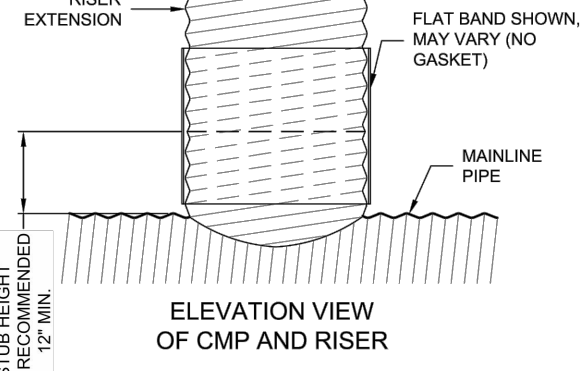
CONTECH
CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
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120"Ø UNDERGROUND DETENTION SYSTEM - 671567-010
JOMAX STORAGE (10798 E. JOMAX RD.)
SCOTTSDALE, AZ
SITE DESIGNATION:

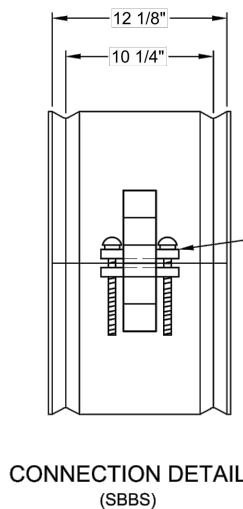
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DESIGNED: DAH	DRAWN: DAH	
CHECKED: DAH	APPROVED: DAH	
SHEET NO.: P5 OF 5		



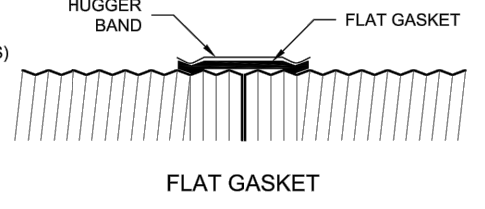
CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY



ELEVATION VIEW
OF CMP AND RISER



CONNECTION DETAIL
(SBBS)



FLAT GASKET

PLAIN END CMP RISER PIPE

GENERAL NOTES:

- DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.
- JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
- IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
- BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" THRU 96" 2-PIECES
 - 102" THRU 144" 3-PIECES
- ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
- MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
- DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL

NOT TO SCALE

2 2/3"x1/2" RE-ROLLED END HEL-COR PIPE

GENERAL NOTES:

- JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
- BAND MATERIALS AND/OR COATING CAN VARY BY LOCATION. CONTACT YOUR CONTECH REPRESENTATIVE FOR AVAILABILITY.
- BANDS ARE SHAPED TO MATCH THE PIPE-ARCH WHEN APPLICABLE.
- BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
 - 12" THRU 48" 1-PIECE
 - 54" THRU 96" 2-PIECES
 - 102" THRU 144" 3-PIECES
- BAND FASTENERS ARE ATTACHED WITH SPOT WELDS, RIVETS OR HAND WELDS.
- ALL CMP IS REROLLED TO HAVE ANNULAR END CORRUGATIONS OF 2 2/3"x1/2"
- DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
- ORDER SHALL DESIGNATE GASKET OPTION, IF REQUIRED (SEE DETAILS ABOVE).

H-12 HUGGER BAND DETAIL

NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

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CONTECH
CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
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120"Ø UNDERGROUND DETENTION SYSTEM - 671567-010
JOMAX STORAGE (10798 E. JOMAX RD.)
SCOTTSDALE, AZ
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SHEET NO.: P3 OF 5		

