2. SEPARATE RIGHT-OF-WAY PERMITS ARE REQUIRED FOR ALL PUBLIC UTILITIES, PUBLIC STREET IMPROVEMENTS, AND RIGHT-OF-WAY LANDSCAPING. FOR INFORMATION REGARDING AVAILABILITY AND COST OF RIGHT-OF-WAY PERMITS, CONTACT THE PERMIT SERVICES SECTION OF THE BUILDING SAFETY DIVISION AT (480) 644-4273 OR AT HTTP://WWW.MESAAZ.GOV/DEVSUSTAIN/CONSTRUCTIONPERMITS.ASPX. THE CONTRACTOR SHALL OBTAIN ALL PERMITS REQUIRED UNLESS OTHERWISE NOTED. CONTRACTORS MUST HOLD THE APPROPRIATE CLASS OF LICENSE AND SHALL HAVE ON FILE WITH THE PERMIT SERVICES SECTION PROOF OF INSURANCE COVERAGE. PERMITS BECOME INVALID AND MUST BE UPDATED IF WORK HAS NOT BEGUN WITHIN NINETY (90) DAYS. PERMITS ALSO BECOME INVALID IF THE CONTRACTOR'S INSURANCE LAPSES OR IS VOIDED.

- 3. TWENTY FOUR (24) HOURS PRIOR TO THE COMMENCEMENT OF ANY WORK, CONSTRUCTION OR INSTALLATIONS ASSOCIATED WITH THIS PERMIT, THE PERMITTEE SHALL NOTIFY CITY OF MESA ENGINEERING CONSTRUCTION SERVICES AT (480) 644-2253 OF INTENT TO BEGIN AND REQUEST/SCHEDULE PRELIMINARY FIELD REVIEW AT THE PROJECT SITE WITH THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR. FAILURE TO PROVIDE PROPER INSPECTION NOTIFICATION AS PRESCRIBED ABOVE, SHALL RESULT IN THIS PERMIT BECOMING INVALID AND WORK BEING STOPPED.
- 4. CONTRACTOR'S SHALL COMPLY WITH THE REQUIREMENTS TO OBTAIN THE NECESSARY RIGHT-OF-WAY PERMITS AND SHALL COMPLY WITH THE RIGHT-OF-WAY PERMIT CONDITIONS AS FOUND ON THE BACK OF THE PERMIT FORM.
- 5. THE CITY OF MESA PARKS & RECREATION DIVISION IS NOT REPRESENTED BY BLUE STAKE. WHEN THE CONTRACTOR EXCAVATES NEAR OR ADJACENT TO A CITY PARK, THE CONTRACTOR SHALL CONTACT THE PARKS & RECREATION ADMINISTRATION SECTION AT (480) 644-2354 TO REQUEST ASSISTANCE IN LOCATING ALL THEIR UNDERGROUND FACILITIES
- 6. THE CONTRACTOR SHALL OBTAIN AN EARTH-MOVING PERMIT FROM THE MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT AND SHALL COMPLY WITH ITS REQUIREMENTS FOR DUST CONTROL.
- 7. THE ENGINEER HEREBY CERTIFIES AS EVIDENCED BY A PROFESSIONAL SEAL & SIGNATURE, THAT ALL AFFECTED UTILITY COMPANIES BOTH PUBLIC AND PRIVATE HAVE BEEN CONTACTED AND ALL EXISTING AND/OR PROPOSED UTILITY LINES AND OTHER RELATED INFORMATION HAVE BEEN TRANSFERRED ONTO THESE PLANS. THE ENGINEER OR ARCHITECT ALSO HEREBY CERTIFIES THAT ALL EXISTING AND/OR PROPOSED PUBLIC RIGHT-OF-WAY OR EASEMENT HAVE BEEN CORRECTLY PLOTTED/SHOWN.
- 8. THE ENGINEER, OR LAND SURVEYOR OF RECORD SHALL CERTIFY UPON COMPLETION OF CONSTRUCTION THAT ALL PUBLIC IMPROVEMENTS (WATER AND SEWER UTILITIES, STORM SEWER, CONCRETE, PAVING, STREET LIGHTS, ETC.) HAVE BEEN INSTALLED AT THE LOCATIONS AND ELEVATIONS SHOWN ON THE APPROVED PLANS. ANY CHANGES SHALL BE REFLECTED ON "AS-BUILT" DRAWINGS PROVIDED BY THE ENGINEER TO THE CITY'S ENGINEERING DEPARTMENT.
- 9. THE REGISTERED ENGINEER OR LAND SURVEYOR SHALL CERTIFY THAT THE MINIMUM HORIZONTAL AND VERTICAL SEPARATION BETWEEN UTILITIES WITHIN PUBLIC RIGHT-OFWAY OR EASEMENTS HAS BEEN MAINTAINED AS REQUIRED BY LAW OR POLICY.
- 10. THE DEVELOPER SHALL PROVIDE ALL CONSTRUCTION STAKING FOR THE PROJECT.
- 11. THE DEVELOPER OR THE ENGINEER IS RESPONSIBLE FOR ARRANGING FOR THE RELOCATION OR REMOVAL OF ALL UTILITIES OR FACILITIES THAT ARE IN CONFLICT WITH THE PROPOSED PUBLIC IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE RELOCATION OF ALL UTILITIES, POWER POLES, IRRIGATION DRY-UPS, RESETS REMOVALS BY OTHERS, ETC.
- 12. THE CONTRACTORS SHALL LOCATE ALL UTILITIES PRIOR TO EXCAVATION AND AVOID DAMAGE TO SAME. CALL (602) 263-1100 FOR BLUE STAKE TWO WORKING DAYS PRIOR TO DIGGING. CALL SALT RIVER PROJECT FOR POLE BRACING, ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT (602) 273-8888.
- 13. WHEN GAS MAINS AND/OR SERVICES ARE EXPOSED, CONTACT THE CITY OF MESA AT (480) 644-2261 FOR INSPECTION OF THE EXPOSED PIPE AND COATING PRIOR TO BACKFILLING OF THE TRENCH.
- 14. CONTRACTORS SHALL COMPLY WITH THE PROVISIONS FOR TRAFFIC CONTROL AND BARRICADING PER THE CURRENT CITY OF MESA TRAFFIC BARRICADE MANUAL.
- 15. IF A FIRE HYDRANT IS NEEDED TO OBTAIN CONSTRUCTION WATER, THE CONTRACTOR SHALL OBTAIN A FIRE HYDRANT METER FROM PERMIT SERVICES AND PAY ALL APPLICABLE FEES AND CHARGES.
- 16. IF DURING THE CONSTRUCTION OF A PUBLIC FACILITY, THE CONTRACTOR FAILS TO OR IS UNABLE TO COMPLY WITH A REQUEST OF THE ENGINEERING CONSTRUCTION INSPECTOR, AND IT IS NECESSARY FOR CITY FORCES TO DO WORK THAT IS NORMALLY THE CONTRACTOR'S RESPONSIBILITY, THE CITY SHALL BE JUSTIFIED IN BILLING THE CONTRACTOR. EACH INCIDENT REQUIRING WORK BY CITY FORCES SHALL BE COVERED BY A SEPARATE BILLING AT THE CURRENT APPLICABLE RATES.
- 17. THE CONTRACTOR IS ADVISED THAT DAMAGE TO PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY INSPECTOR. UNLESS OTHERWISE APPROVED BY THE CITY, ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES AND SYSTEMS AS A RESULT OF CONTRACTOR'S ACTIVITIES SHALL BE BORNE BY THE CONTRACTOR.

# CITY OF MESA - MISCELLANEOUS NOTES

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

# LEGAL DESCRIPTION

THAT PORTION OF THE NORTHWEST QUARTER OF SECTION 26, TOWNSHIP 1 NORTH, RANGE 6 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

# COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 26;

THENCE NORTH 89 DEGREES 04 MINUTES 02 SECONDS EAST, ALONG THE NORTH LINE OF SAID SECTION, A DISTANCE OF 88.95 FEET;

THENCE SOUTH 00 DEGREES 55 MINUTES 58 SECONDS EAST, A DISTANCE OF OF 65.00 FEET TO THE SOUTH LINE OF THE NORTH 65.00 FEET OF SAID SECTION;
THENCE NORTH 89 DEGREES 04 MINUTES 02 SECONDS EAST, ALONG SAID SOUTH LINE, A

DISTANCE OF 284.36 FEET;
THENCE SOUTH 00 DEGREES 00 MINUTES 10 SECONDS EAST, A DISTANCE OF 234.34 FEET;
THENCE SOUTH 89 DEGREES 59 MINUTES 50 SECONDS WEST, A DISTANCE OF 299.33 FEET TO
THE EAST LINE OF THE WEST 75.00 FEET OF SAID SECTION;

THENCE SOUTH 00 DEGREES 00 MINUTES 10 SECONDS EAST, ALONG SAID EAST LINE, A DISTANCE OF 134.11 FEET TO THE POINT OF BEGINNING;
THENCE CONTINUING SOUTH 00 DEGREES 00 10 SECONDS EAST, ALONG SAID EAST LINE, A DISTANCE OF 201.48 FEET TO THE SOUTH LINE OF THE NORTH 630 FEET OF SAID SECTION;

DISTANCE OF 10.00 FEET TO THE EAST LINE OF THE WEST 65.00 FEET OF SAID SECTION;
THENCE SOUTH 00 DEGREES 00 MINUTES 10 SECONDS EAST, ALONG SAID LAST EAST LINE A
DISTANCE OF 141.81 FEET;
THENCE NORTH 89 DEGREES 01 MINUTES 19 SECONDS EAST, A DISTANCE OF 332.52 FEET;
THENCE NORTH 00 DEGREES 00 MINUTES 10 SECONDS WEST, A DISTANCE OF 343.03 FEET;
THENCE SOUTH 89 DEGREES 04 MINUTES 02 SECONDS WEST, A DISTANCE OF 322.53 FEET TO

THE EAST LINE OF SAID WEST 75.00 FEET OF SAID SECTION 26 AND THE POINT OF BEGINNING.