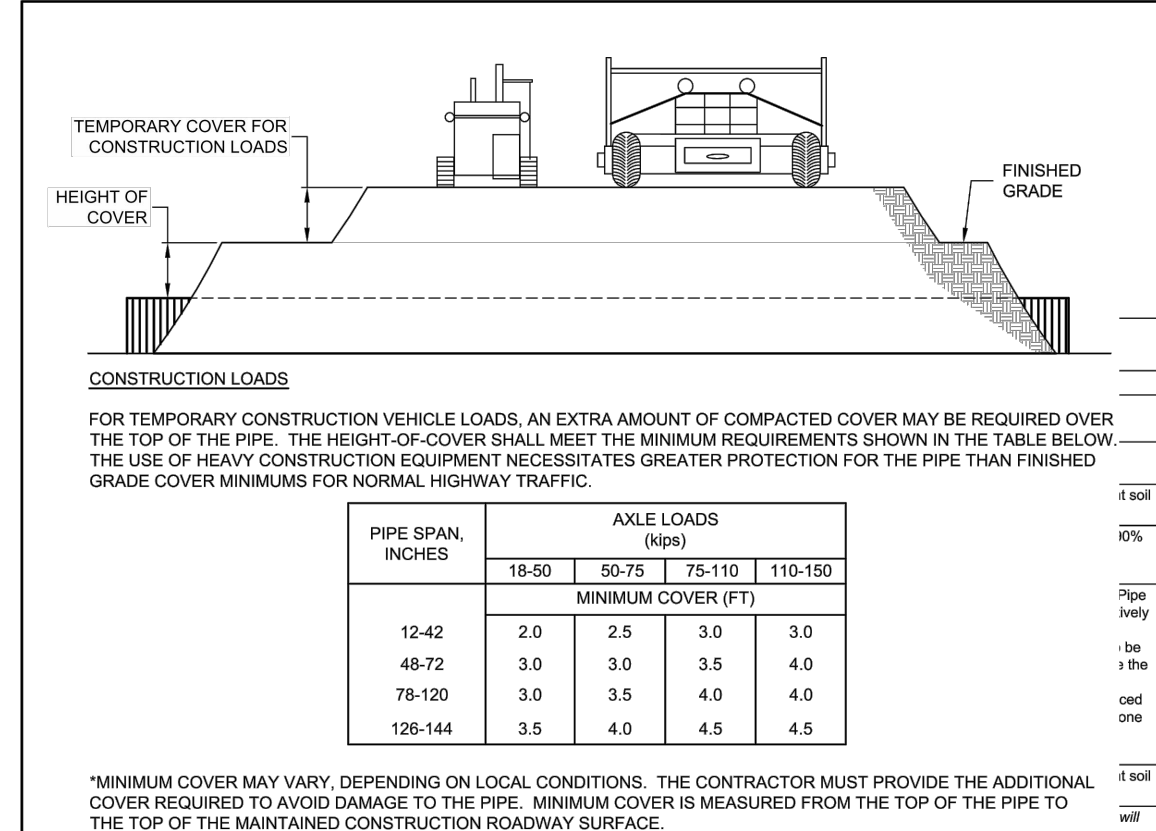
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11515 NE Glenn Widing Drive, Portland, OR 97220
800-548-4667 503-240-3393 800-561-1271 FAX

CONTECH
CMP DETENTION SYSTEMS
CONTECH
PROPOSAL
DRAWING

120"Ø UNDERGROUND DETENTION SYSTEM - 671567-010
JOMAX STORAGE (10798 E. JOMAX RD.)
SCOTTSDALE, AZ
SITE DESIGNATION:

PROJECT NO.:	SEQ. NO.:	DATE:
671567	010	3/3/2021
DESIGNED:	DRAWN:	
DAH	DAH	
CHECKED:	APPROVED:	
DAH	DAH	
SHEET NO.:		
P4	OF	5



CONSTRUCTION LOADING DIAGRAM

NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-POLYMER COATED STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE POLYMER COATED CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-245 OR ASTM A-752. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

PIPE

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH NCSPPS (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) RECOMMENDATIONS.

INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A-789 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS, THE CONTRACTOR MUST BRING THEM TO THE ATTENTION OF THE SITE ENGINEER.

CONSTRUCTION LOADS

CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPPS'S GUIDELINES.