THENCE SOUTH 89 DEGREES 04 MINUTES 02 SECONDS WEST, ALONG SAID LAST SOUTH LINE, A

# **ENGINEERS NOTES**

- CONTRACTOR SHALL NOTIFY WESTWOOD PROFESSIONAL SERVICES OF ANY DISCREPANCIES BETWEEN THE CIVIL PLANS AND SITE CONDITIONS, A MINIMUM OF 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION IN THE AFFECTED AREA. FAILURE TO DO SO SHALL RESULT IN ANY DISCREPANCIES BEING THE RESPONSIBILITY OF THE CONTRACTOR
- DURING CONSTRUCTION, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE CONTROL OF EARTH SPILLAGE, RUNOFF AND CONSTRUCTION WATER AND SHALL PROTECT ADJACENT PROPERTY AND EXISTING STRUCTURES FROM SUCH.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CARE, MAINTENANCE, REPAIR OR REPLACEMENT OF EXISTING IMPROVEMENTS AND UTILITIES IN THE WORK AREA AND ON ADJACENT PROPERTIES WHICH HAVE BEEN REMOVED OR DAMAGED DURING THE COURSE OF CONSTRUCTION. ALL REPAIR, REPLACEMENT OR CLEANUP SHALL BE DONE TO THE SATISFACTION OF AND AT NO ADDITIONAL EXPENSE TO THE UTILITY COMPANY AND OWNER.
- 4. THE CONTRACTOR SHALL GIVE FORTY-EIGHT (48) HOURS NOTICE WHEN HE SHALL REQUIRE THE SERVICES OF THE ENGINEER OR ANY OTHER PERSON PROPERLY AUTHORIZED FOR SUCH PURPOSE FOR LAYING OUT OR TESTING ANY PORTION THE WORK.
- 5. THE CONTRACTOR SHALL PRESERVE ALL STAKES SET FOR THE LINES, LEVELS OR MEASUREMENTS OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEER. ANY EXPENSE INCURRED IN REPLACING ANY STAKES WHICH THE CONTRACTOR OR HIS SUBORDINATES MAY HAVE FAILED TO PRESERVE SHALL BE CHARGED TO THE CONTRACTOR.
- 6. ESTIMATED QUANTITIES SHOWN ARE FOR BONDING & PERMIT PURPOSES ONLY. CONTRACTOR TO MAKE HIS OWN DETERMINATION OF QUANTITIES.
- EXISTING UNDER GROUND UTILITIES SHOWN ARE PER UTILITY COMPANY RECORDS. CONTRACTOR TO FIELD VERIFY LOCATION/ELEVATION OF ALL UTILITIES PRIOR TO BEGINNING CONSTRUCTION.

# CITY OF MESA - PUBLIC WATER UTILITY NOTES

- 1. ALL PUBLIC WATER MAIN MATERIALS SHALL BE PER SECTION 610.3 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS. ALL DUCTILE IRON PIPE (D.I.P.) WATER MAINS SHALL HAVE POLYETHYLENE CORROSION PROTECTION PER SECTION 610.5 OF THE M.A.G. UNIFORM STANDARD SPECIFICATIONS.
- 2. ALL NEW WATERLINES THAT REQUIRE SERVICE DISRUPTION IN ORDER TO CONNECT TO THE CITY SYSTEM SHALL REQUIRE A DAYTIME TIE-IN. THE CONTRACTOR SHALL COMPLETE ALL WORK NECESSARY TO RESTORE UTILITY SERVICE AND FULLY OPEN THE TIE-IN AREA TO VEHICULAR TRAFFIC WITHIN THE TIME FRAME ALLOWED BY THE CITY OF MESA ENGINEERING CONSTRUCTION INSPECTOR.
- 3. THE CONTRACTOR SHALL INSTALL A TEMPORARY PLUG OR VALVE ON A SECTION OF NEW WATER LINE TO TEST LINES BEFORE CONNECTING TO THE EXISTING PUBLIC WATER SYSTEM WHERE THERE IS NO WATER VALVE ON THE EXISTING LINE.
- 4. WATER LINE TESTS SHALL BE CONDUCTED SO THAT EXISTING WATER LINES WILL NOT BE INCLUDED IN THE TEST OF THE NEW LINE.
- 5. THE REQUIRED BACKFLOW PREVENTION ASSEMBLY SHALL BE A MANUFACTURER AND MODEL DESIGNATED IN THE CURRENT "LIST OF APPROVED BACKFLOW PREVENTION ASSEMBLIES" AS PUBLISHED BY THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
- 6. THE BACKFLOW PREVENTION ASSEMBLY SHALL BE TESTED AND APPROVED BY A CERTIFIED TECHNICIAN DESIGNATED IN THE CURRENT CITY OF MESA "LIST OF APPROVED INSPECTORS" PRIOR TO THE REQUEST FOR FINAL INSPECTION.
- 7. IN ACCORDANCE WITH ARIZONA ADMINISTRATIVE CODE (A.A.C). R18-4-213, ALL MATERIALS ADDED AFTER JANUARY 1, 1993, WHICH MAY COME INTO CONTACT WITH DRINKING WATER, SHALL CONFORM TO NATIONAL SANITATION FOUNDATION STANDARDS 60 AND 61.
- 8. PER CITY ORDINANCE NO. 2341, ALL WATER METERS ARE TO BE PURCHASED FROM THE CITY OF MESA. METERS TWO INCHES OR LESS WILL BE DELIVERED AND INSTALLED BY CITY FORCES. METERS LARGER THAN TWO INCHES WILL BE DELIVERED BY THE CITY AND INSTALLED BY THE CONTRACTOR AND REQUIRE SCHEDULING AND INSPECTIONS WITH CITY FORCES (CONTACT BUILDING SAFETY PERMIT SERVICES (480)-644-4BSD FOR THE SPECIFIC PROCEDURE).

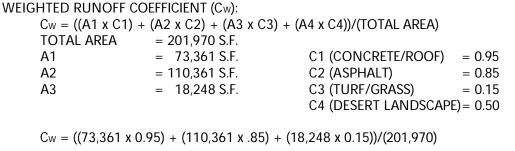
# CITY OF MESA - STORMWATER DRAINAGE

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

# PRELIMINARY GRADING AND DRAINAGE PLAN MCDOWELL ROAD MINI STORAGE

BEING A PORTION OF THE NORTHWEST QUARTER OF SECTION 35, TOWNSHIP 2 NORTH, RANGE 6 EAST, OF THE GILA & SALT RIVER BASE & MERIDIAN, MARICOPA COUNTY, ARIZONA

### SHEET INDEX COVER SHEET C-1GRADING & DRAINAGE C-2SITE AREA GRADING DETAILS & C-3SECTIONS = 201,970 SQ.FT. OR 4.64 ACRES MORE OR LESS 180,218 SQ.FT. OR 4.14 ACRES MORE OR LESS STORMDRAIN DETAILS C-4 UTILITY PLAN C-5 ASSESSORS PARCEL NUMBER A.P.N. 141-42-009 RETENTION CALCULATIONS **VOLUME REQUIRED - 100 YEAR 2 HOUR STORM EVENT** BENCHMARK $V_R = C \times P/12 \times A$ CITY OF MESA, BRASS TAG ON TOP OF CURB LOCATED ON THE SOUTHWEST CORNER OF HIGLEY ROAD AND MCDOWELL ROAD. VOLUME REQUIRED (CU.FT.) **ELEVATION: 1393.69 CITY OF MESA DATUM** 2.15 (100YR, 2HR FROM NOAA ATLAS 14) WEIGHTED RUNOFF COEFFICIENT AREA IN SQUARE FEET (NET)



= 3.748 C.F.

 $C_W = 0.82$ 

V<sub>R</sub> = 29,673 C.F.

VOLUME PROVIDED:

SURFACE RETENTION:

OFFSITE RETENTION BASIN A:

REQUIRED

 $V_R = 2.15/12 \times 201.970 \text{ SQ.FT.} \times 0.82$ 

PROVIDED = 4,016 C.F. @ 1' DEEP

UNDERGROUND RETENTION:

MC4500 STORMTECH CHAMBERS

REQUIRED = 25,924 C.F.

155 CHAMBERS @ 162.6 C.F. PER CHAMBER

8 END CAPS @ 108.6 C.F. PER END CAP

PROVIDED = 26,072 C.F.

CITY OF MESA - MISCELLANEOUS NOTES (CONT.)

BALANCE OF THE UTILITY TRENCHING.

VERTICAL CONSTRUCTION WITH COMBUSTIBLE MATERIALS SHALL NOT BEGIN PRIOR TO

STRUCTURE CONSTRUCTION, ALTERATION OR DEMOLITION SHALL COMPLY WITH

REQUIREMENTS OF I.F.C. CHAPTER 14 AND N.F.P.A. 241, 2006 I.F.C. SECTION 1401.1

10. CONTRACTORS SHALL VERIFY ALL INVERT ELEVATIONS BEFORE PROCEEDING WITH THE

11. ALL MANHOLES PER M.A.G. DETAILS MUST NECK DOWN TO USE THE STANDARD 30INCH

FRAME AND COVER. STEPS SHALL NOT BE INSTALLED WITHIN THE MANHOLE.

THE ACCEPTANCE OF FIRE ACCESS ROAD AND FIRE HYDRANTS, 2006 I.F.C. SECTION 501.4

TOTAL VOLUME PROVIDED: 30,088 C.F.

**VOLUME REQUIRED:** 

RETENTION VOLUME TABLE

VOLUME REQUIRED VOLUME PROVIDED AS—BUILT VOLUME
29,673 30,088

# FLOOD PLAIN THE SUBJECT PROPERTY IS LOCATED WITHIN SHADED ZONE "X" DEFINED AS "AREAS OF 0.2% ANNUAL CHANCE FLOOD PER FIRM MAP NO. 04013C2280L DATED NOVEMBER 4, 2015. ZONING THE SUBJECT PROPERTY IS CURRENTLY ZONED LI (LIGHT INDUSTRIAL) PER CITY OF MESA PLANNING DIVISION. UTILITY UNDERGROUND UTILITIES & STORM DRAIN LOCATIONS SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS AND "BLUE STAKE" MARKINGS AND AVAILABLE MAPS OBTAINED FROM UTILITY COMPANIES AND THE CITY OF MESA, AZ... ACTUAL LOCATIONS MAY VARY FROM LOCATIONS SHOWN HEREON. CONTRACTOR TO VERIFY LOCATION AND DEPTH PRIOR TO CONSTRUCTION. APPROVALS APPROVALS APPROVED: MARICOPA COUNTY ENVIRONMENTAL SERVICES DEPARTMENT DATE