MATERIAL SPECIFICATION

NOT TO SCALE

MARK	DATE	REVISION DESCRIPTION	BY

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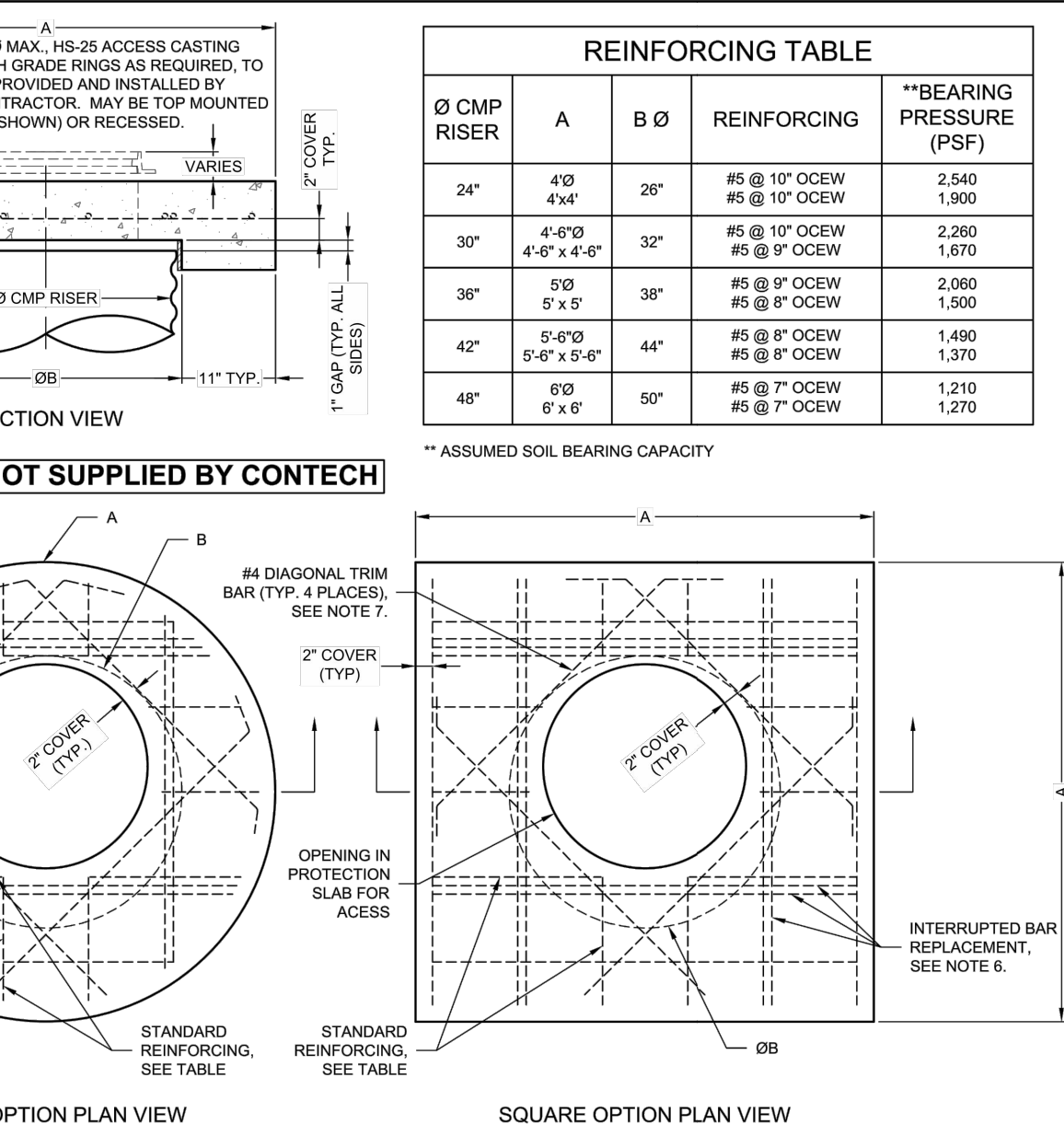
120"Ø UNDERGROUND DETENTION SYSTEM - 671567-010
JOMAX STORAGE (10798 E. JOMAX RD.)
SCOTTSDALE, AZ
SITE DESIGNATION:

PROJECT No.: 671567	SEQ. No.: 010	DATE: 3/3/2021
DESIGNED: DAH	DRAWN: DAH	
CHECKED: DAH	APPROVED: DAH	
SHEET NO.: P3 OF 5		

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DRAWING



REINFORCING TABLE

Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'0"	20"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'0"	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,080 1,500
42"	5'6"	44"	#5 @ 8" OCEW #5 @ 7" OCEW	1,490 1,370
48"	6'0"	50"	#5 @ 7" OCEW #5 @ 6" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

MANHOLE CAP DETAIL

NOT TO SCALE

Larson
Engineering, Inc.
6380 E. Thomas Rd., Suite 300
Scottsdale, AZ 85251
480.212.4200
www.larsonengr.com
Project # 6220035