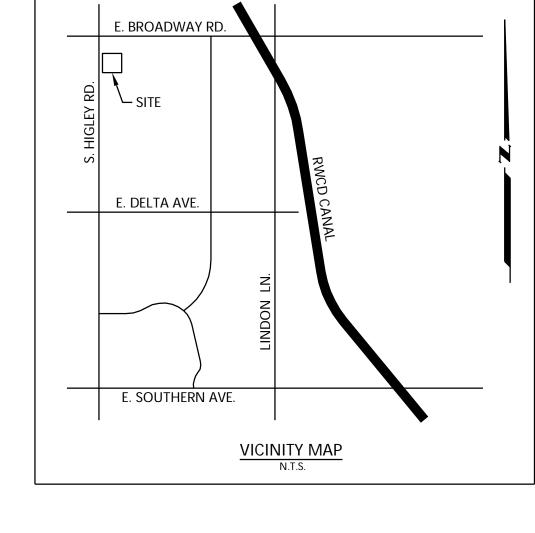
# AS-BUILT CERTIFICATION

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

REGISTERED ENGINEER / LAND SURVEYOR

CITY COUNCIL. OR FROM BUILDING AND ENGINEERING STANDARDS.

REGISTRATION NUMBER



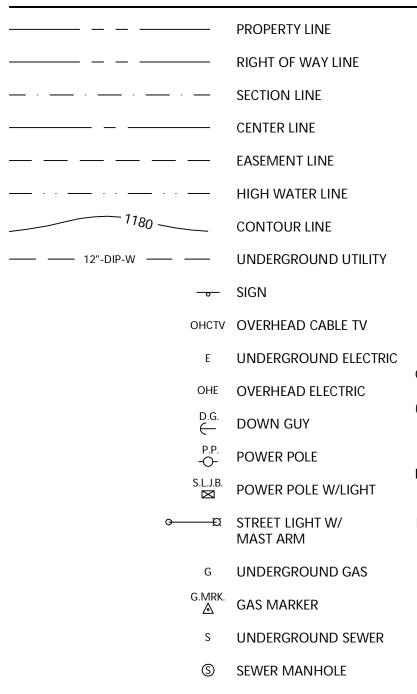
# OWNER

ARC SERVICES, INC. 14010 N. SUSSEX PLACE FOUNTAIN HILLS, AZ 85288 CONTACT: PHIL GOLLON TELE: 480-837-0761 EMAIL:PGOLLON@ARCSERVICESINC.COM

# **ENGINEER**

WESTWOOD PROFESSIONAL SERVICES
6909 EAST GREENWAY PARKWAY, SUITE 250
SCOTTSDALE, AZ 85254
TELE: 480-747-6558
CONTACT: DAVID BOHN, P.E.
EMAIL: DAVID.BOHN@WESTWOODPS.COM





# UNDERGROUND STORM DRAIN DRAIN CLEAN-OUT UNDERGROUND TELEPHONE

DRAIN CLEAN-OUT

UNDERGROUND
TELEPHONE

TELEPHONE CABINET

TELEPHONE RISER

UNDERGROUND
WATER

W UNDERGROUND WATER

W.M. WATER METER

W.V. 
⊗ WATER VALVE

F.H. 
FIRE HYDRANT

C.O.M. CITY OF MESA

(R&M) RECORD & MEASURED

FND. FOUND

R.O.W. RIGHT OF WAY

M.C.R. MARICOPA COUNTY

RECORDER OFFICE

IND GAS

A.P.N. ASSESSOR PARCEL

NUMBER

TC TOP CURB ELEVATION

G GUTTER ELEVATION

P PAVEMENT ELEVATION

C CONCRETE ELEVATION

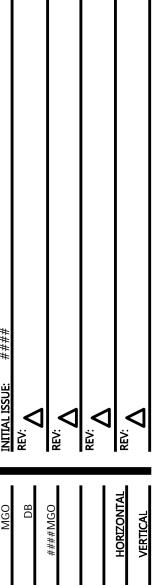
NG NATURAL GROUND

INV INVERT

THE APPLICANT HEREBY REPRESENTS THAT THESE CONSTRUCTION DOCUMENTS COMPLY WITH ALL ZONING APPROVALS, DESIGN REVIEW BOARD APPROVALS, BUILDING AND ENGINEERING STANDARDS AND ALL APPLICABLE REQUIREMENTS OF THE MESA CITY CODE. THE APPLICANT ACKNOWLEDGES AND AGREES ANY DEVIATION FROM OF FAILURE TO COMPLY WITH THE REQUIREMENTS OF ANY SUCH APPROVAL OR STANDARD WILL RESULT IN THE DENIAL OF CERTIFICATE OF OCCUPANCY AND MAY RESULT IN ADDITIONAL PENALTIES AND/OR ENFORCEMENT ACTIONS AS PROVIDED IN THE MESA ZONING AND BUILDING CODES. APPROVAL OF THE STIPULATED BY DESIGN REVIEW BOARD, PLANNING & ZONING BOARD, AND