EAPC ARCHITECTS
ENGINEERS
901 E. MADISON ST.
PHOENIX, AZ. 85034

DESERT COVE SELF STORAGE
8888 E DESERT COVE AVE, SCOTTSDALE, AZ 85260

Professional Engineer
KIRK V. SMITH
09/08/2022
Arizona, U.S.A.
Expires 6-30-24

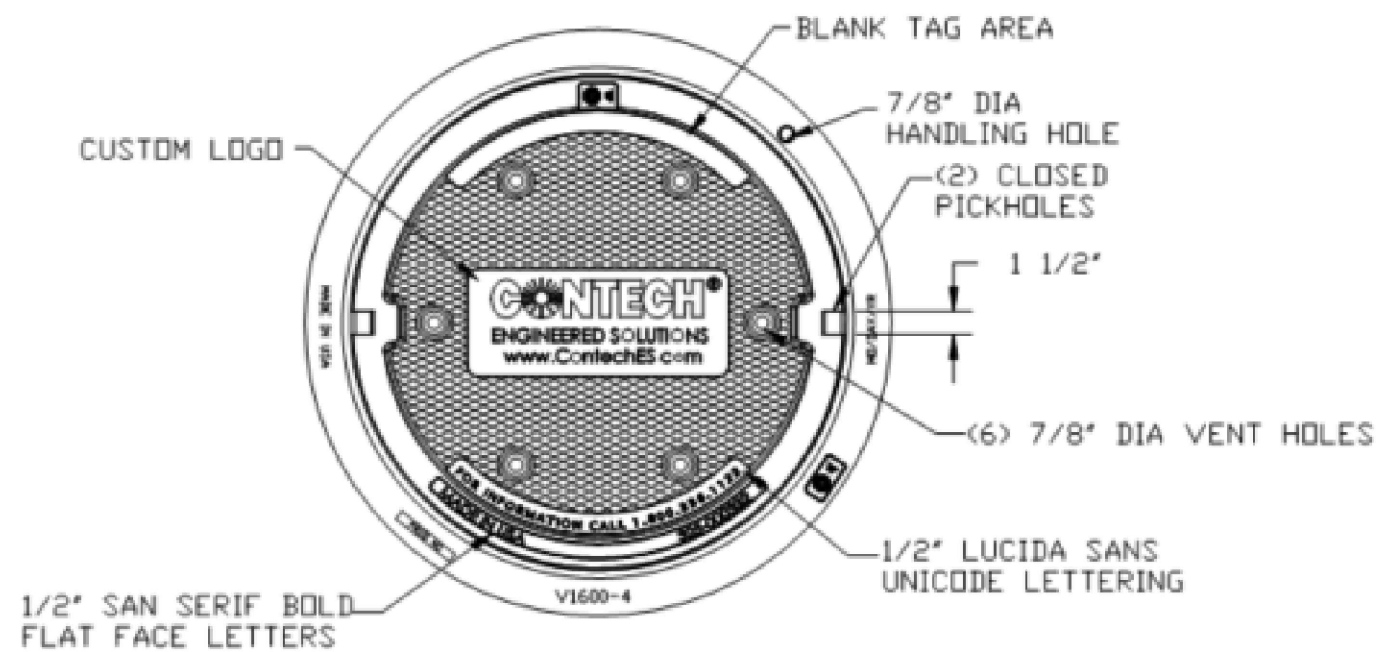
Rev.	Date	Description

Project #: 6220035
Drawn By: JL
Checked By: DC
Issue Date: 09.08.2022
Sheet Title:

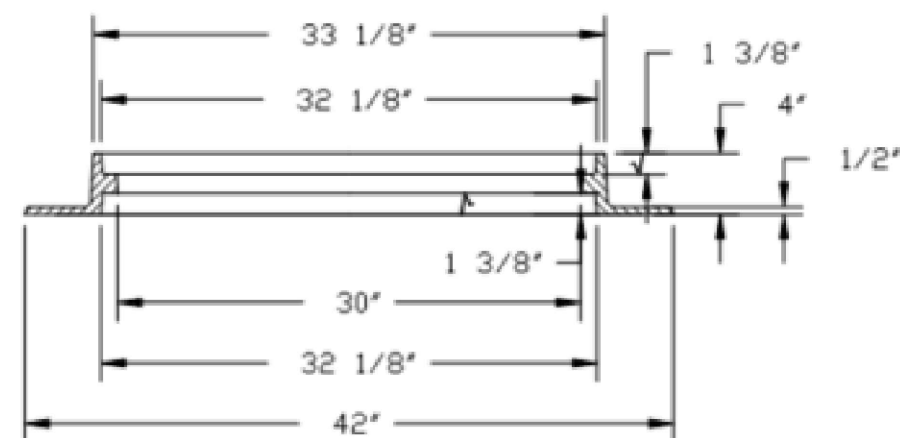
CONTECH
DETAILS
C4

Sheet:

30"x4" REVERSIBLE FRAME & SOLID COVER

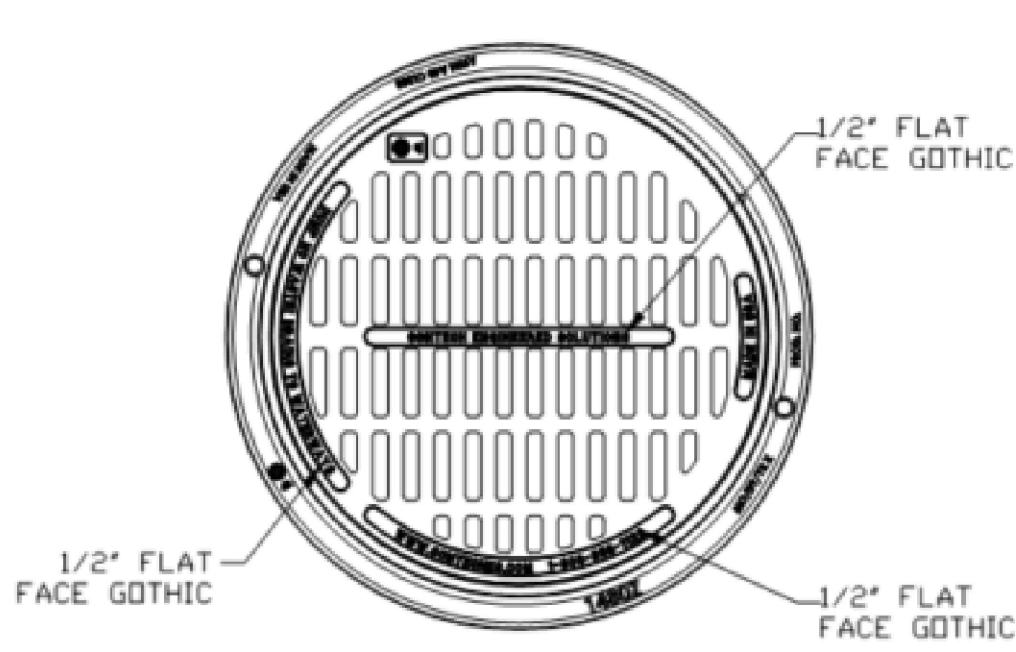


COVER SECTION

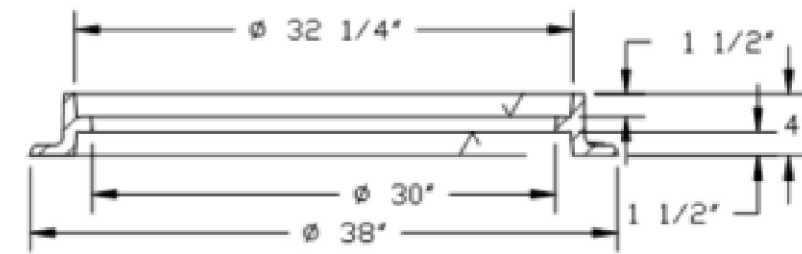


FRAME SECTION

30"x4" REVERSIBLE FRAME & GRATE



COVER SECTION



FRAME SECTION

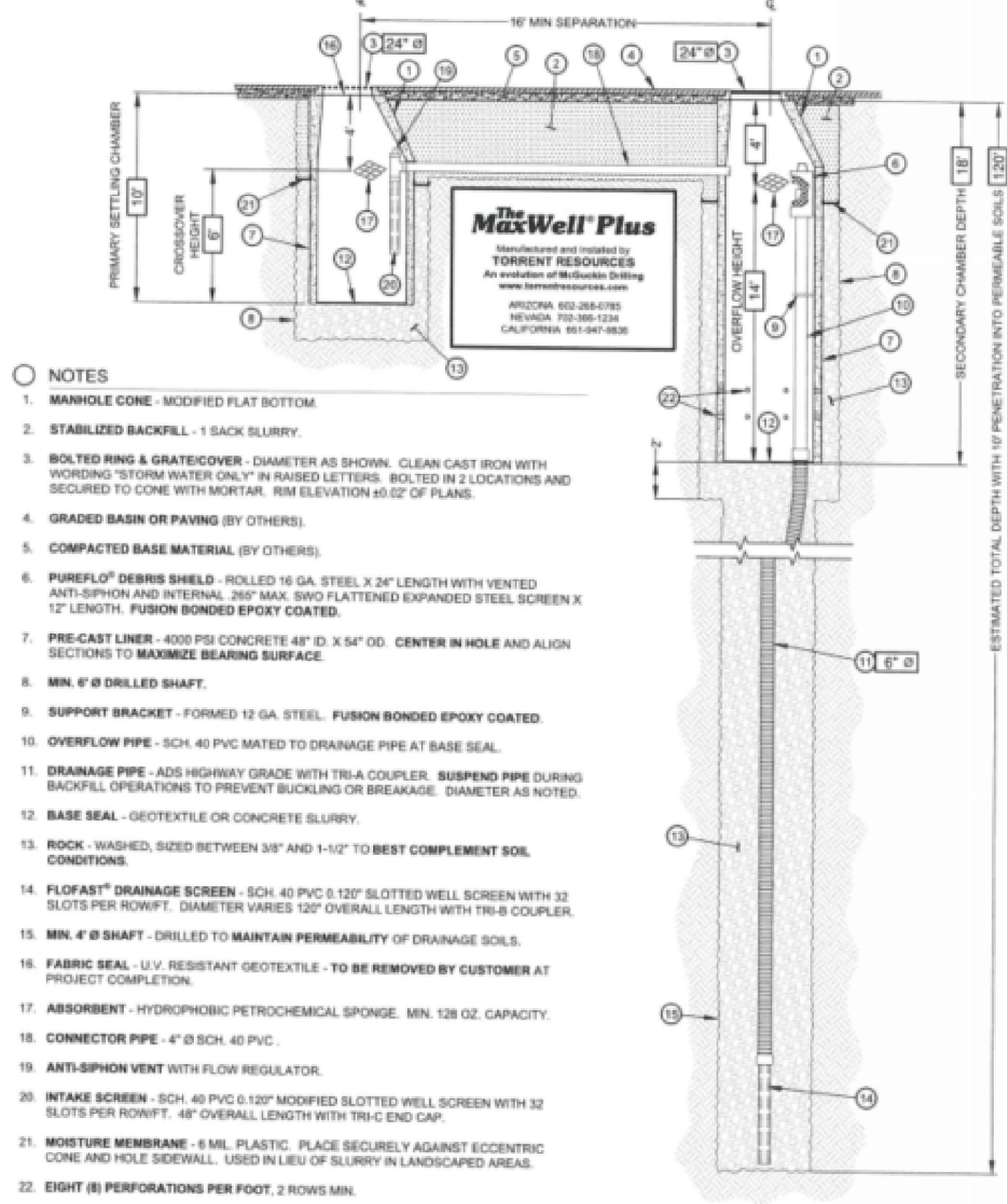
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INTENDED FOR PLANT USE