Contact Arizona 811 at least two full working days before you begin excavation

Call 811 or click Arizona811.com



Mestwoodps.com

ORAGE Phone (480) 747-

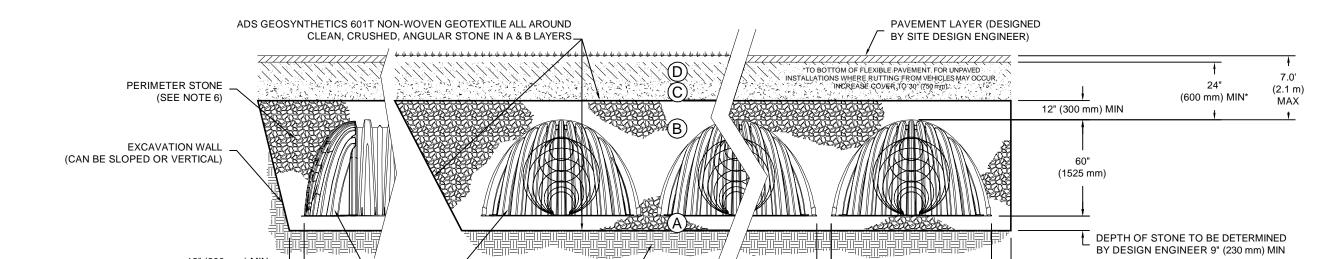
DOWELL ROAD N

 $\sim$ 

OF OF 11/27/2017

	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.
С	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 <sup>1</sup> A-1, A-2-4, A-3  OR  AASHTO M43 <sup>1</sup> 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS 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.
В	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 4	NO COMPACTION REQUIRED.
А	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE, NOMINAL SIZE DISTRIBUTION BETWEEN 3/4-2 INCH (20-50 mm)	AASHTO M43 <sup>1</sup> 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. 23

- 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. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE WOULD STAT
- 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



(230 mm) MIN

# NOTES:

- 1. MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"
- 2. MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS"

SUBGRADE SOILS

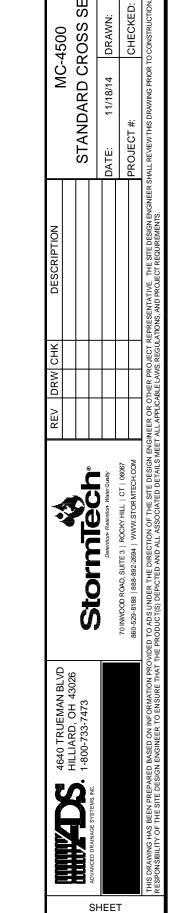
(SEE NOTE 5)

- 3. "ACCEPTABLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- 4. THE "SITE DESIGN ENGINEER" REFERS TO THE ENGINEER RESPONSIBLE FOR THE DESIGN AND LAYOUT OF THE STORMTECH CHAMBERS FOR THIS PROJECT

END CAP

EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

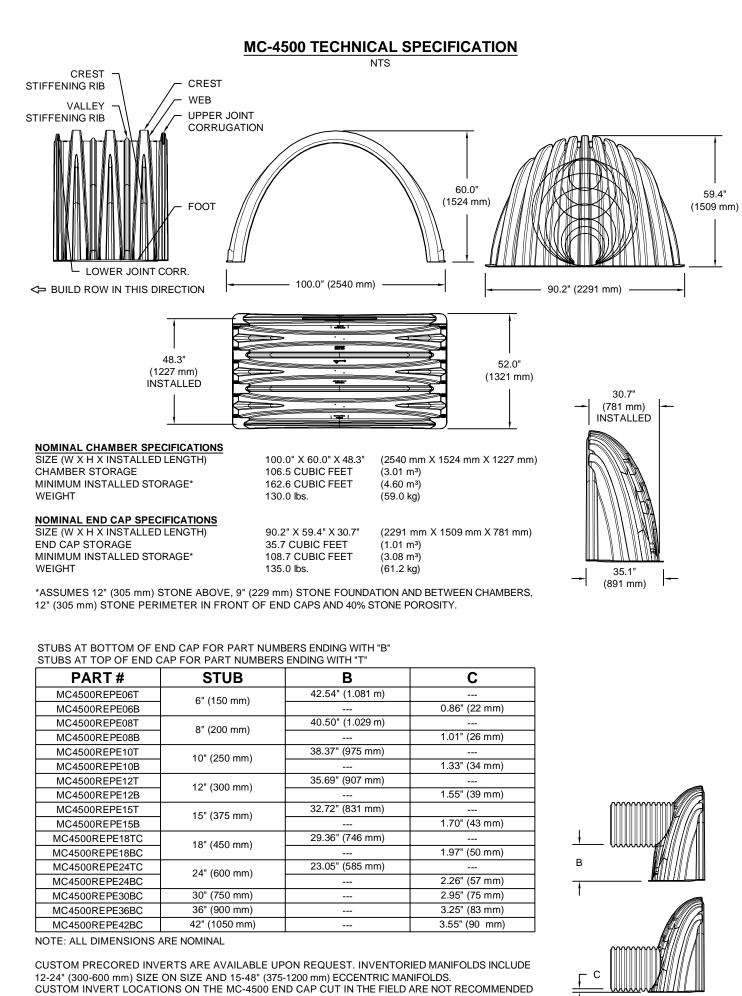
- 5. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- 6. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- 7. 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.