ARIZONA CMP DETENTION
STANDARD DETAIL

Desert Cove Storage - Scottsdale

The MaxWell® Plus Drainage System Detail And Specifications



NOTES

1. MANHOLE CONE - MODIFIED FLAT BOTTOM.
2. STABILIZED BACKFILL - 1 SACK SLURRY.
3. BOLTED RING & GRATE COVER - DIAMETER AS SHOWN. CLEAN CAST IRON WITH WELDING STORM WATER ONLY IN RAISED LETTERS. BOLTED IN 2 LOCATIONS AND SECURED TO CONE WITH MORTAR. RIM ELEVATION ± 0.2' OF PLANE.
4. GRADED BASIN OR PAVING (BY OTHERS).
5. COMPACTED BASE MATERIAL (BY OTHERS).
6. PURELO® DEBRIS SHIELD - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL 200' MAX. 500' FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. FUSION BONDED EPOXY COATED.
7. PRE-CAST LINER - 4000 PSI CONCRETE 48" D. X 54" OD. CENTER IN HOLE AND ALIGN SECTIONS TO MAXIMIZE BEARING SURFACE.
8. MIN. 6" Ø DRILLED SHAFT.
9. SUPPORT BRACKET - FORMED 12 GA. STEEL. FUSION BONDED EPOXY COATED.
10. OVERFLOW PIPE - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
11. DRAINAGE PIPE - ADS HIGHWAY GRADE WITH TRIA COUPLER. SUSPEND PIPE DURING BACKFILL OPERATIONS TO PREVENT BUCKLING OR BREAKAGE. DIAMETER AS NOTED.
12. BASE SEAL - GEOTEXTILE OR CONCRETE SLURRY.
13. ROCK - WASHED, SIZED BETWEEN 3/8" AND 1-1/2" TO BEST COMPLEMENT SOIL CONDITIONS.
14. FLOFAST® DRAINAGE SCREEN - SCH. 40 PVC 6 1/2" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. DIAMETER VARIES 120" OVERALL LENGTH WITH TRIA COUPLER.
15. MIN. 4" Ø SHAFT - DRILLED TO MAINTAIN PERMEABILITY OF DRAINAGE SOILS.
16. FABRIC SEAL - U.V. RESISTANT GEOTEXTILE - TO BE REMOVED BY CUSTOMER AT PROJECT COMPLETION.
17. ABSORBENT - HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY.
18. CONNECTOR PIPE - 4" Ø SCH. 40 PVC.
19. ANTI-SIPHON VENT WITH FLOW REGULATOR.
20. INTAKE SCREEN - SCH. 40 PVC 6 1/2" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. 48" OVERALL LENGTH WITH TRIA END CAP.
21. MOISTURE MEMBRANE - 6 MIL. PLASTIC. PLACE SECURELY AGAINST ECCENTRIC CONE AND HOLE SIDEWALL. USED IN LIEU OF SLURRY IN LANDSCAPED AREAS.
22. EIGHT (8) PERFORATIONS PER FOOT, 2 ROWS MIN.

12 1/4" RISE/FAHRENHEIT & DEGREES CELSIUS
1/8" DIA. RISE/FAHRENHEIT & DEGREES CELSIUS
1/8" DIA. RISE/FAHRENHEIT & DEGREES CELSIUS
U.S. Patent No. 6,552,232 - 1" trademark 1991, 1995, 2004

AZ MAXWELL PLUS

PROJECT SUMMARY

CALCULATION DETAILS

- LOADING = HS20HS25
- APPROX. LINEAR FOOTAGE = 55 LF

STORAGE SUMMARY

- STORAGE VOLUME REQUIRED = 4,317 CF
- PIPE STORAGE VOLUME = 4,320 CF
- BACKFILL STORAGE VOLUME = 0 CF
- TOTAL STORAGE PROVIDED = 4,320 CF