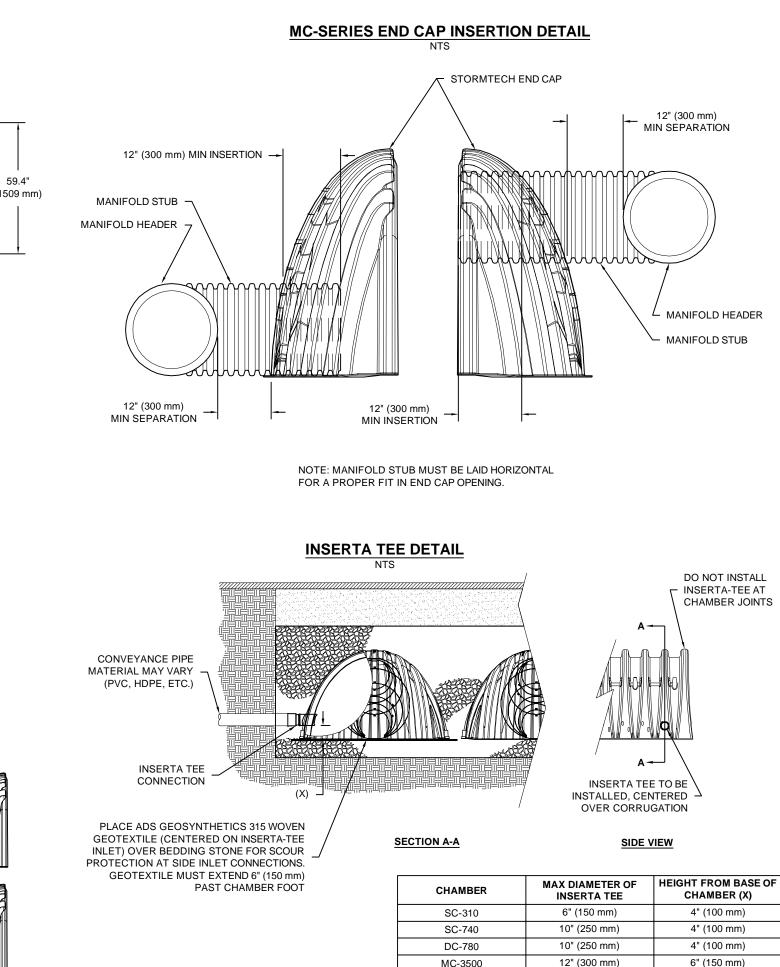


SHEET

FOR PIPE SIZES GREATER THAN 10" (250 mm)

THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHTEST POSSIBLE FOR THE PIPE SIZE.





MC-4500

PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS.

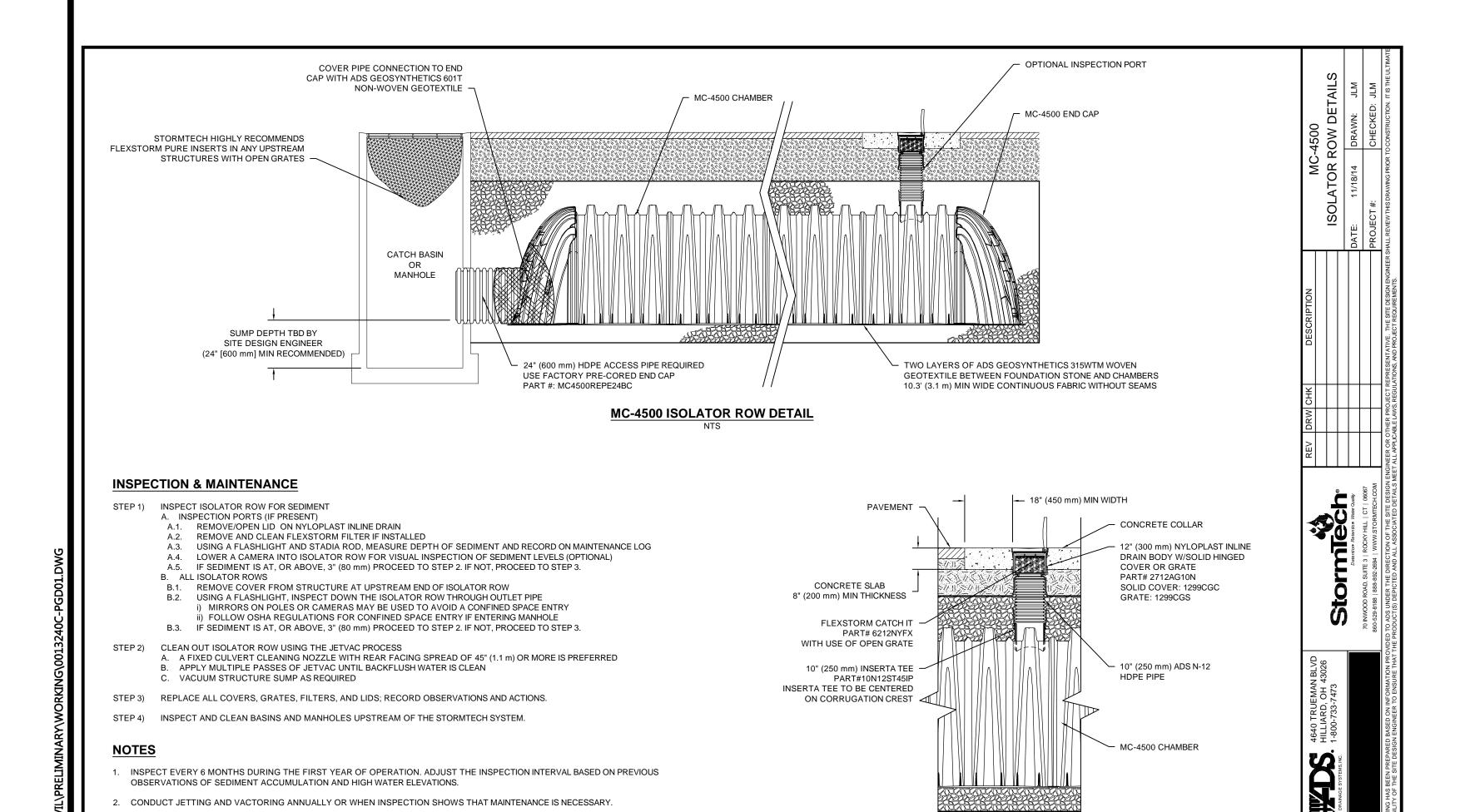
CONTACT STORMTECH FOR MORE INFORMATION.

12" (300 mm)

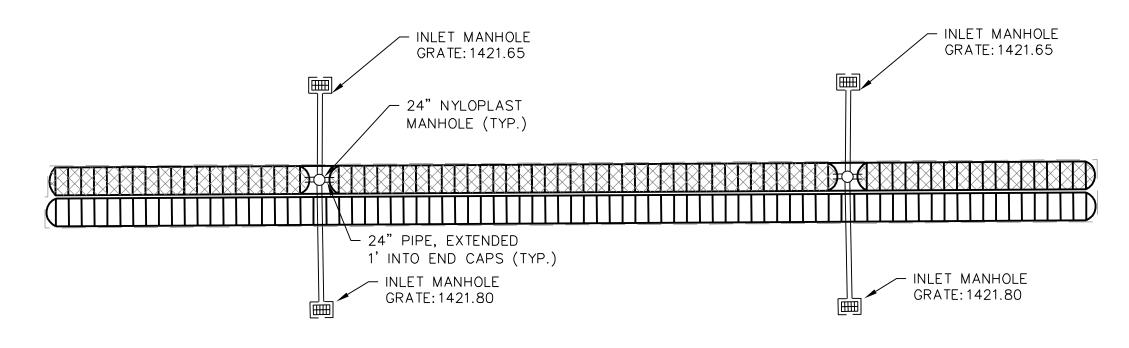
INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS

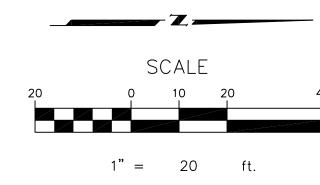
GASKETED & SOLVENT WELD N-12 HP STORM C-900 OR DUCTHE IRON

8" (200 mm)



MC-4500 INSPECTION PORT DETAIL





- SAWCUT & REMOVE EXISTING CONCRETE SIDEWALK / CONCRETE CURB
- 2 SAWCUT & REMOVE EXISTING ASPHALT PAVEMENT, 2' WIDE MIN.

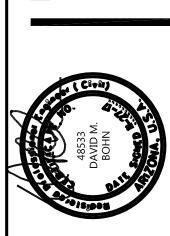
# OFF-SITE CONSTRUCTION NOTES

- 1 CONSTRUCT 30' WIDE DRIVEWAY PER C.O.M. DETAIL M-42
  - 2 CONSTRUCT CONCRETE SIDEWALK PER M.A.G. STD. DTL. 230.
  - 3 EXISTING CURB TO REMAIN. PROTECT FROM DAMAGE.

# ON-SITE CONSTRUCTION NOTES

- CLEAR SITE; REMOVE VEGETATION, DEBRIS AND EXISTING IMPROVEMENTS WITHIN LIMITS OF NEW CONSTRUCTION.
- 2 CONSTRUCT SINGLE CURB PER M.A.G. STD. DTL. 222, TYPE 'A'
- 3 CONSTRUCT CURB AND GUTTER PER M.A.G. STD. DTL. 220-1 , TYPE 'A'
- 4 CONSTRUCT CURB TERMINATION PER M.A.G. STD. DTL. 222.
- CONSTRUCT CONCRETE SIDEWALK PER M.A.G. STD. DTL. 230. SEE ARCHITECTURAL PLANS FOR FINISH AND SCORING DETAILS.

- 7 CONSTRUCT SIDEWALK RAMP.
- 8 INSTALL ASPHALT PAVEMENT SECTION: 3" A.C. ON 6" A.B.C. OR PER SOILS REPORT WHICHEVER IS GREATER
- INSTALL 8" ADS N-12 MEGA GREEN WT IB STORM DRAIN PIPE (ASTM F2487 PIPE) OR EQUIVALENT. LENGTH PER PLAN WITH 1% MINIMUM SLOPE TOWARD THE UNDERGROUND RETENTION. LENGTH
- 10 INSTALL STORMTECH SYSTEM MC-4500 CHAMBER AND END CAP SYSTEM PER DETAIL ON SHEET C-4
- (11) CONSTRUCT CATCH BASIN PER M.A.G. DETAIL 535, TYPE F
- 12) PAINT STRIPING. SEE ARCHITECTURAL PLANS FOR DETAILS.
- 13) PAVERS. SEE ARCHITECTURAL PLANS FOR DETAILS.



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Contact Arizona 811 at least two full working days before you begin excavatio