PIPE DETAILS

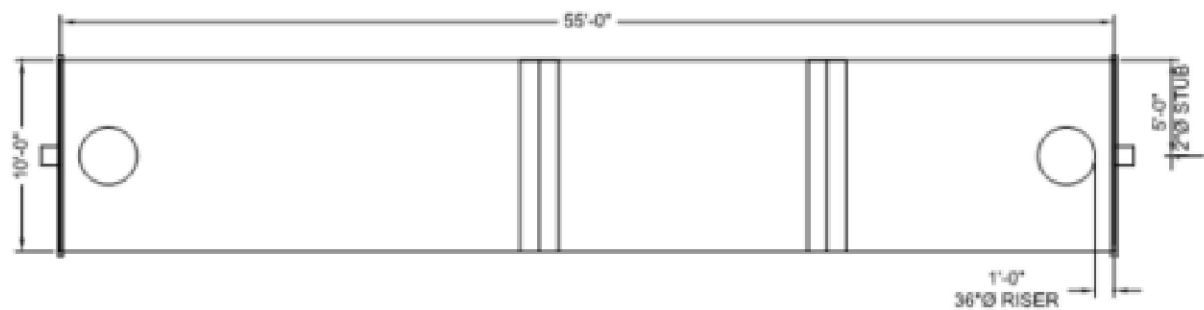
- DIAMETER = 120"
- CORRUIGATION = 5x1
- GAGE = 14
- COATING = AL72
- WALL TYPE = SOLID
- BARREL SPACING = 36"

BACKFILL DETAILS

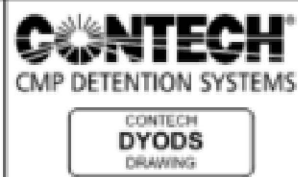
- WIDTH AT ENDS = 12"
- ABOVE PIPE = 36"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 6"

NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A996.
- ALL RISERS AND STUBS ARE 2 1/2" x 1/2" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAIL PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- RAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

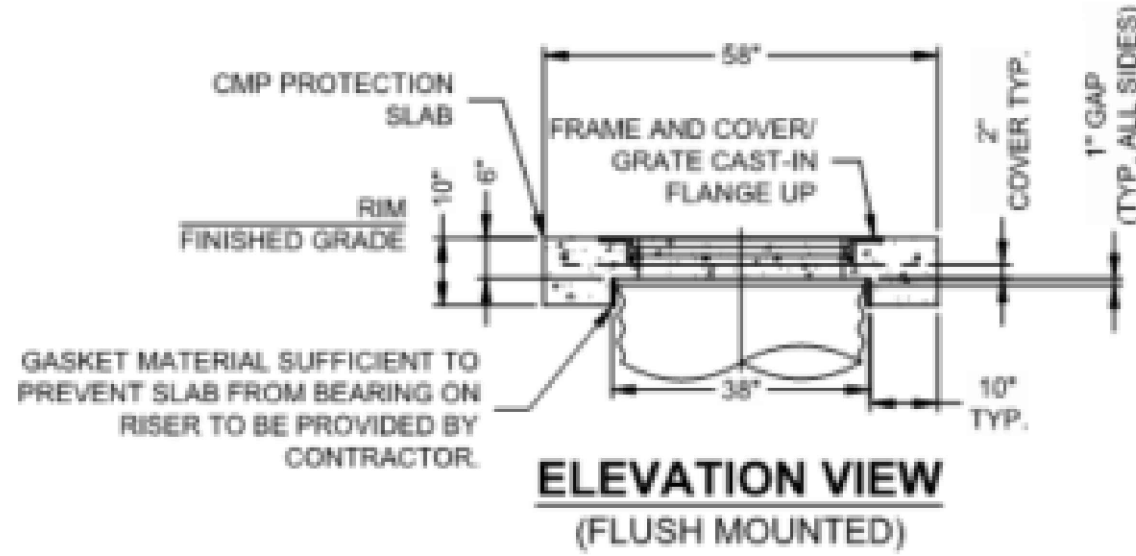


ASSEMBLY
SCALE: 1" = 10'

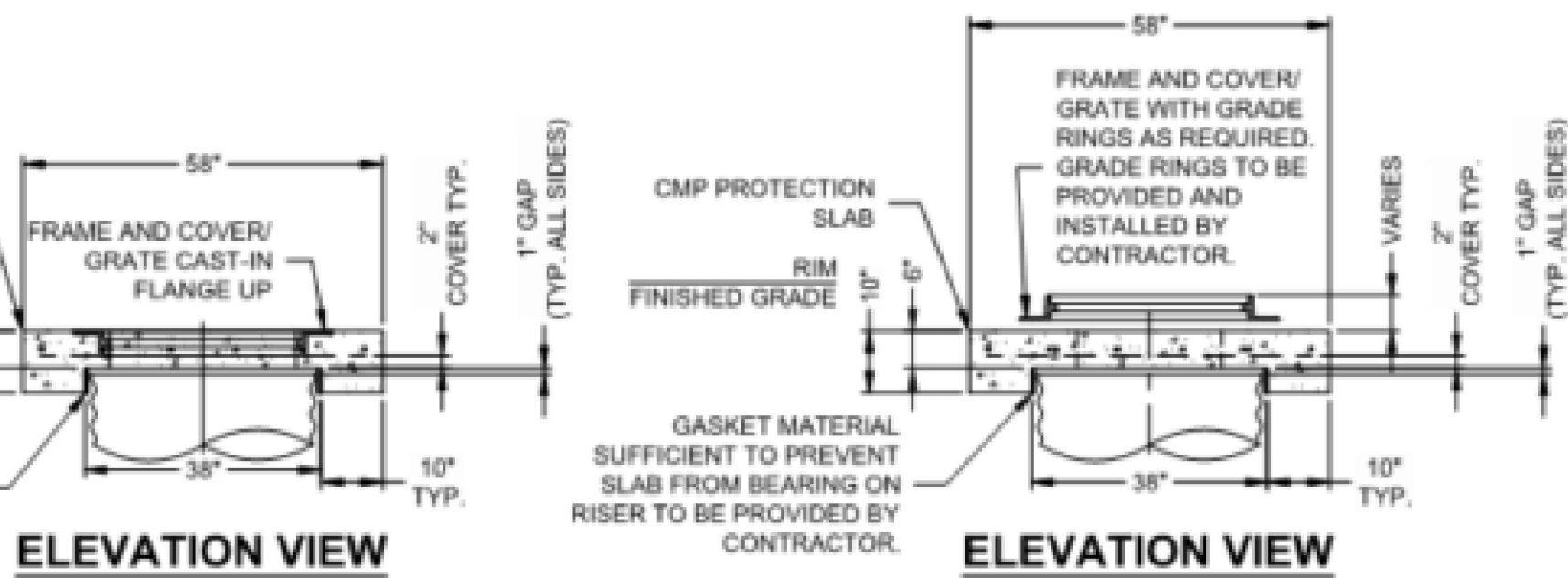


DYO19120 Desert Self Storage
URS-1
Scottsdale, AZ
DETENTION SYSTEM

PROJECT No.	REV. No.	DATE
12345	19120	01/14/2022
DESIGNED BY	DRAWN BY	
CHECKED BY	APPROVED BY	
SHEET No.		1



PLAN VIEW
(GRATED CASTING)
30"Ø HS25 LOAD RATED



PLAN VIEW
(SOLID CASTING)
24"Ø HS25 LOAD RATED
30"Ø HS25 LOAD RATED

CHECK ONE:

- ☐ CAST-IN COVER
☐ SEPARATE COVER

CHECK ONE:

- ☐ 24"Ø COVER
☐ 30"Ø COVER
☐ 30"Ø GRATE

FABRICATION NOTES:

1. CONCRETE STRENGTH = 4,000 PSI
2. REINFORCING STEEL - ASTM A615, GRADE 60, OR EQUIVALENT WELDED WIRE FABRIC.
3. NICE LIGHT BROOM FINISH FOR UNITS W/ CAST-IN FRAME AND COVER
4. LIFTERS IN SIDE FOR UNITS W/ CAST-IN FRAME AND COVER AND LIFTERS IN TOP SLAB FOR UNITS W/ SEPARATE COVER

GENERAL NOTES:

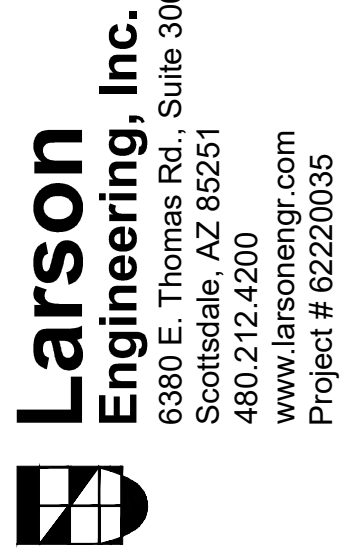
1. DESIGN LOAD HS20/HS25
2. EARTH COVER = 1' MAX
3. RISER CAP MUST BE ADEQUATELY SUPPORTED WITH PROPER BEDDING AND BEARING PRESSURE OF 3350 PSF AS TO NOT TRANSFER LOADS ONTO RISER.
4. HEAVY PICK WEIGHT = 1,900 LBS



58" OD CMP RISER CAP
UP TO 36" RISERS
PRECASTER: SEALY, TX



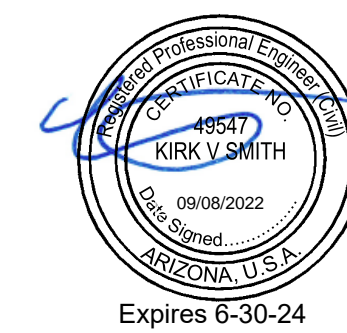
8025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX
DATE: 04/07/2021 SCALE: NONE PROJECT No.: SEQUENCE No.: DRAWN: TJS CHECKED: KMR



EAPC ARCHITECTS
ENGINEERS
901 E. MADISON ST.
PHOENIX, AZ, 85034

DESERT COVE SELF STORAGE

8888 E DESERT COVE AVE, SCOTTSDALE, AZ 85260



Rev.	Date	Description

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DETAILS

C5

Sheet: