

WATER AND SEWER PLANS
FOR

PARKER ADVENTIST HOSPITAL MOB III

A PARCEL OF LAND BEING A PORTION OF LOT 1, TRACT A, CROWN POINT F#1, AMENDMENT 28
SITUATED IN THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN,
TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

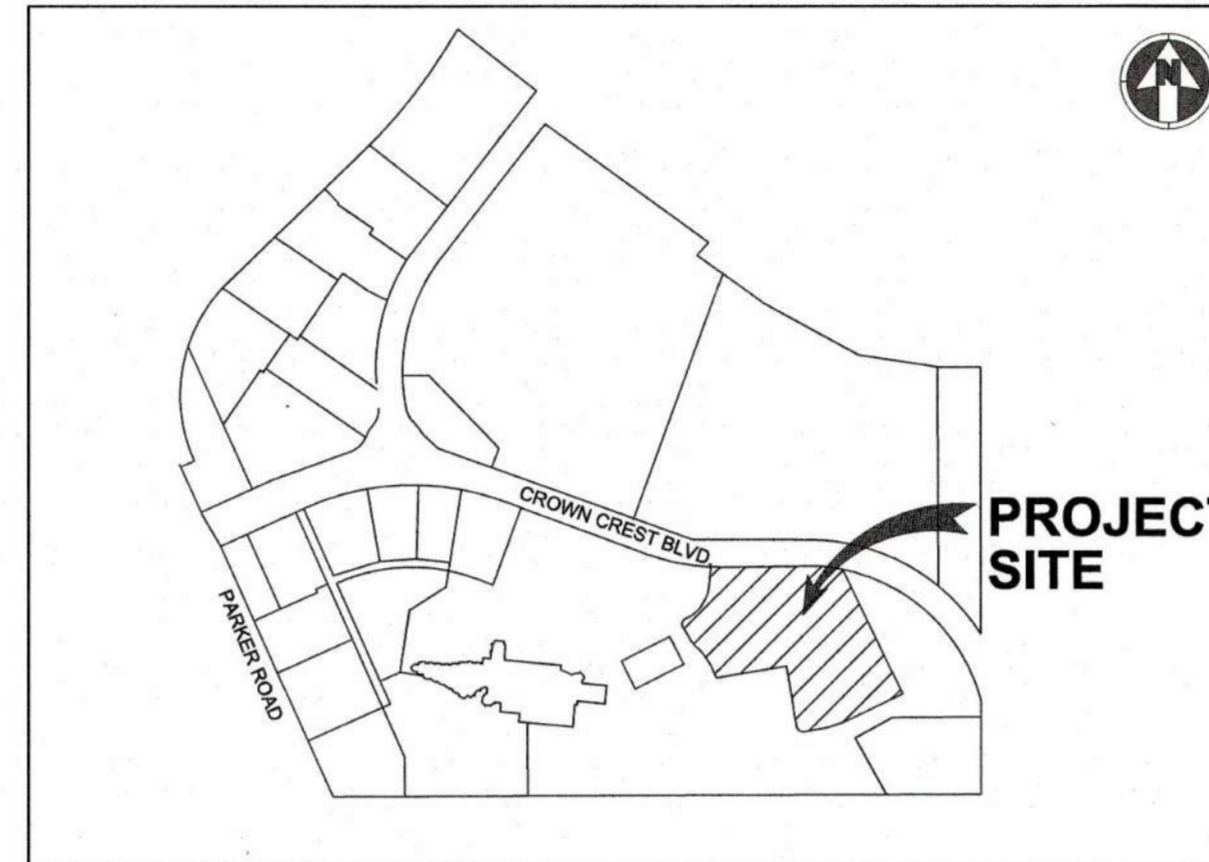


S.A. MIRO INC.
CONSULTING ENGINEERS
4582 South Ulster Street Pkwy.
Suite 750 Denver, CO 80237
ph. 303-741-3737
fax 303-694-3134



Know what's below.
Call before you dig.

Sheet Number	Sheet Title
C-500	UTILITY COVER
C-501	UTILITY NOTES AND LEGEND
C-511	UTILITY PLAN
C-521	SANITARY SEWER PLAN AND PROFILE
C-531	WATER DETAILS
C-532	WATER DETAILS
C-533	WATER DETAILS
C-534	SANITARY SEWER DETAILS
I100	IRRIGATION COVER SHEET
I101	IRRIGATION PLAN



VICINITY MAP
NO SCALE

ENGINEER'S STATEMENT

I HEREBY CERTIFY THAT THESE PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF COLORADO.

JASON DEAN CARR
REGISTERED PROFESSIONAL ENGINEER
COLORADO NO. 33854

12/19/19

DATE SIGNED

AGENCY LIST

ELECTRIC-IREA
PO DRAWER A
5496 US HWY 85
SEDALIA, CO. 80135
303-698-3100
CONTACT: BROOKS KAUFMAN

GAS-XCEL ENERGY
2070 SOUTH VALENTIA STREET
DENVER, CO. 80231
1-800-628-2121
CONTACT: DESIGN MANAGER

FIRE-SOUTH METRO FIRE RESCUE
9195 E. MINERAL AVE
CENTENNIAL, CO 80112
720-989-2000
CONTACT: RANDY CAPRA

TOWN OF PARKER
PLANNING AND BUILDING DEPT.
20120 E. MAIN STREET
PARKER, CO. 80134
303-841-2332
CONTACT: PAUL WORKMAN

TOWN OF PARKER-PUBLIC WORKS
9200 MOTSENBOCKER ROAD
PARKER, CO 80134
303-840-9546
CONTACT: MIKE WAUGH

COTTONWOOD WATER & SANITATION DISTRICT
188 INVERNESS DR. WEST SUITE 150
ENGLEWOOD, CO 80112
303-792-9509
DISTRICT MANAGER: RANDY WARREN
MANAGER ENGINEER:
DISTRICT ENGINEER: SCOTT BARNETT, P.E.
PHONE: 303-649-9857

CABLE-COMCAST
6850 S. TUSCON WAY
ENGLEWOOD, CO. 80112
303-603-5605
CONTACT: KEVIN YOUNG

TRI-COUNTY HEALTH DEPARTMENT
7000 E. BELLEVUE AVENUE
GREENWOOD VILLAGE, CO. 80111
303-220-9200
CONTACT: CAROL MACLENNAN

TELEPHONE - CENTURY LINK
LOCAL NETWORK OPERATIONS
9750 E. COSTILLA AVENUE
ENGLEWOOD, CO. 80112
303-792-1840
CONTACT: WILLIAM BENSON

CROWN POINT ARCHITECTURAL
CONTROL COMMITTEE
27805 MEADOW DRIVE, SUITE 11
EVERGREEN, CO 80439 303-674-7856
CONTACT: TIM LEONARD

OWNER INFORMATION

PARKER ADVENTIST HOSPITAL
9395 CROWN CREST BLVD.
PARKER, CO. 80138
PHONE: 303-269-4014
CONTACT: JONATHON FISHER / CFO

DEVELOPER INFORMATION

CP DEVELOPMENT
OWNER REPRESENTATIVE:
GUIDE MANAGEMENT, LLC
CONTACT: KATE REILLY
PHONE: 720-255-6879
EMAIL: KATE@GUIDEMGMT.COM

DESIGN INFORMATION

ARCHITECT: RTA ARCHITECTS
PHONE: 719-471-7566

CIVIL ENGINEER: S. A. MIRO, INC
PHONE: 303-741-3737

LANDSCAPE ARCHITECT: GROUND LOGIC INC.
PHONE: 303-733-8333

PHOTOMETRIC ENGINEER: SSR, INC.
PHONE: 303-779-1222

FIRE FLOW REQUIREMENTS ARE 3,125 GPM MINIMUM @ 20 PSI
RESIDUAL PRESSURE
THIS BUILDING REQUIRES 4 FIRE HYDRANTS TO MEET FIRE-FLOW
REQUIREMENTS. EACH FIRE HYDRANT MUST SUPPLY 1500 GPM
MINIMUM @ 20 PSI RESIDUAL PRESSURE

CODE USED FOR ANALYSIS: 2018 IFC
OCCUPANCY GROUP: S2
CONSTRUCTION TYPE: II-B
FIRE FLOW CALCULATION AREA: 88,291 SF

COTTONWOOD WATER AND SANITATION DISTRICT SIGNATURE

THE DISTRICT ENGINEER AND MANAGER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL DISTRICT ENGINEER, AT 303-649-9857. THE DISTRICT ENGINEER AND SUPPORTING STAFF WILL OBSERVE THE WORK FOR COMPLIANCE WITH THE DISTRICT SPECIFICATIONS. THE DEVELOPER/OWNER WILL BE CHARGED FOR CONSTRUCTION OBSERVATION AND BE BILLED BY THE DISTRICT. PAYMENT MUST BE RECEIVED IN FULL PRIOR TO FINAL ACCEPTANCE OF THE NEW LINES. CONSTRUCTION OBSERVATION ASSISTS IN QUALITY CONTROL IN ACHIEVING PERFORMANCE WITH THE DISTRICT SPECIFICATIONS, BUT DOES NOT GUARANTEE THE CONTRACTOR'S PERFORMANCE. SUCH CONSTRUCTION OBSERVATION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATION TO CONSTRUCT FACILITIES IN ACCORDANCE WITH REGULATIONS. WORK NOT PERFORMED IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS WILL NOT BE ACCEPTED. THESE PLANS HAVE BEEN REVIEWED FOR WATER AND SANITARY SEWER ONLY.

REVIEWED FOR COTTONWOOD
WATER AND SANITATION DISTRICT

DISTRICT MANAGER
DATE: 1/3/2020

DISTRICT ENGINEER
DATE: 1/3/2020

DATE	DESCRIPTION	REV.
		1
		2
		3
		4
		5
		6
		7
		8

CLIENT NAME: PARKER ADVENTIST HOSPITAL
PROJECT NAME: PARKER MOB III
DRAWING TITLE: 9403 CROWN CREST BLVD. UTILITY COVER
FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C500-UTIL-COVR.dwg C-500 - 12/18/2019

BENCHMARK:

THE SITE BENCHMARK IS DOUGLAS COUNTY CONTROL MONUMENT NO. 1.115026, 473.35± NORTH AND 1959.02± WEST OF THE WEST 1/4 CORNER OF SECTION 3, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE 6TH PRINCIPAL MERIDIAN. 3-1/2" ALUMINUM CAP, ELEVATION 5759.78.

BASIS OF BEARING:

BEARINGS ARE BASED ON THE EAST LINE OF THE NORTHWEST QUARTER OF SECTION 10, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN, BEING MONUMENTED ON THE SOUTH END BY A #6 REBAR WITH A 3.25" ALUMINUM CAP IN RANGE BOX "PLS 29412" AND ON THE NORTH END BY A #6 REBAR WITH A 3.25" ALUMINUM CAP "LS 9329". SAID LINE HAVING A BEARING OF NORTH 00°07'01" WEST, 2678.56 FEET AS DEPICTED ON THE CROWN POINT F#1, 4TH AMENDMENT PLAT. THE BEARINGS SHOWN ON THIS SURVEY ARE BASED ON THE CROWN POINT FILING NO. 1, 17TH AMENDMENT.

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE
DATE: 12/23/2019

(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.



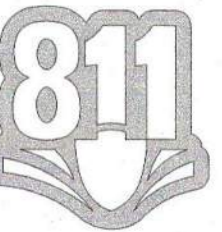
DESIGNED BY: MHV
DRAWN BY: DAT
CHECKED BY: JDC

DATE: 12/10/2019
MIRO JOB NUMBER: 18057
CLIENT JOB NUMBER: 18057

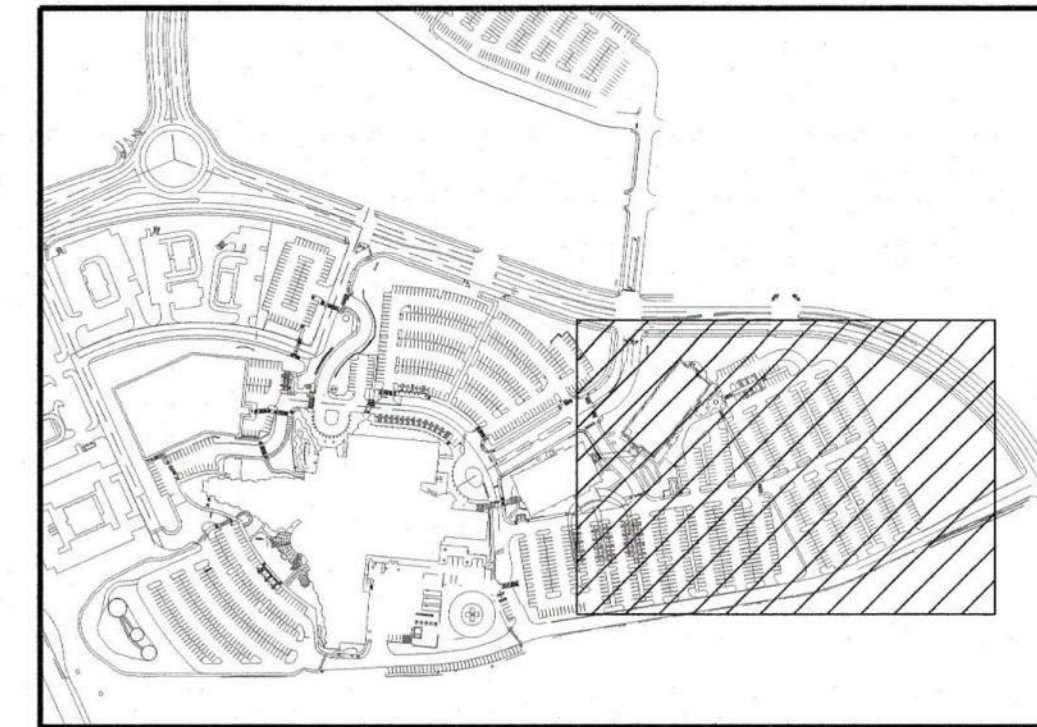
DRAWING NUMBER:
C-500



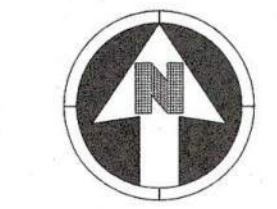
S.A. MIRO INC.
CONSULTING ENGINEERS
4582 South Ulster Street Pkwy.
Suite 750 Denver, CO 80237
ph. 303-741-3737
fax 303-694-3134



Know what's below.
Call before you dig.



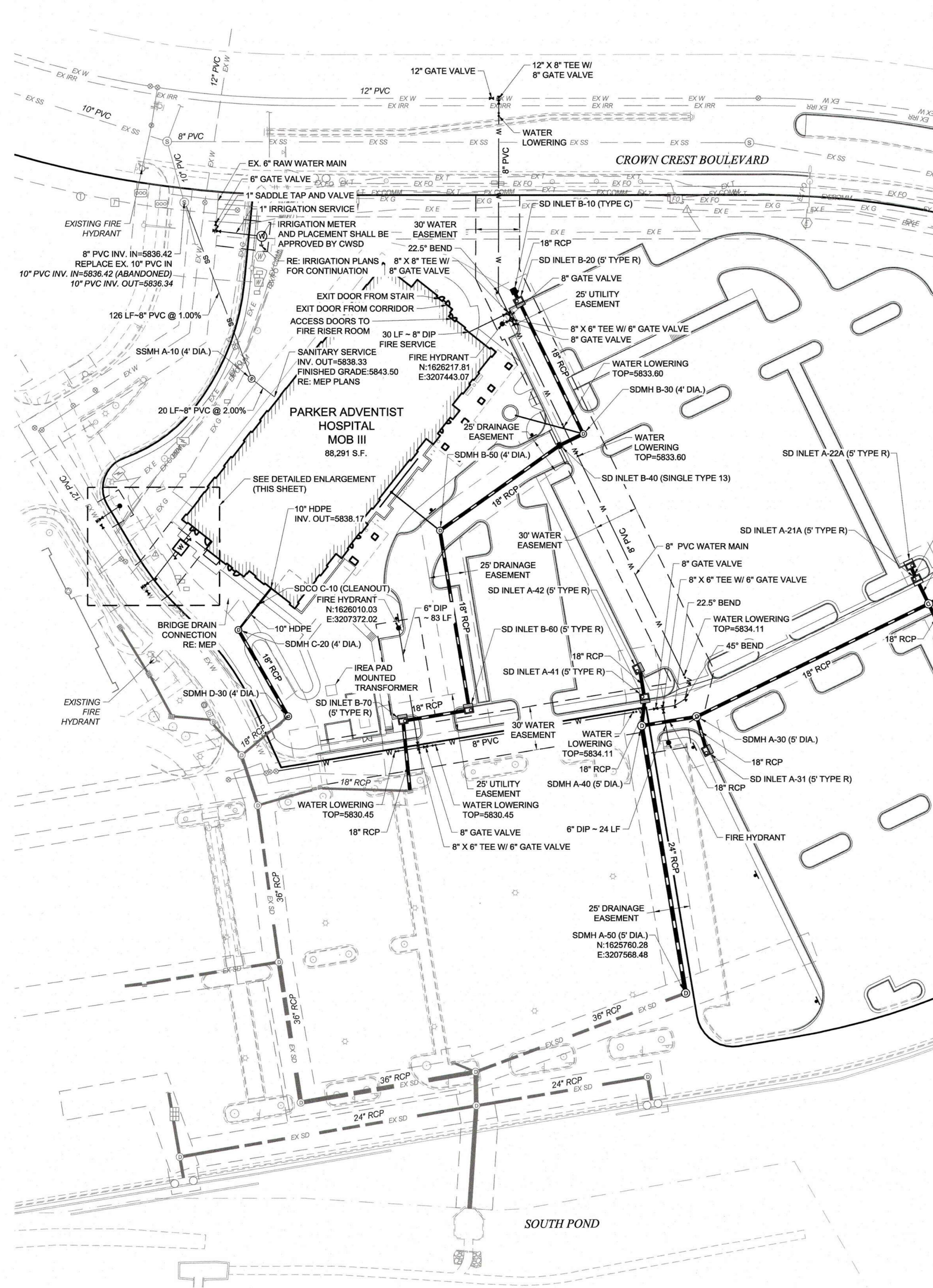
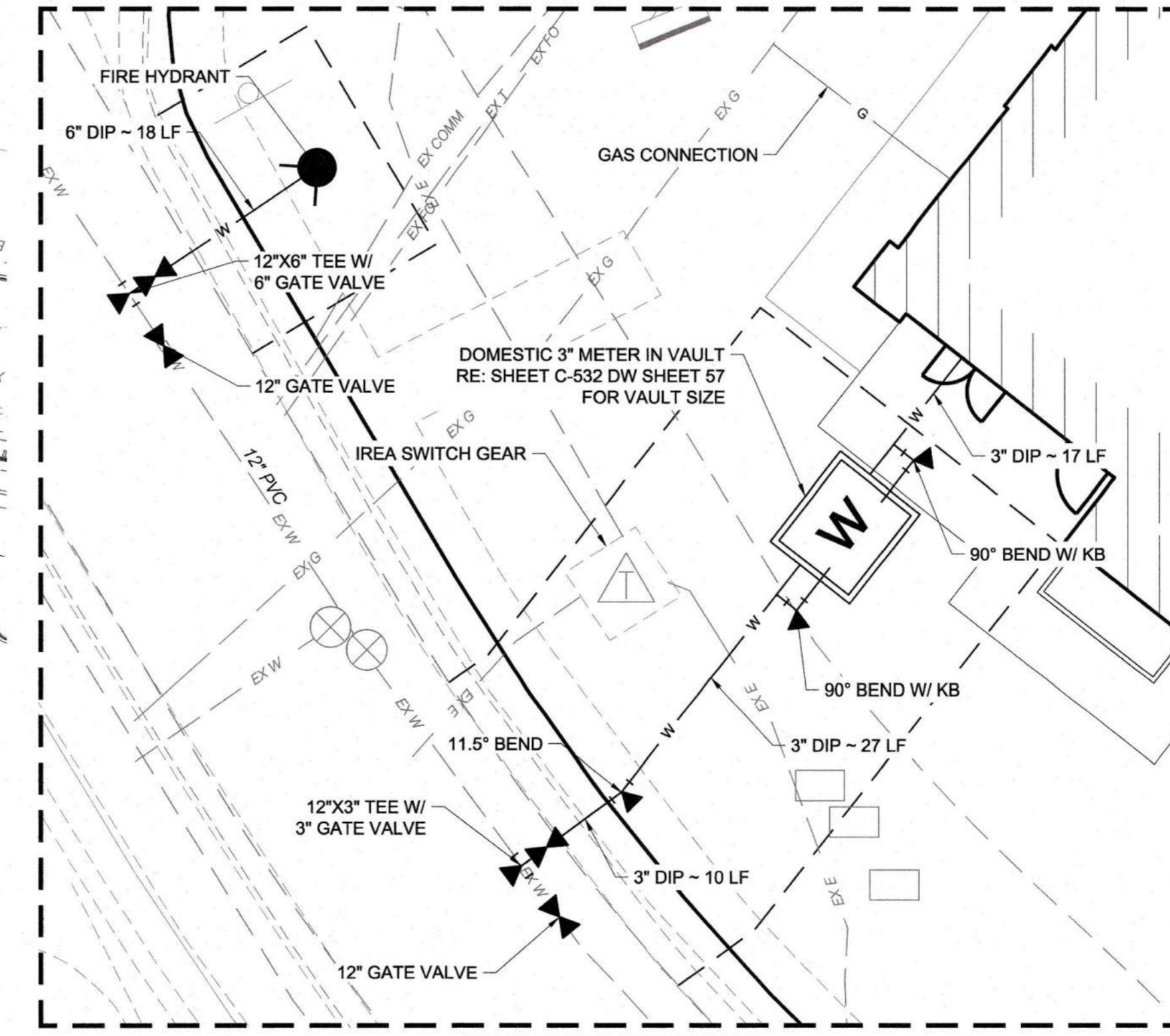
KEY MAP
NOT TO SCALE



SCALE: 1" = 40'

NOTES:

1. SEE SHEET C-501 FOR CIVIL NOTES AND LEGEND.
2. SEE SHEETS C-521 FOR SEWER PROFILE.
3. THE PROPOSED UTILITY CONNECTION WILL REQUIRE A TOWN RIGHT-OF-WAY PERMIT PRIOR TO COMMENCING WORK. THE TOWN PREFERENCES CONNECTIONS TO BE BORED TO THE EXTENT POSSIBLE, AND ANY STREET CUT ALLOWED BY THE TOWN WILL BE REQUIRED TO BE PATCHED ACCORDING TO THE TOWN'S CONSTRUCTION STANDARDS AND DETAILS. THE LIMITS OF PATCHING WILL BE DETERMINED BY THE TOWN AT THE TIME OF CONSTRUCTION. THE TOWN OF PARKER DOES NOT ALLOW ROADWAY CLOSURES FOR UTILITY WORK.



COTTONWOOD WATER AND SANITATION DISTRICT SIGNATURE

THE DISTRICT ENGINEER AND MANAGER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL THE DISTRICT, AT 303-649-9857. THE DISTRICT ENGINEER AND SUPPORTING STAFF WILL OBSERVE THE WORK FOR COMPLIANCE WITH THE DISTRICT SPECIFICATIONS. THE DEVELOPER/OWNER WILL BE CHARGED FOR CONSTRUCTION OBSERVATION AND BE BILLED BY THE DISTRICT. PAYMENT MUST BE RECEIVED IN FULL PRIOR TO FINAL ACCEPTANCE OF THE NEW LINES. CONSTRUCTION OBSERVATION ASSISTS IN QUALITY CONTROL IN ACHIEVING CONFORMANCE WITH THE DISTRICT SPECIFICATIONS, BUT DOES NOT GUARANTEE THE CONTRACTORS PERFORMANCE. SUCH CONSTRUCTION OBSERVATION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATION TO CONSTRUCT FACILITIES IN ACCORDANCE WITH REGULATIONS. WORK NOT PERFORMED IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS WILL NOT BE ACCEPTED. THESE PLANS HAVE BEEN REVIEWED FOR WATER AND SANITARY SEWER ONLY.

REVIEWED FOR COTTONWOOD
WATER AND SANITATION DISTRICT

[Signature] 1/3/2020
DISTRICT MANAGER

[Signature] 1/3/2020
SCOTT BARNETT
DISTRICT ENGINEER

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

[Signature] 12/23/2019
FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE DATE

(NOTE - UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENT OF NFPA 24 WHEN SUBMITTING FOR REVIEW.

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLANS DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER

TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

REV.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		

CLIENT NAME: **PARKER ADVENTIST HOSPITAL**

PROJECT NAME: **PARKER MOB III**

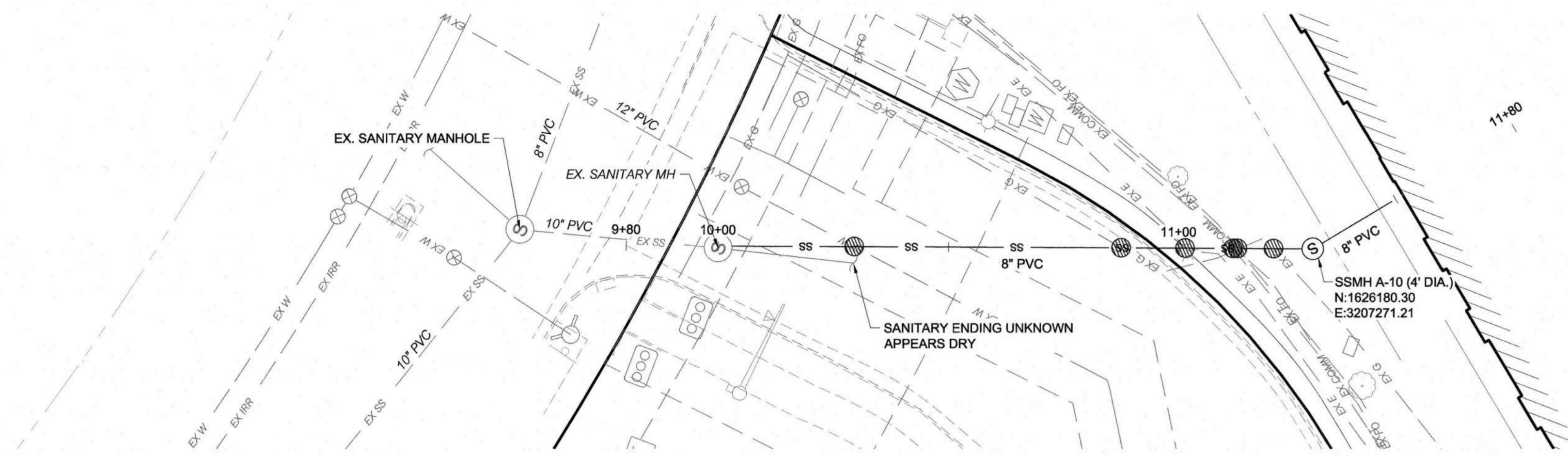
DRAWING TITLE: **9403 CROWN CREST BLVD. UTILITY PLAN**

FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C511-UTIL-PLAN.dwg C-511 - 12/18/2019

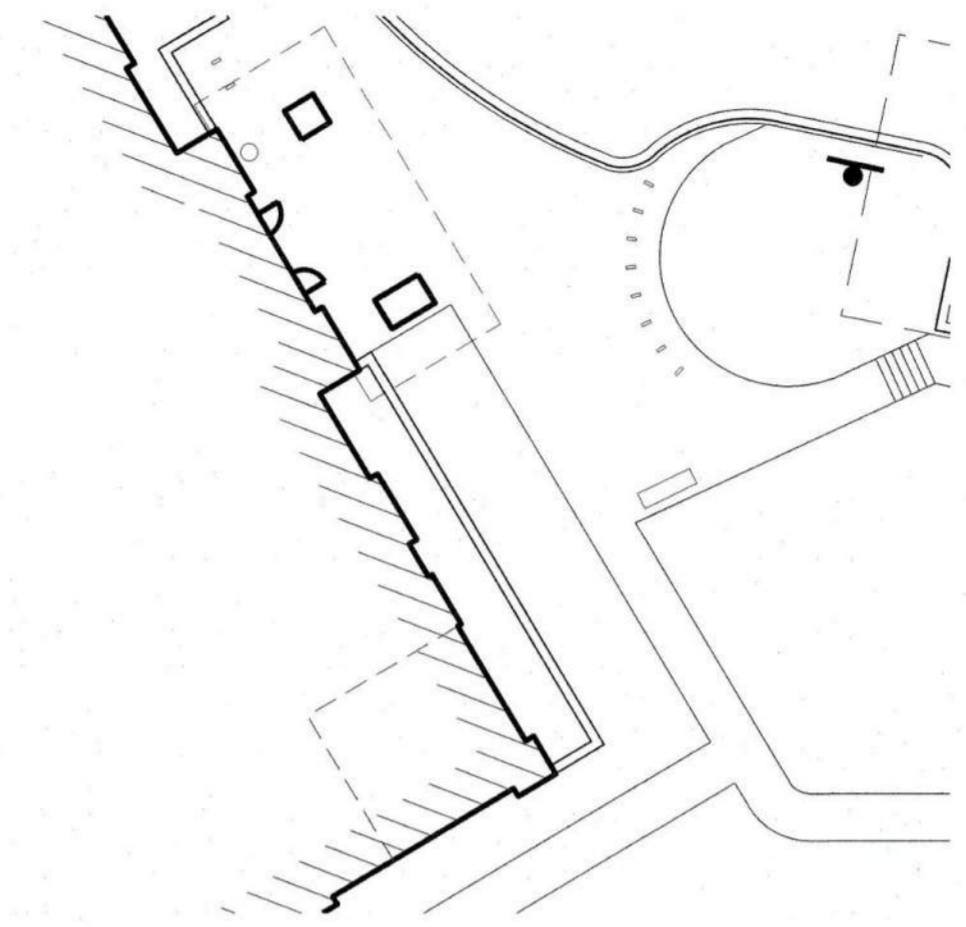


DESIGNED BY: MHW
DRAWN BY: DAT
CHECKED BY: JDC
DATE: 12/10/2019

MIRO JOB NUMBER: 18057
CLIENT JOB NUMBER: 18057
DRAWING NUMBER: **C-511**

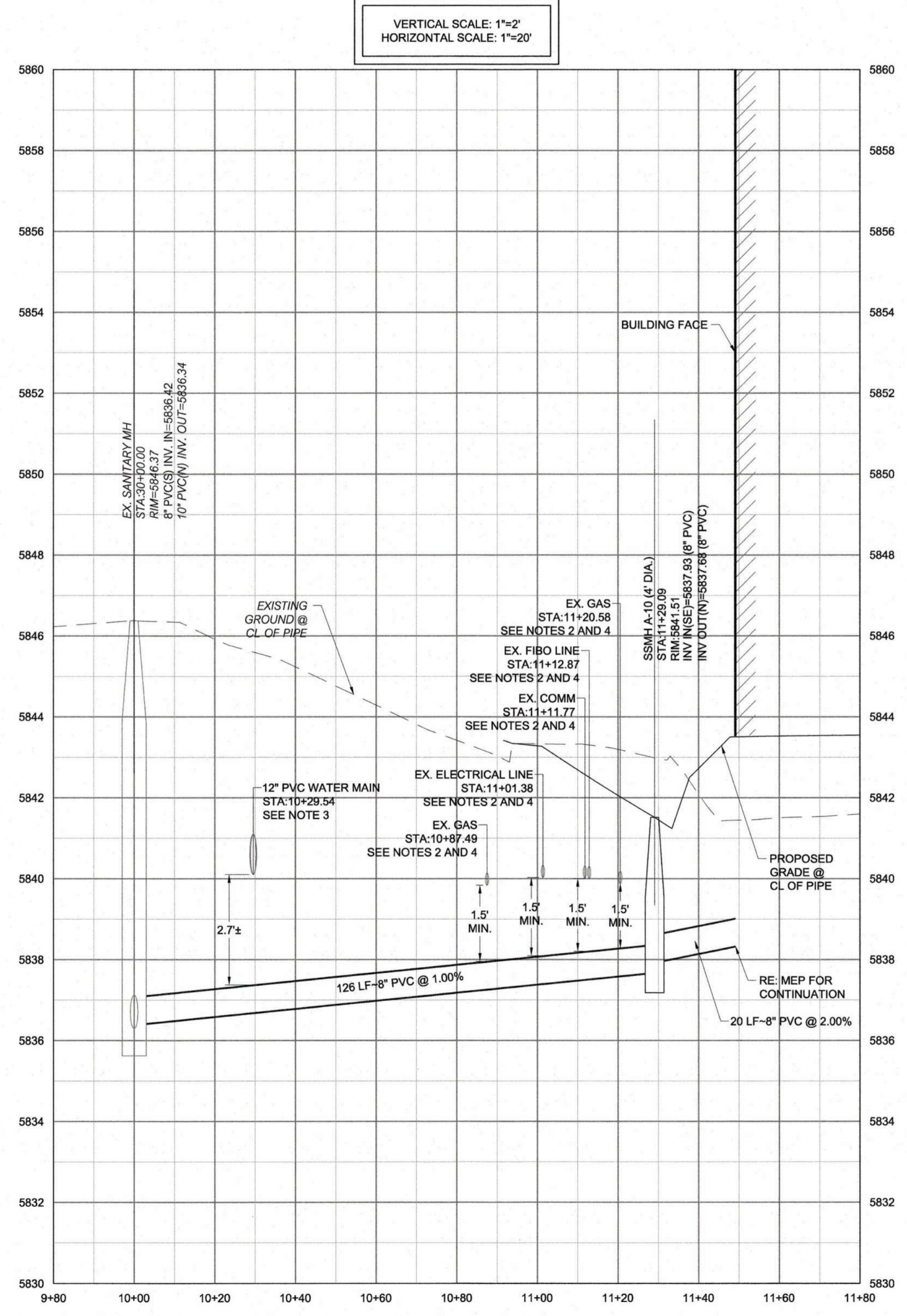


PARKER MOB III

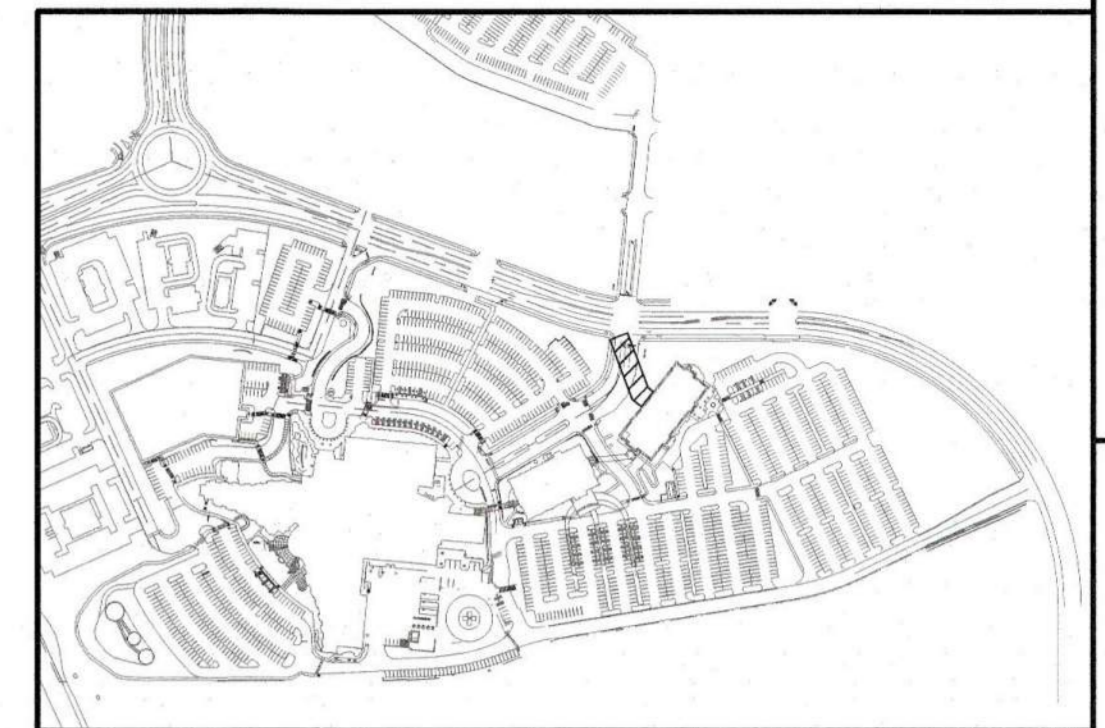


KEY MAP
NOT TO SCALE

SEWER LINE A PLAN



SEWER LINE A PROFILE



KEY MAP
NOT TO SCALE



SCALE: 1" = 20'

- NOTES:
- SEE SHEET C-501 FOR CIVIL NOTES AND LEGEND.
 - ALL EXISTING DRY UTILITIES ARE ASSUMED TO BE 3' DEEP TO TOP OF PIPE.
 - ALL EXISTING WATER LINES ARE ASSUMED TO BE 4.5' DEEP TO TOP OF PIPE.
 - THE CONTRACTOR SHALL POTHOLE ALL EXISTING UTILITY CROSSINGS PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER OF ANY POTENTIAL CONFLICTS IMMEDIATELY.

MIRO
S.A. MIRO INC.
CONSULTING ENGINEERS
4582 South Ulster Street Pkwy.
Suite 750 Denver, CO 80237
ph. 303-741-3737
fax 303-694-3134

811
Know what's below.
Call before you dig.

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		

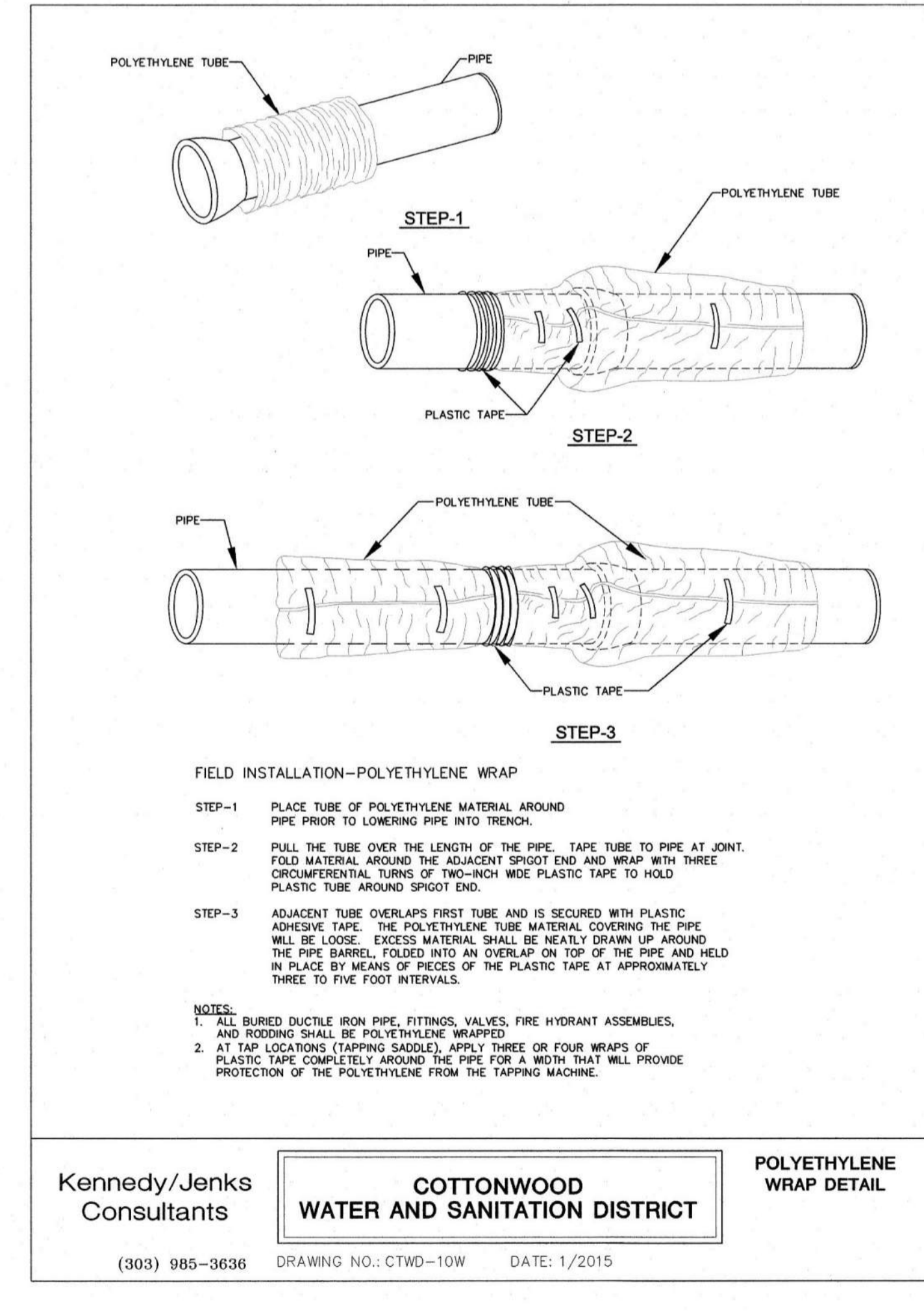
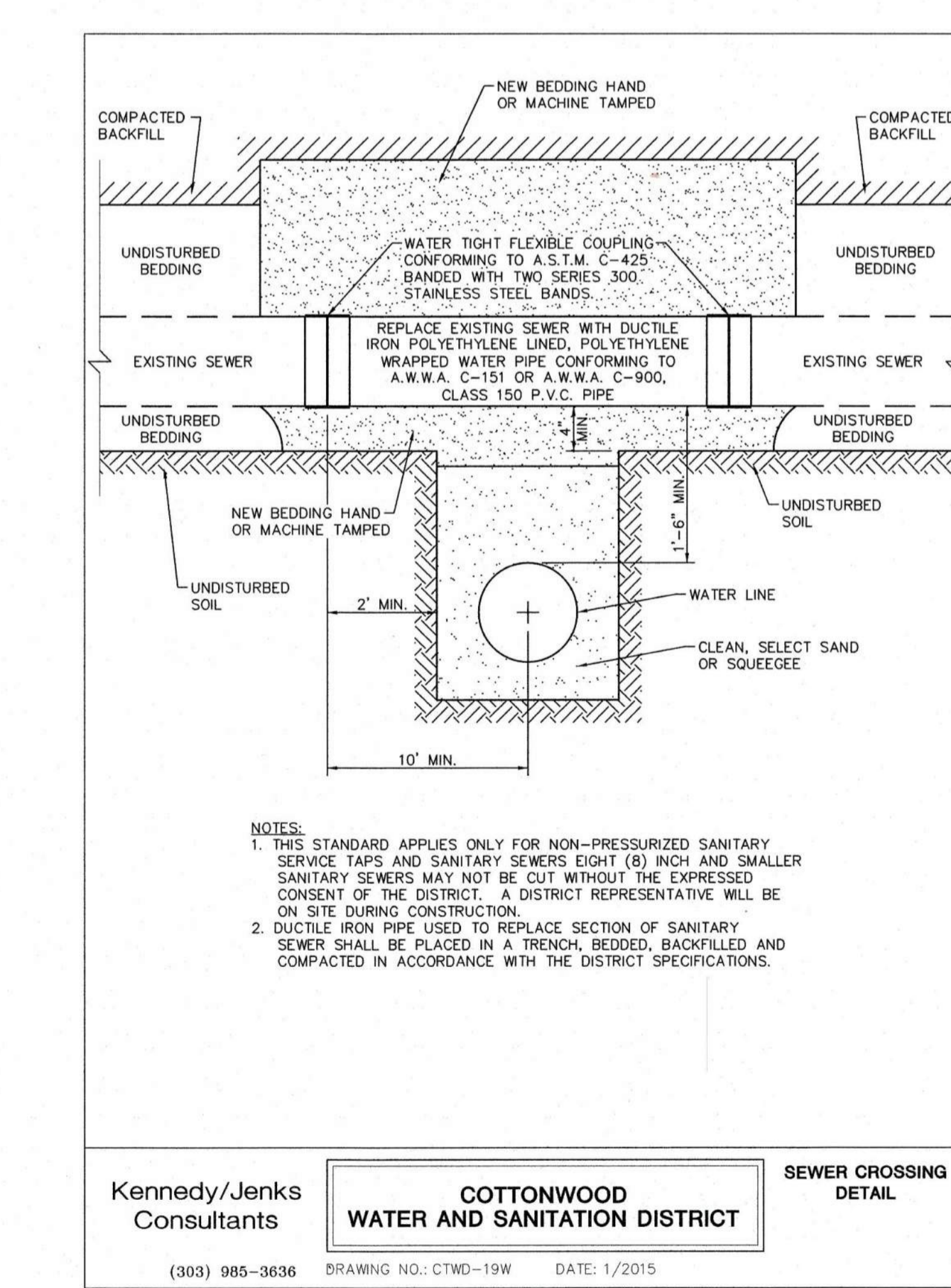
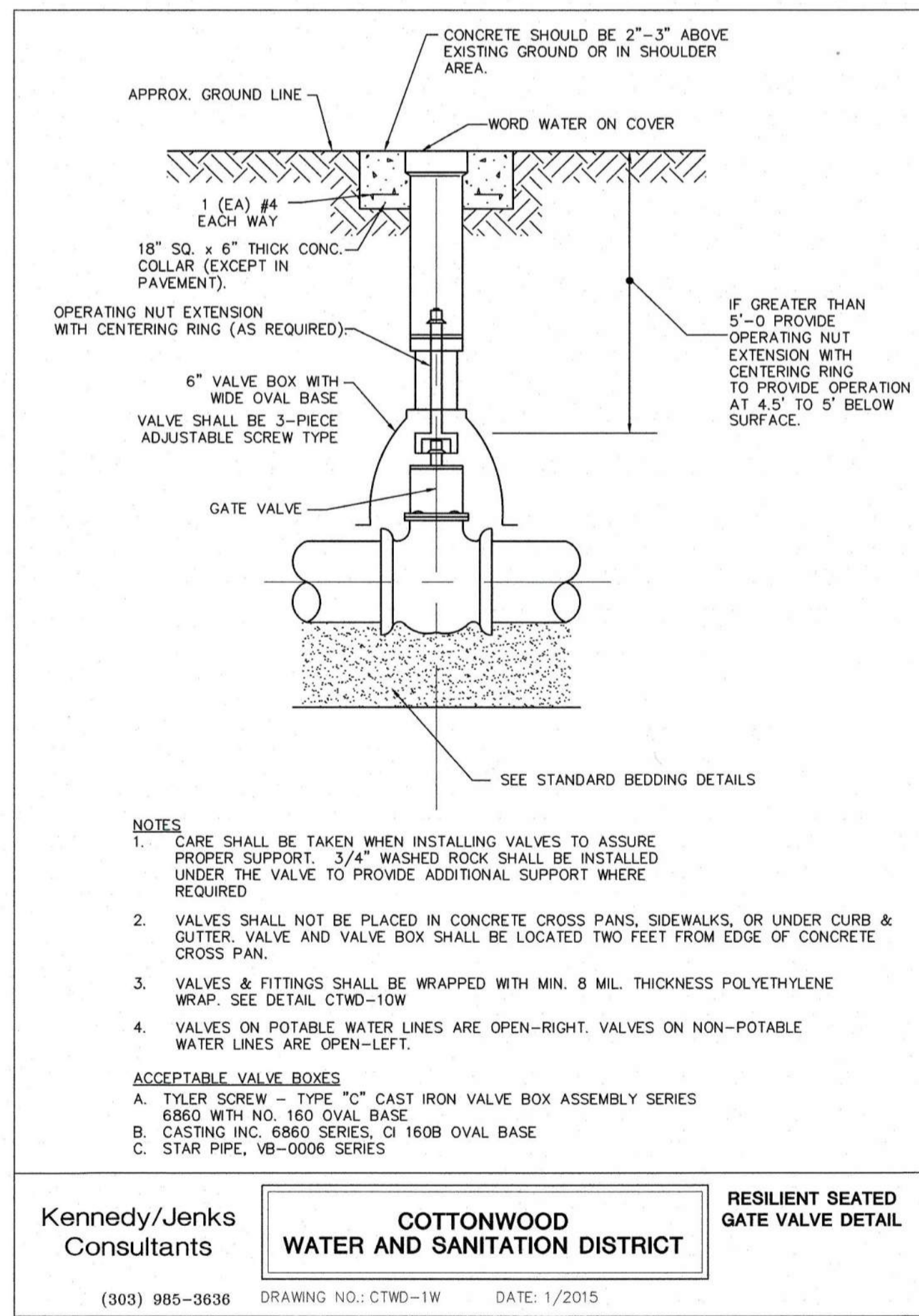
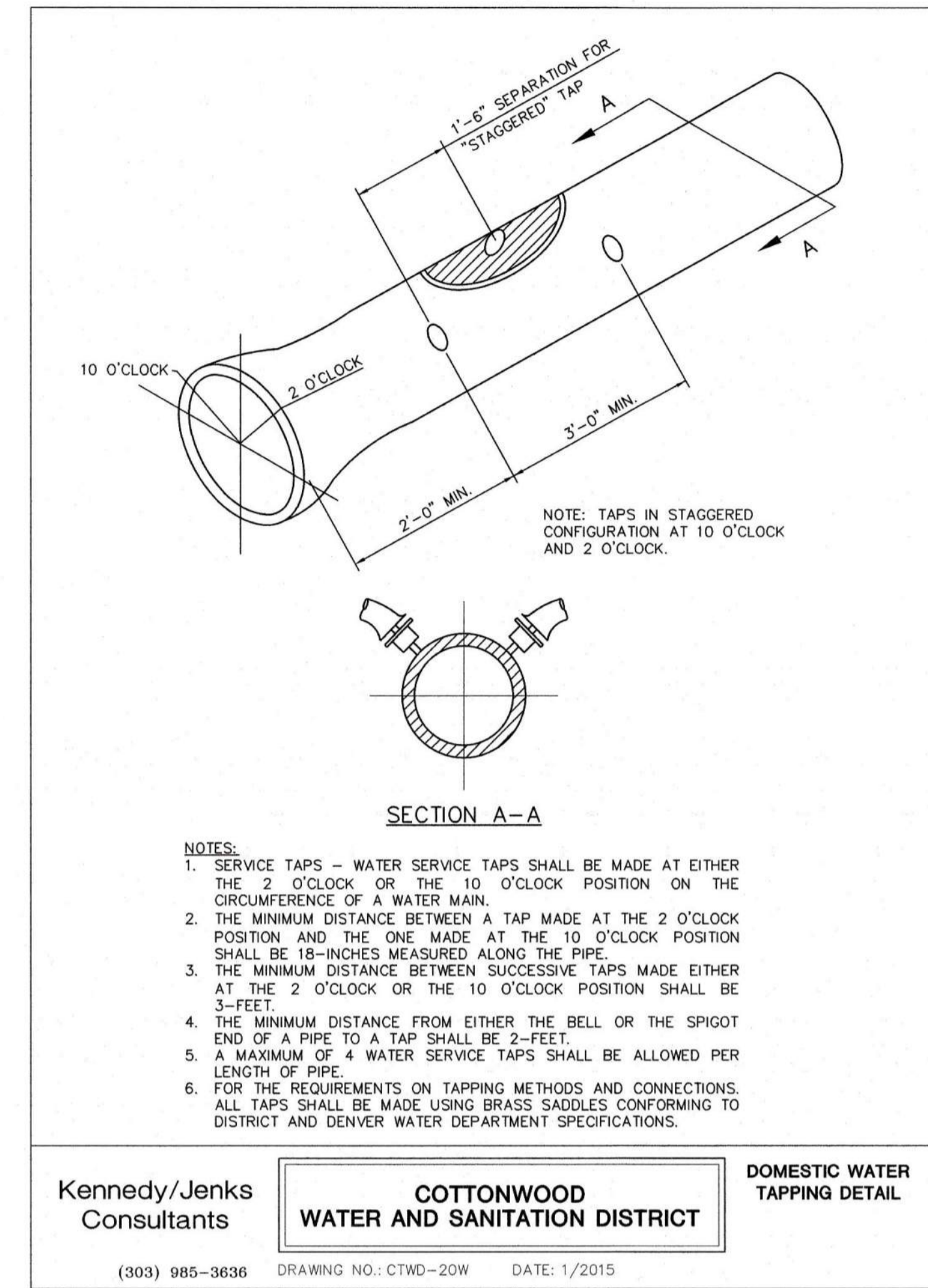
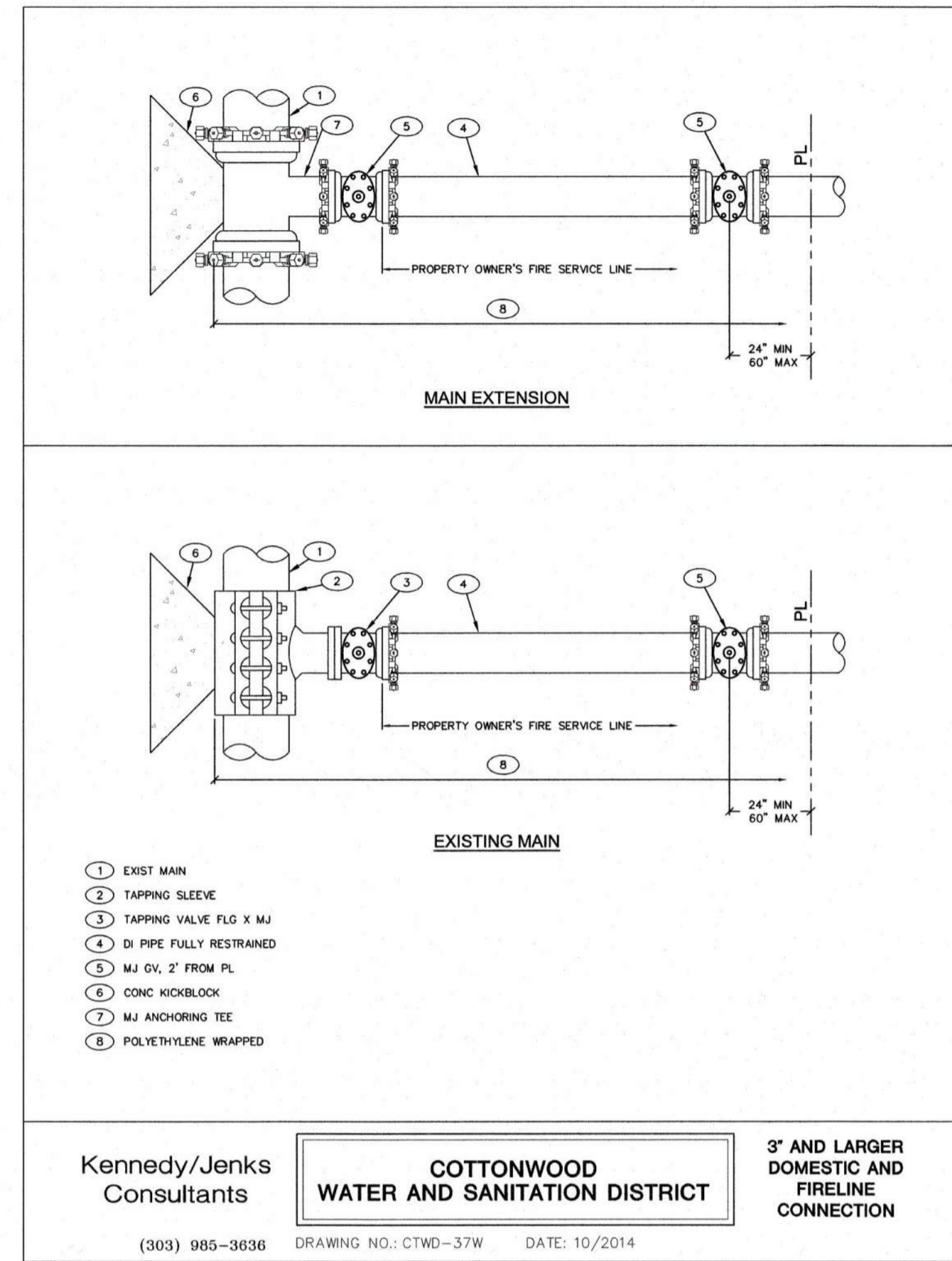
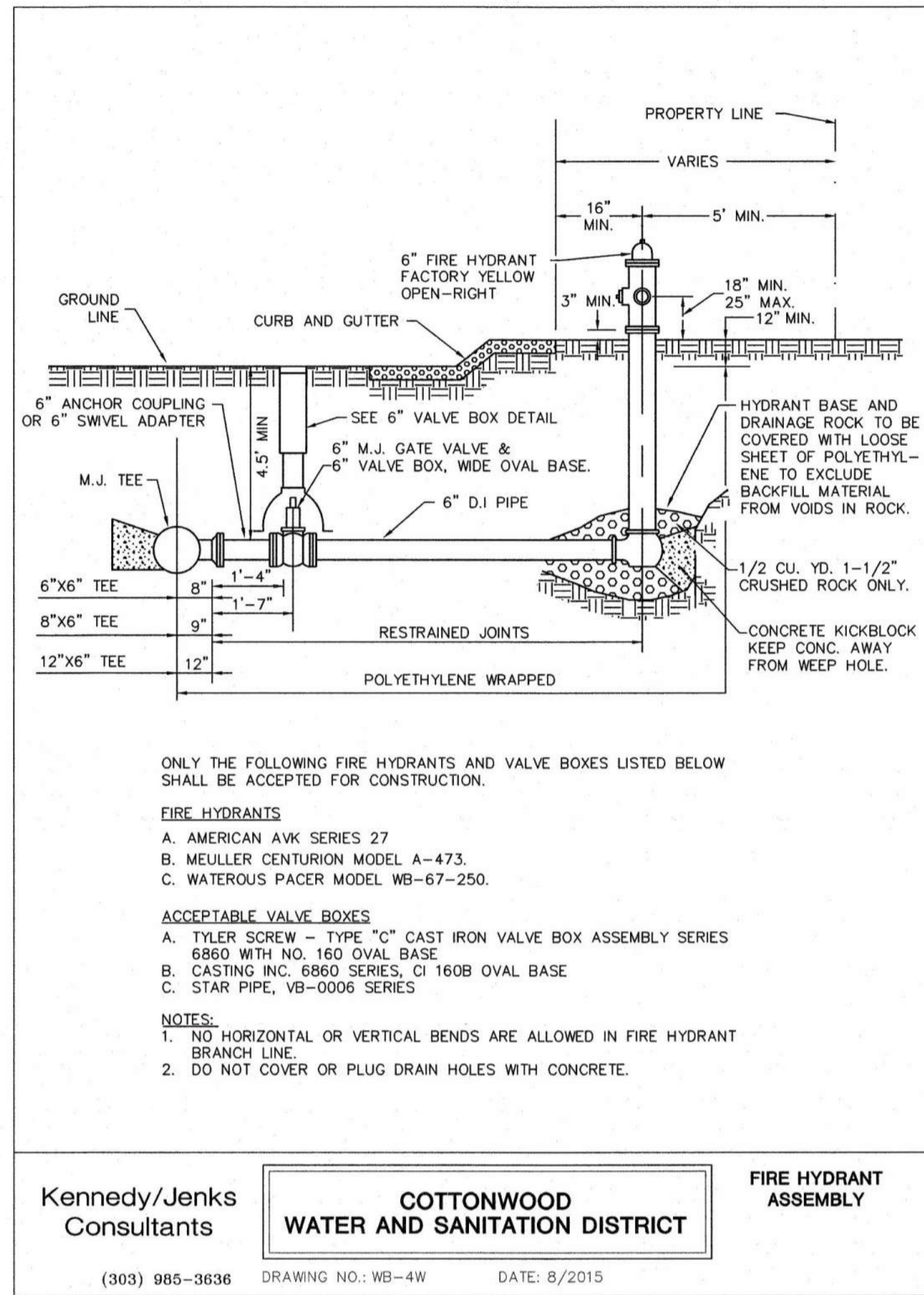
CLIENT NAME: **PARKER ADVENTIST HOSPITAL**
PROJECT NAME: **PARKER MOB III**
DRAWING TITLE: **9403 CROWN CREST BLVD. SANITARY SEWER PLAN AND PROFILE**
FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C521-SSSEW-PROF.dwg C-521 - 12/18/2019

COTTONWOOD WATER AND SANITATION DISTRICT SIGNATURE
THE DISTRICT ENGINEER AND MANAGER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL THE DISTRICT, AT 303-649-9857. THE DISTRICT ENGINEER AND SUPPORTING STAFF WILL OBSERVE THE WORK FOR COMPLIANCE WITH THE DISTRICT SPECIFICATIONS. THE DEVELOPER/OWNER WILL BE CHARGED FOR CONSTRUCTION OBSERVATION AND BE BILLED BY THE DISTRICT. PAYMENT MUST BE RECEIVED IN FULL PRIOR TO FINAL ACCEPTANCE OF THE NEW LINES. CONSTRUCTION OBSERVATION ASSISTS IN QUALITY CONTROL IN ACHIEVING CONFORMANCE WITH THE DISTRICT SPECIFICATIONS, BUT DOES NOT GUARANTEE THE CONTRACTORS PERFORMANCE. SUCH CONSTRUCTION OBSERVATION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS/HER OBLIGATION TO CONSTRUCT FACILITIES IN ACCORDANCE WITH REGULATIONS. WORK NOT PERFORMED IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS WILL NOT BE ACCEPTED. THESE PLANS HAVE BEEN REVIEWED FOR WATER AND SANITARY SEWER ONLY.
REVIEWED FOR COTTONWOOD WATER AND SANITATION DISTRICT



DESIGNED BY: MHV
DRAWN BY: DAT
CHECKED BY: JDC
DATE: 12/10/2019
MIRO JOB NUMBER: 18057
CLIENT JOB NUMBER:
DISTRICT MANAGER: *[Signature]* 1/3/2020
DISTRICT ENGINEER: *[Signature]* 1/3/2020

DRAWING NUMBER:
C-521

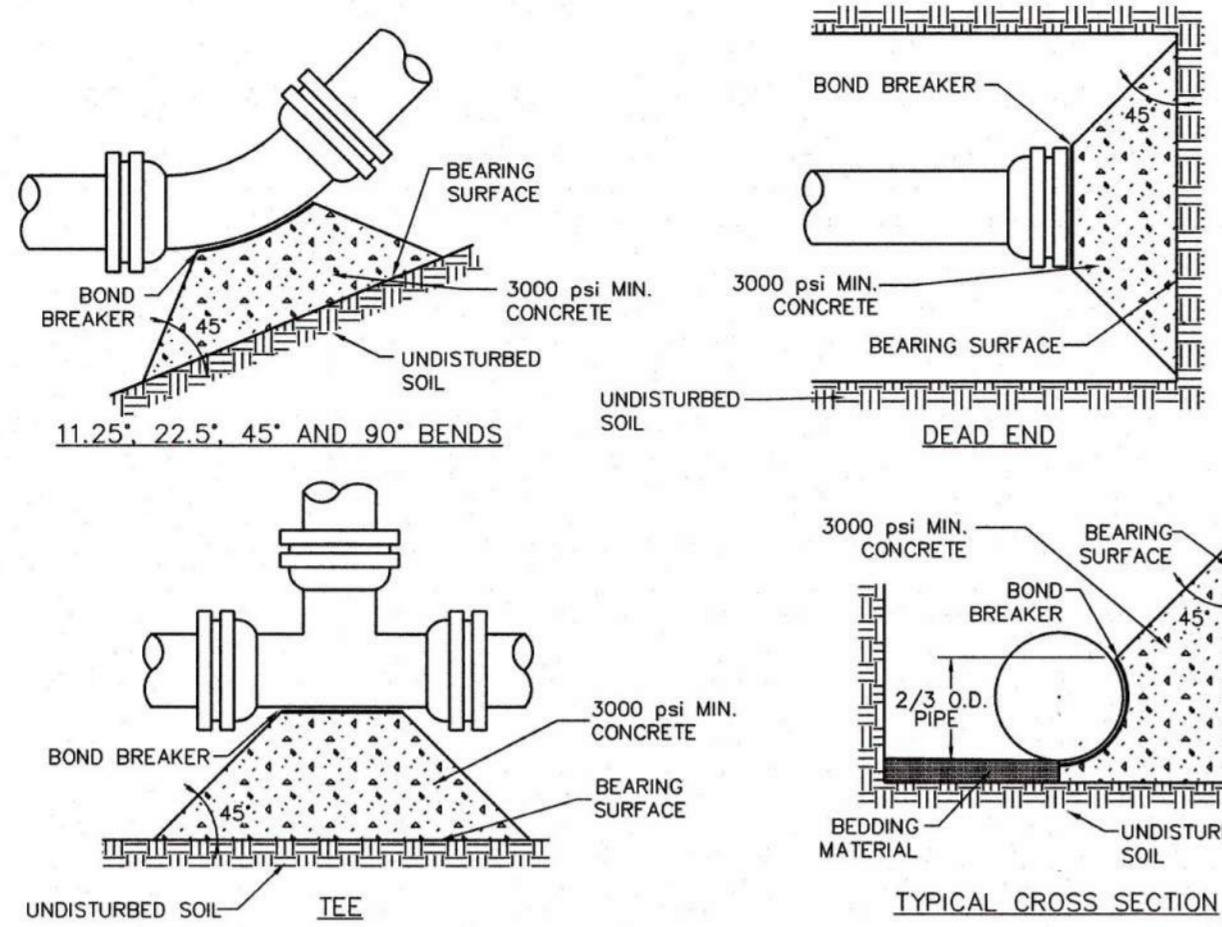


REV.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		

CLIENT NAME: **PARKER ADVENTIST HOSPITAL**
PROJECT NAME: **PARKER MOB III**
DRAWING TITLE: **9403 CROWN CREST BLVD. WATER DETAILS**
FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C331-UTIL-DTLS.dwg C-531 - 12/18/2019



DESIGNED BY: MHV
DRAWN BY: DAT
CHECKED BY: JDC
DATE: 12/10/2019
MIRO JOB NUMBER: 18057
CLIENT JOB NUMBER:
DRAWING NUMBER: **C-531**

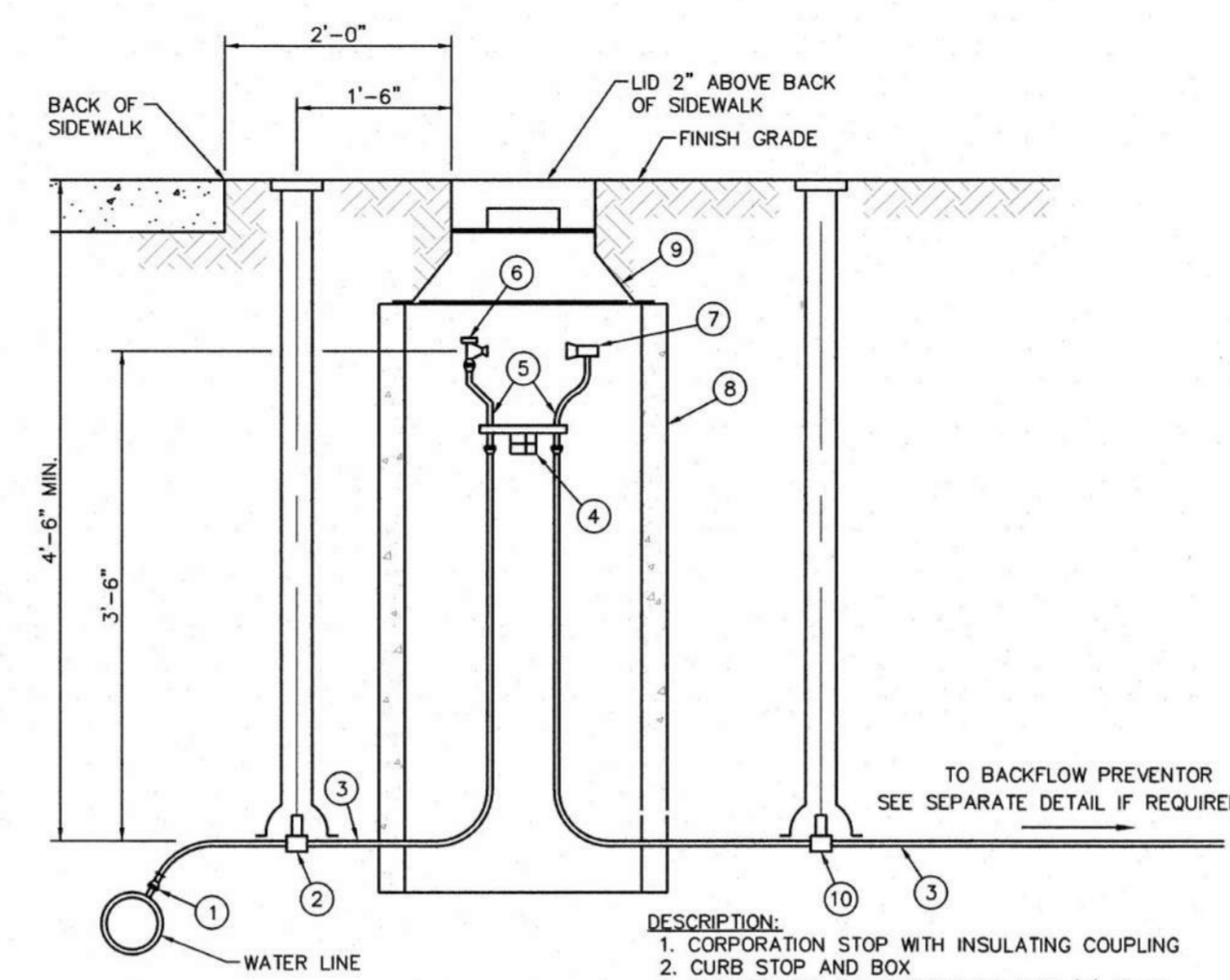


MINIMUM BEARING SURFACE AREA (N SQUARE FEET)

SIZE OF PIPE	B E N D S				TEE OR DEAD END
	11.25°	22.5°	45°	90°	
4"	1.00	1.00	1.00	2.00	1.50
6"	1.00	1.25	2.25	4.25	3.00
8"	1.00	2.00	4.00	7.50	5.25
12"	2.25	4.50	8.75	16.00	11.25
16"	3.75	7.50	14.50	27.00	19.00
20"	5.00	10.00	19.50	35.50	25.00
24"	7.00	14.00	27.75	51.00	36.00

- NOTES:**
- BEARING AREAS SHOWN ON THE CHART ARE MINIMUM AREAS AND ARE DESIGNED USING THE FOLLOWING CRITERIA:
 - INTERNAL WORKING PRESSURE OF 150 PSI.
 - TRANSIENT (WATER HAMMER) PRESSURE OF 120 PSI FOR 4, 6, AND 8-INCH DIAMETER LINES, 110 PSI FOR 12-INCH LINES, AND 70 PSI FOR 16-INCH AND 20-INCH LINES.
 - MINIMUM UNDISTURBED SOIL BEARING CAPACITY OF 3,000 PSI.
 - ALL SIZES OF BENDS, TEES, AND DEAD ENDS SHALL HAVE KICKBLOCKS.
 - MECHANICAL JOINT RESTRAINT IS ALSO REQUIRED ON ALL FITTINGS. SEE LENGTH OF PIPE RESTRAINT DETAIL FOR SPECIFIC REQUIREMENTS.
 - ALL BENDS SHALL BE RESTRAINED.

Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 (303) 985-3636 DRAWING NO.: CTWD-12W DATE: 1/2015 **KICKBLOCK**

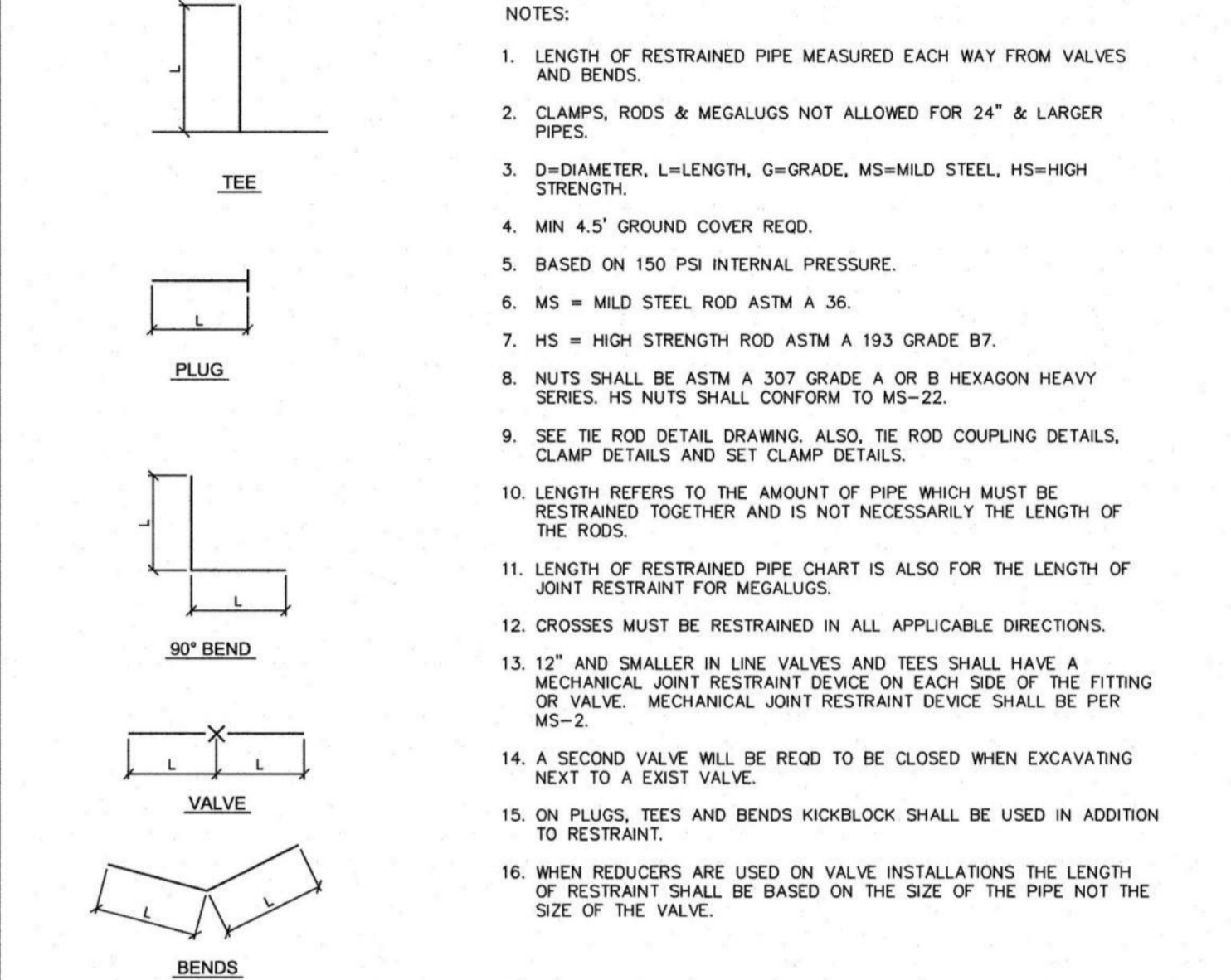


- NOTES:**
- SERVICE LINE MUST HAVE MIN. 4"-6" COVER.
 - THERE SHALL NOT BE ANY CONNECTIONS MADE WITHIN 5'-0" OF THE METER.
 - ONLY CONCRETE METER PITS SHALL BE ACCEPTED.
 - CORPORATION STOP WITH INSULATING COUPLING
 - CURB STOP AND BOX
 - SERVICE LINE-COPPER TUBING TYPE 'K' ONLY
 - METER YOKE BRACE
 - METER YOKE-FORD 80 SERIES WITH LOCKING SHUT-OFF VALVE AND CHECK VALVE. FORD COPPERFITTER FOR COPPER SERVICE WITH TUBE NUTS AND WIRING LOCKS.
 - LOCKING SHUT-OFF VALVE
 - CHECK VALVE
 - METER PIT-24" I.D. x 28" O.D. x 4'-0" IN ONE FOOT SECTIONS.
 - METER PIT HOOD-CASINGS, INC. M-70 AL OR APPROVED EQUAL. LID SHALL BE CAST IRON.
 - DRAIN AND WASTE VALVE AND BOX.

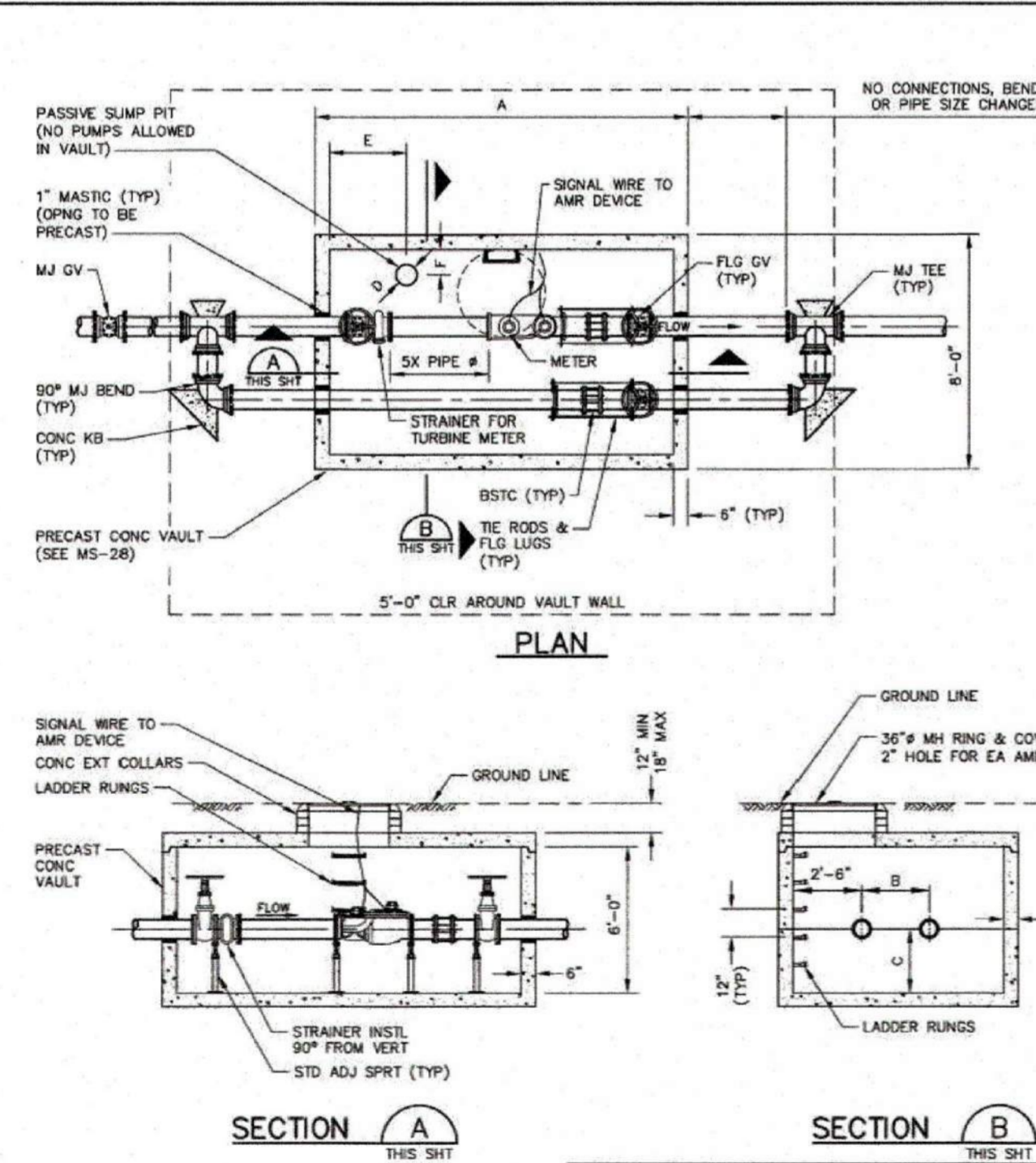
Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 (303) 985-3636 DRAWING NO.: CTWD-32W DATE: 1/2015 **3/4-INCH & 1-INCH IRRIGATION METER PIT DETAIL**

ROD DIAMETER, GRADE & LENGTH OF RESTRAINED PIPE

PIPE SIZE	4"		6"		8"		12"		16"		20"		24"								
	D	L	D	L	D	L	D	L	D	L	D	L	D	L							
90° BEND, TEE, PLUG	3/4"	30"	MS	3/4"	45"	MS	3/4"	60"	MS	3/4"	80"	HS	1"	108"	HS	1 1/4"	132"	HS	-	155"	-
VALVE	3/4"	30"	MS	3/4"	45"	MS	3/4"	60"	MS	3/4"	80"	HS	1"	108"	HS	1 1/4"	132"	HS	-	155"	-
45° BEND	3/4"	9"	MS	3/4"	13"	MS	3/4"	18"	MS	3/4"	23"	MS	1"	32"	MS	3/4"	30"	HS	-	45"	-
22 1/2° BEND	3/4"	2"	MS	3/4"	4"	MS	3/4"	5"	MS	3/4"	7"	MS	3/4"	8"	MS	3/4"	10"	MS	-	12"	-
11 1/4° BEND	3/4"	2"	MS	3/4"	2"	MS	3/4"	2"	MS	3/4"	2"	MS	3/4"	3"	MS	-	3"	-	-	-	-



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 (303) 985-3636 DRAWING NO.: CTWD-9W DATE: 1/2015 **LENGTH OF RESTRAINED PIPE**

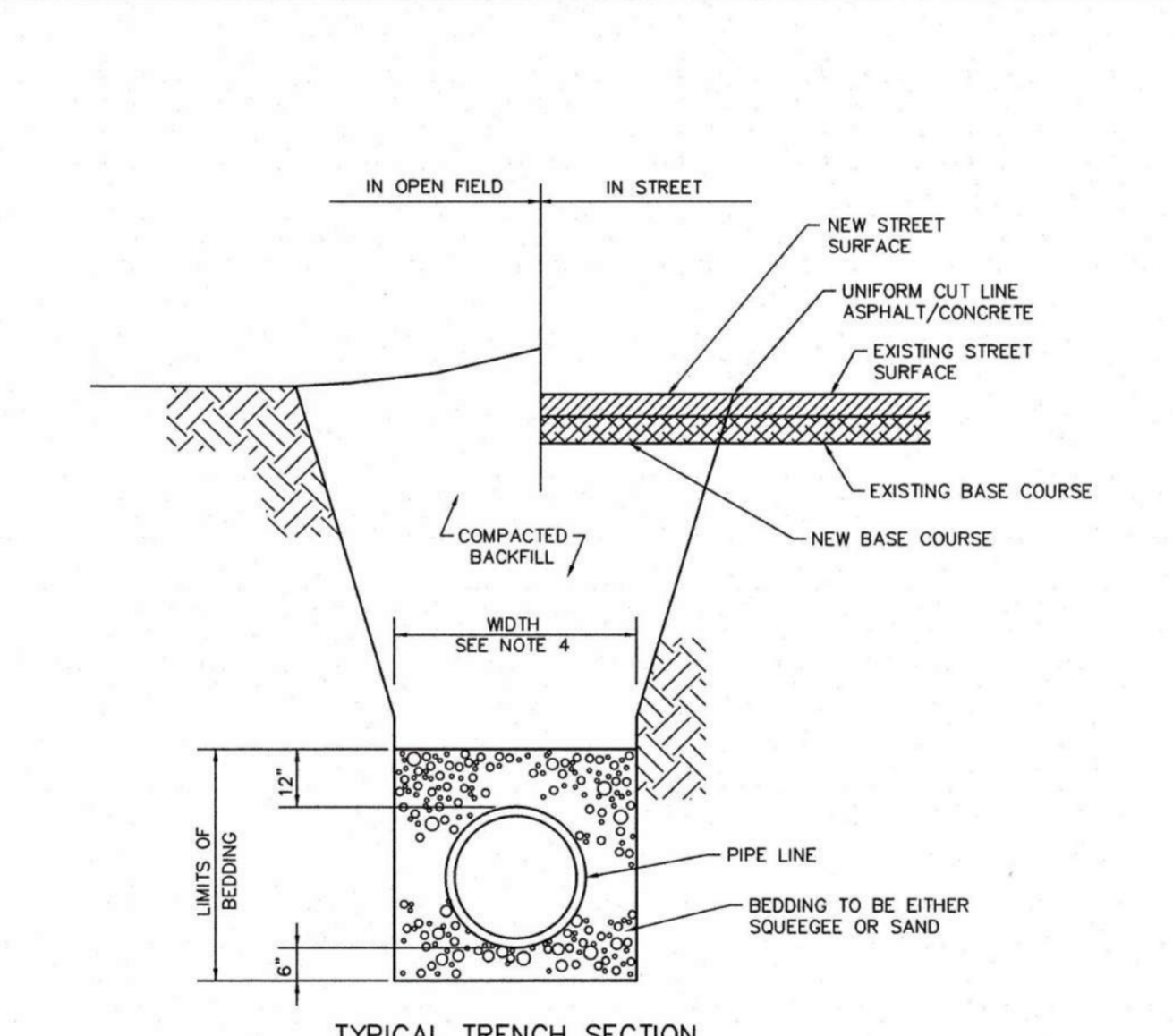


NOTES:

- VALVES INSIDE THE VAULT SHALL BE NON-RISING STEM, RIGHT HAND OPEN VALVES WITH HAND WHEEL OPERATORS.
- A CHECK VALVE IS REQUIRED BETWEEN COUPLING AND GATE VALVE IF BACKFLOW PREVENTION ASSEMBLY IS MORE THAN 150'-FEET FROM VAULT.
- INSTALL METER VAULT AND SERVICE LINE IN ACCORDANCE WITH SPECIFICATION SECTION 3.02.
- SERVICE LINES SHALL NOT CROSS INSIDE THE METER VAULT.

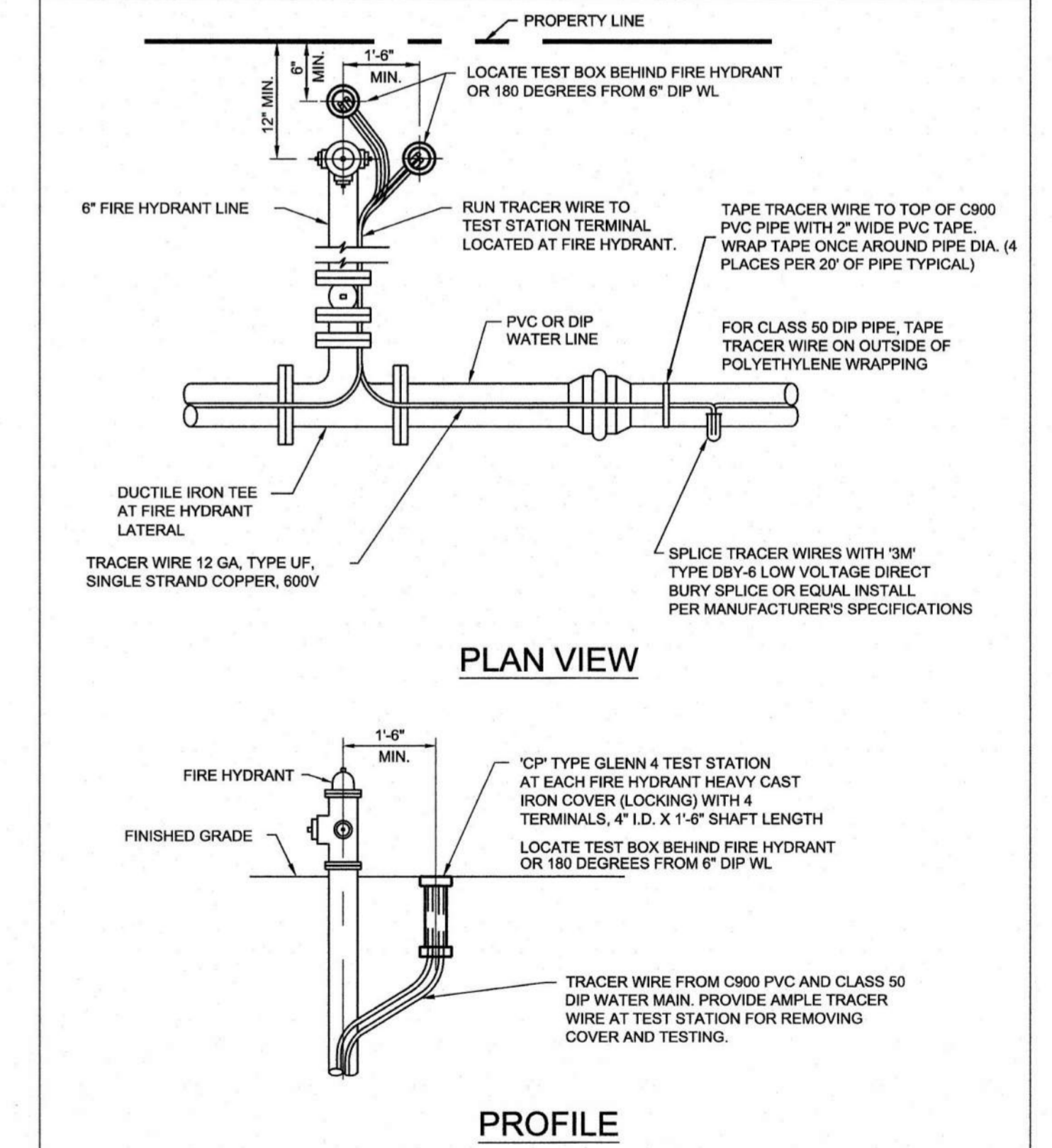
METER SIZE & NOMINAL PIPE Ø	PRECAST VAULT DIMENSIONS						SUMP
	A	B	C	D	E	F	
3"	9'-0"	2'-0"	2'-2"	12"	2'-2"	1'-0"	1'-0"
4"	9'-0"	2'-0"	2'-2"	12"	2'-2"	1'-0"	1'-0"
6"	9'-0"	2'-0"	2'-2"	12"	2'-2"	1'-0"	1'-0"
8"	13'-6"	2'-6"	2'-6"	18"	2'-6"	1'-0"	1'-0"
10"	13'-6"	2'-6"	2'-6"	18"	2'-6"	1'-0"	1'-0"

DENVER WATER
LARGE METER IN VAULT
 Scale: NONE Date: May 2018
 Drawn: RLB Ck: K ROSS
 Approved: Dr. 127 No. 35 SHEET 57



- NOTES:**
- MINIMUM COVER TO BE 4.5' BELOW OFFICIAL STREET GRADE.
 - TRENCH TO BE BRACED OR SHEETED AS NECESSARY FOR THE SAFETY OF THE WORKMEN AND PROTECTION OF OTHER UTILITIES IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL SAFETY REGULATIONS.
 - PIPE SHALL BE BEDDED FROM 6" BELOW THE BOTTOM OF THE PIPE TO 12" ABOVE THE TOP OF THE PIPE.
 - TRENCH WIDTH SHALL NOT BE MORE THAN 16" NOR LESS THAN 12" WIDER THAN THE LARGEST OUTSIDE DIAMETER OF THE PIPE.
 - SHOULD THE TRENCH BE EXCAVATED WIDER THAN ALLOWED, A CONCRETE CRADLE SHALL BE PLACED WITH 2500 P.S.I. CONCRETE FROM TRENCH BOTTOM TO PIPE SPRINGLINE.
 - COMPACTION SHALL BE AS FOLLOWS: PIPE ZONE BEDDING 6" UNDER AND 12" OVER PIPE WILL REQUIRE 90% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, FULL TRENCH SECTION IN ROADWAY OR STREET R.O.W. LIMITS WILL REQUIRE 90% S.P.D. TRENCH ZONE ABOVE BEDDING MATERIALS, OUTSIDE OF STREET R.O.W. WILL REQUIRE 90% S.P.D.

Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 (303) 985-3636 DRAWING NO.: CTWD-16 DATE: 1/2015 **STANDARD BEDDING**



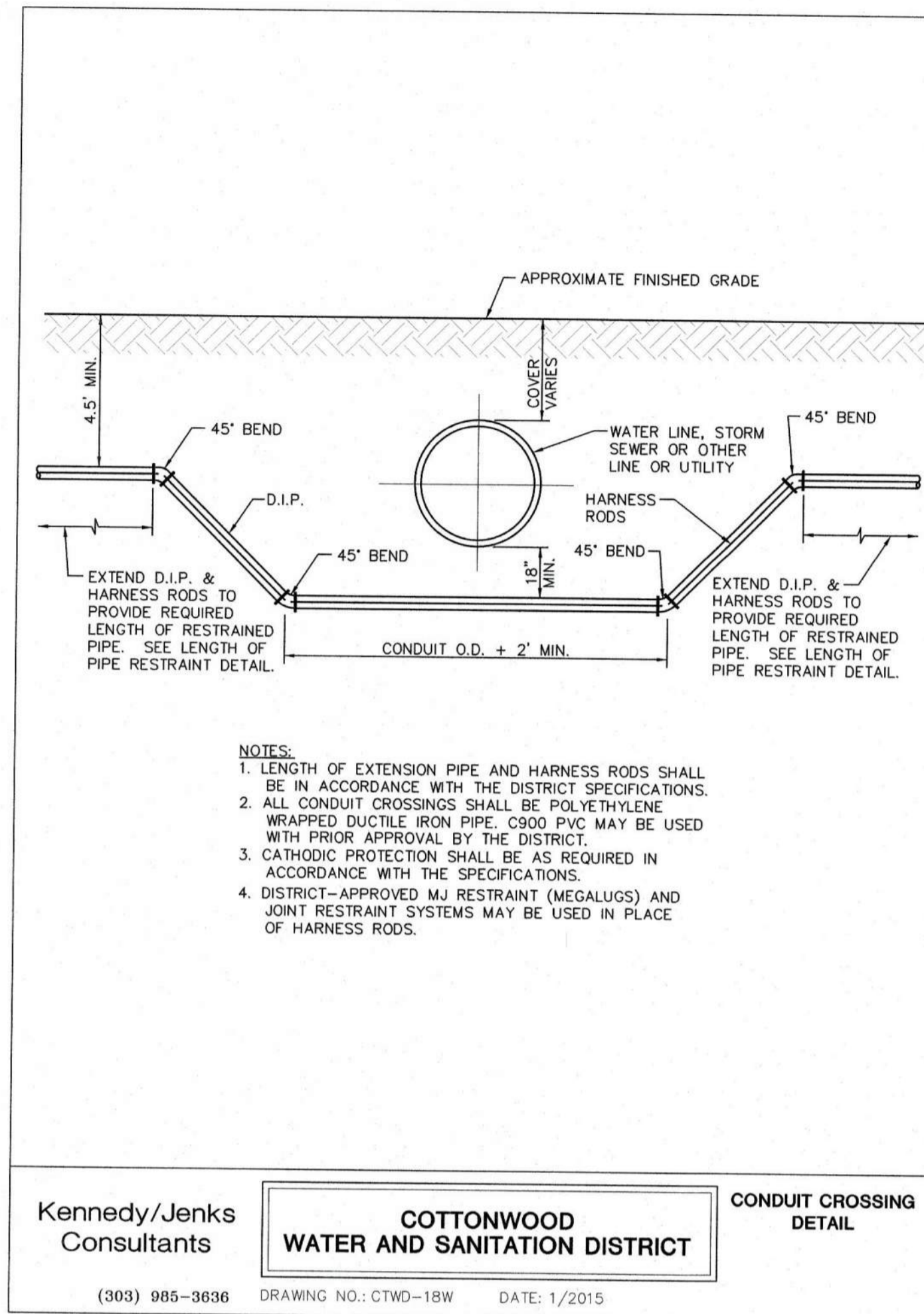
Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 (303) 985-3636 DRAWING NO.: CTWD-11W DATE: 1/2015 **PVC & DIP WATER MAIN TRACER WIRE INSTALLATION DETAIL**

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		

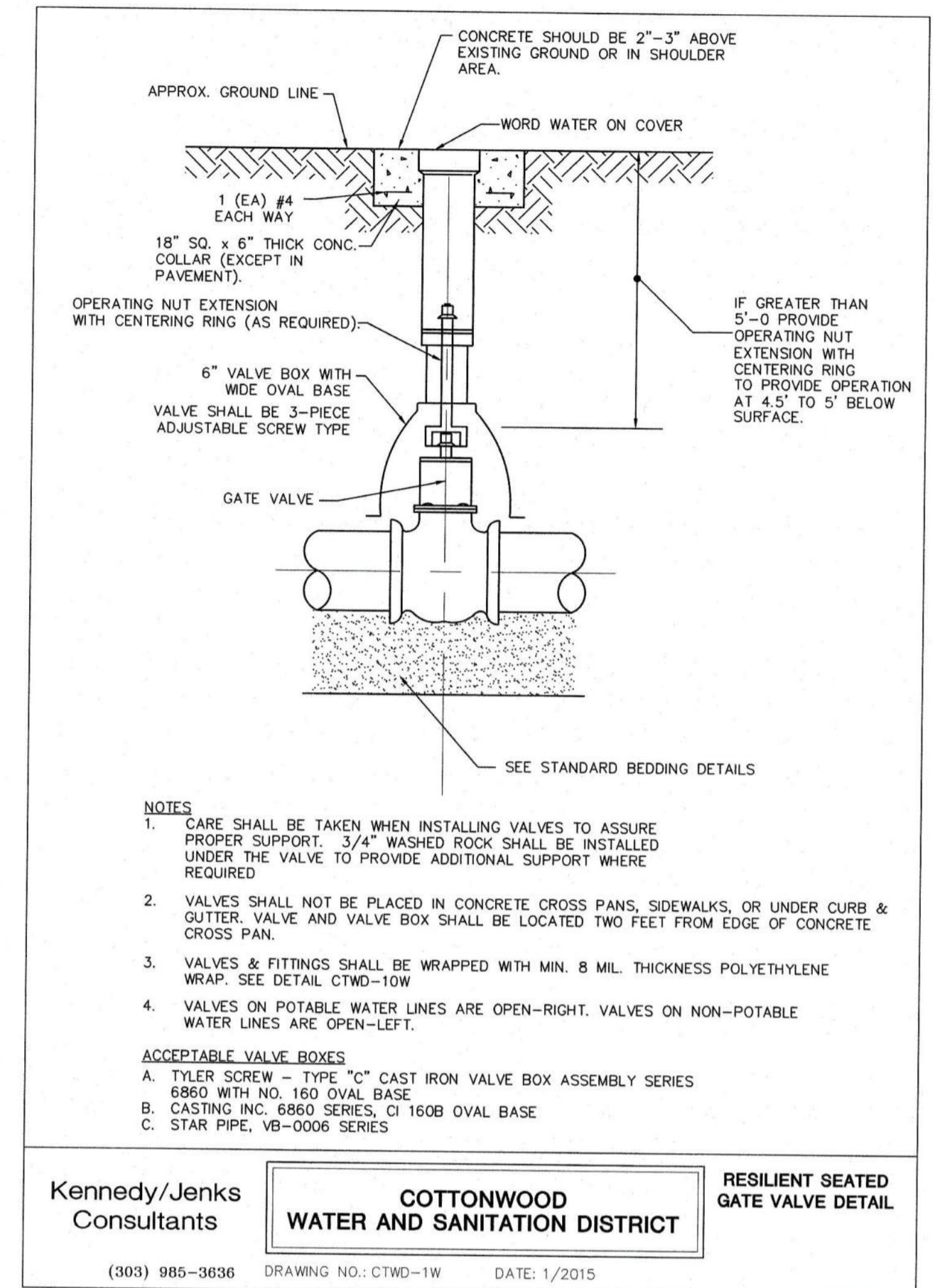
PARKER ADVENTIST HOSPITAL
PARKER MOB III
9403 CROWN CREST BLVD.
WATER DETAILS
 CLIENT NAME:
 PROJECT NAME:
 DRAWING TITLE:
 FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C531-UTIL-DTL.dwg C-532 - 12/18/2019



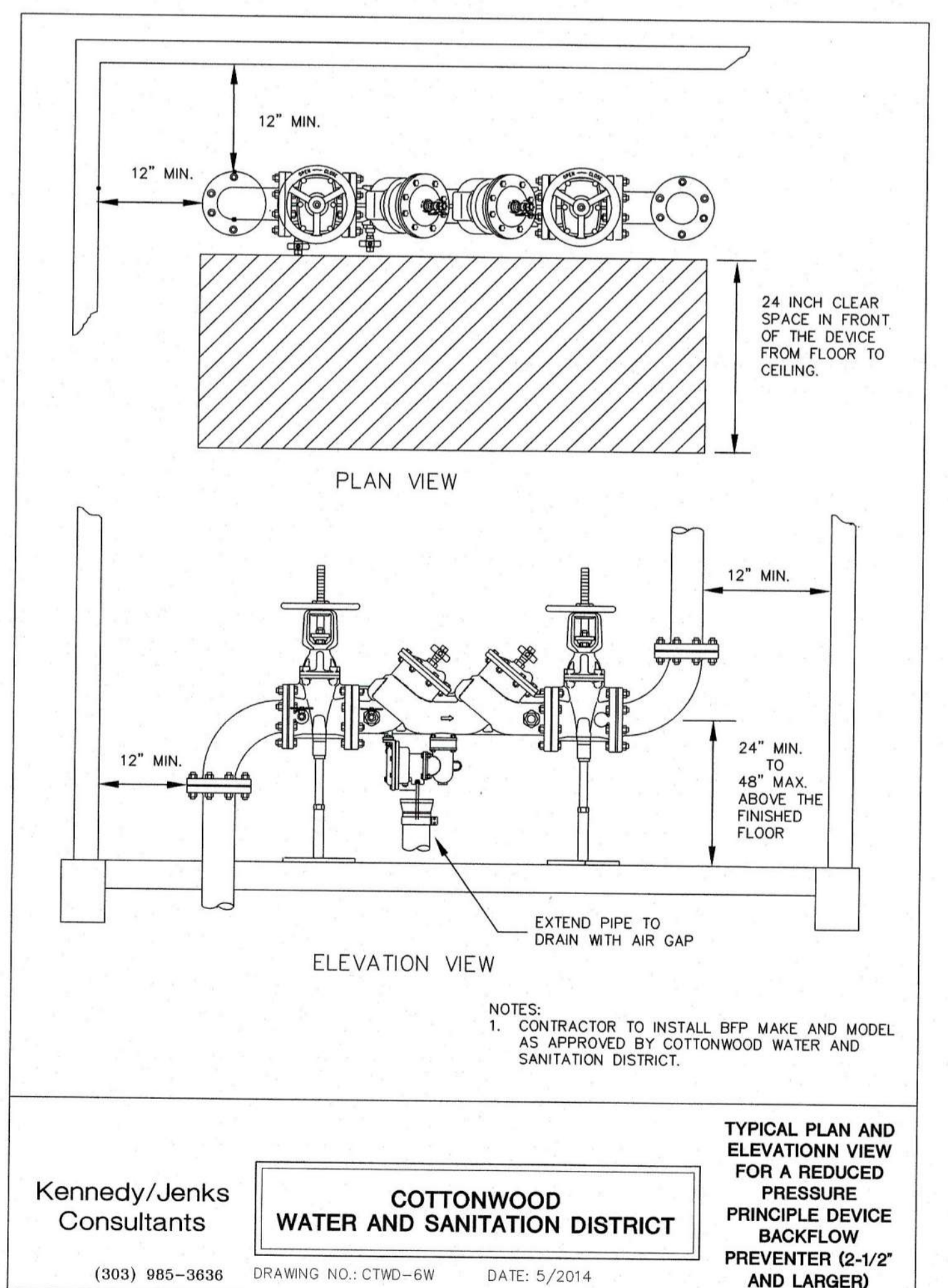
DESIGNED BY: MHV
 DRAWN BY: DAT
 CHECKED BY: JDC
 DATE: 12/10/2019
 MIRO JOB NUMBER: 18057
 CLIENT JOB NUMBER:
 DRAWING NUMBER:
C-532



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 CONDUIT CROSSING DETAIL
 (303) 985-3636 DRAWING NO.: CTWD-18W DATE: 1/2015



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 RESILIENT SEATED GATE VALVE DETAIL
 (303) 985-3636 DRAWING NO.: CTWD-1W DATE: 1/2015



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 TYPICAL PLAN AND ELEVATION VIEW FOR A REDUCED PRESSURE PRINCIPLE DEVICE BACKFLOW PREVENTER (2-1/2" AND LARGER)
 (303) 985-3636 DRAWING NO.: CTWD-6W DATE: 5/2014



S.A. MIRO INC.
 CONSULTING ENGINEERS

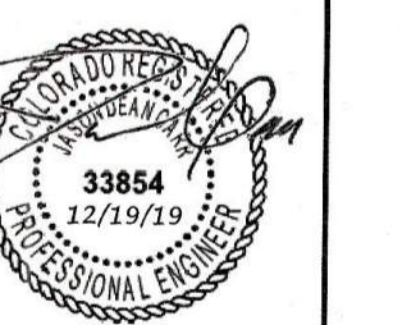
4582 South Ulster Street Pkwy.
 Suite 750 Denver, CO 80237
 ph. 303-741-3737
 fax 303-694-3134



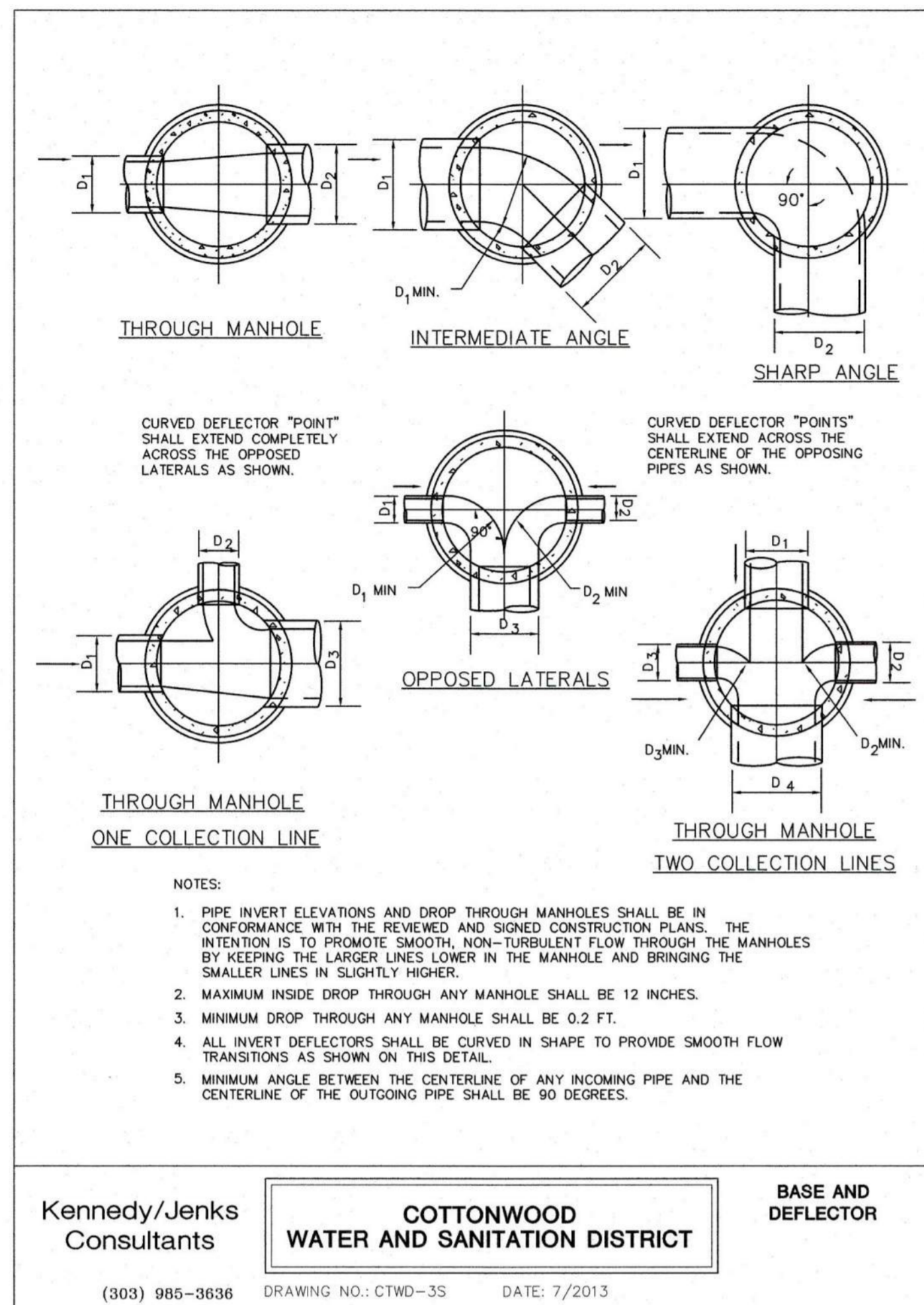
Know what's below.
 Call before you dig.

REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		

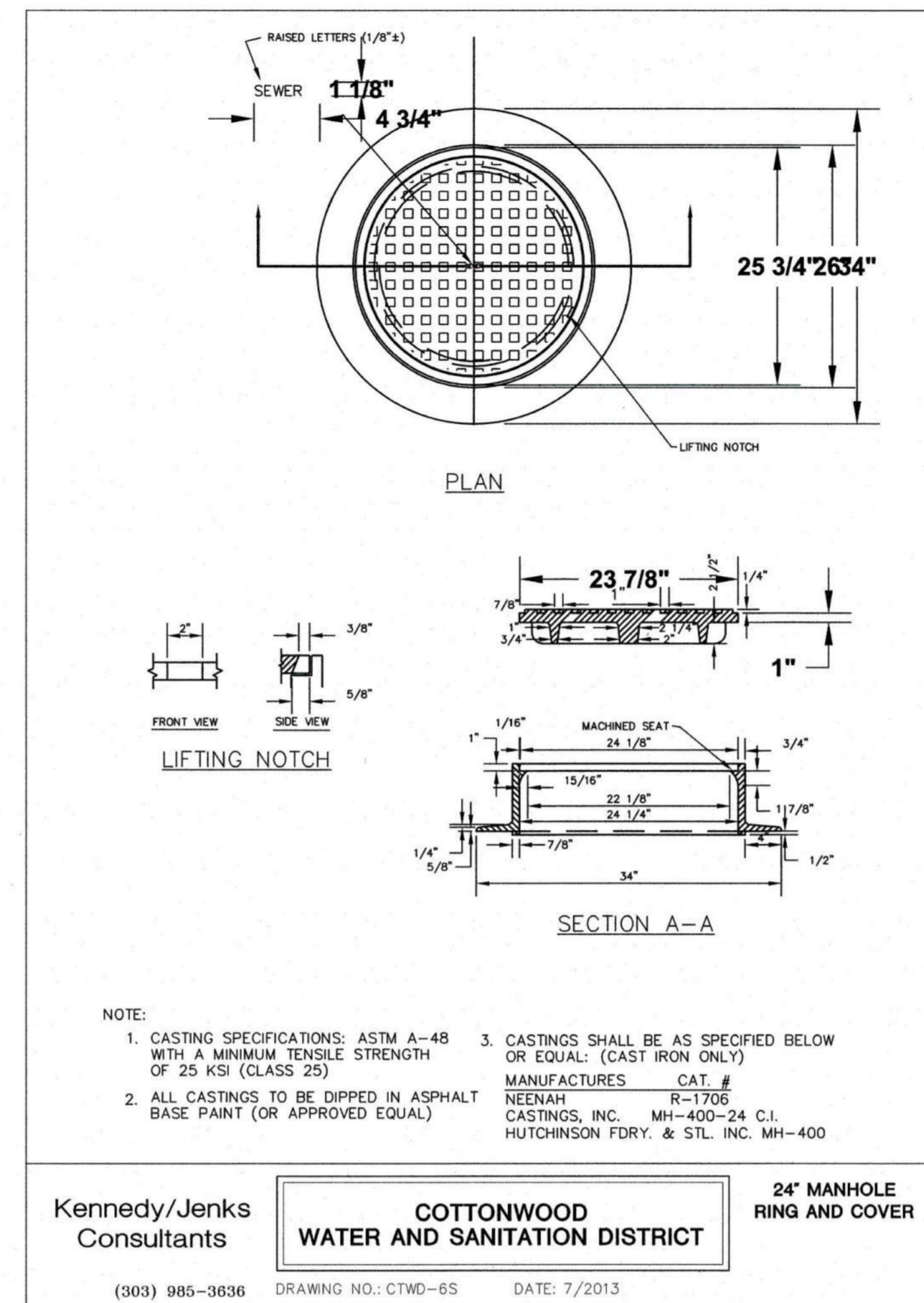
CLIENT NAME: **PARKER ADVENTIST HOSPITAL**
 PROJECT NAME: **PARKER MOB III**
 DRAWING TITLE: **9403 CROWN CREST BLVD. WATER DETAILS**
 FILE PATH: J:\lobst18057 Parker MOB III\05 CAD\Plans and Details\C533-UTIL-DTL.S.dwg C-533 - 12/18/2019



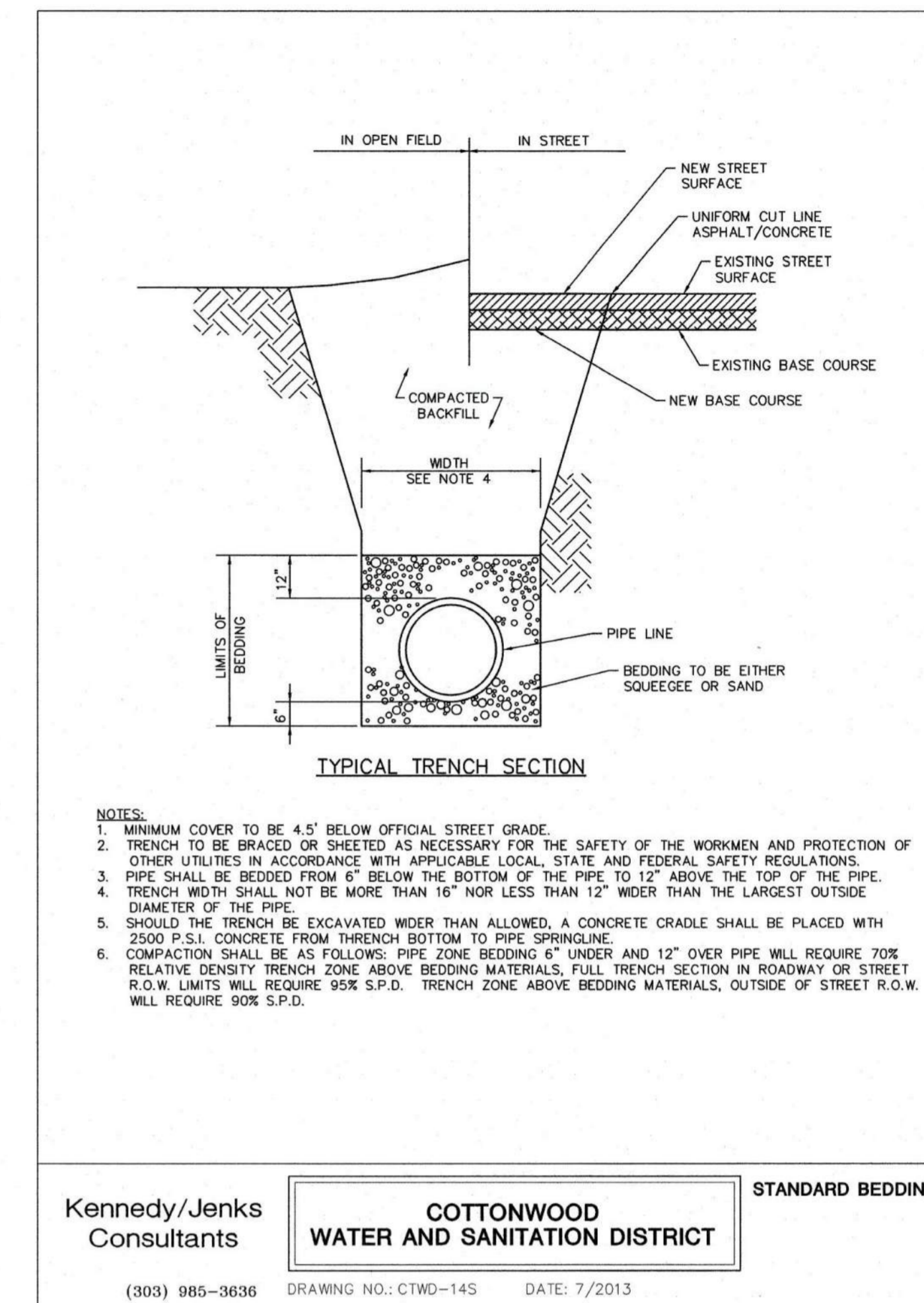
DESIGNED BY: MHV
 DRAWN BY: DAT
 CHECKED BY: JDC
 DATE: 12/10/2019
 MIRO JOB NUMBER: 18057
 CLIENT JOB NUMBER:
 DRAWING NUMBER: **C-533**



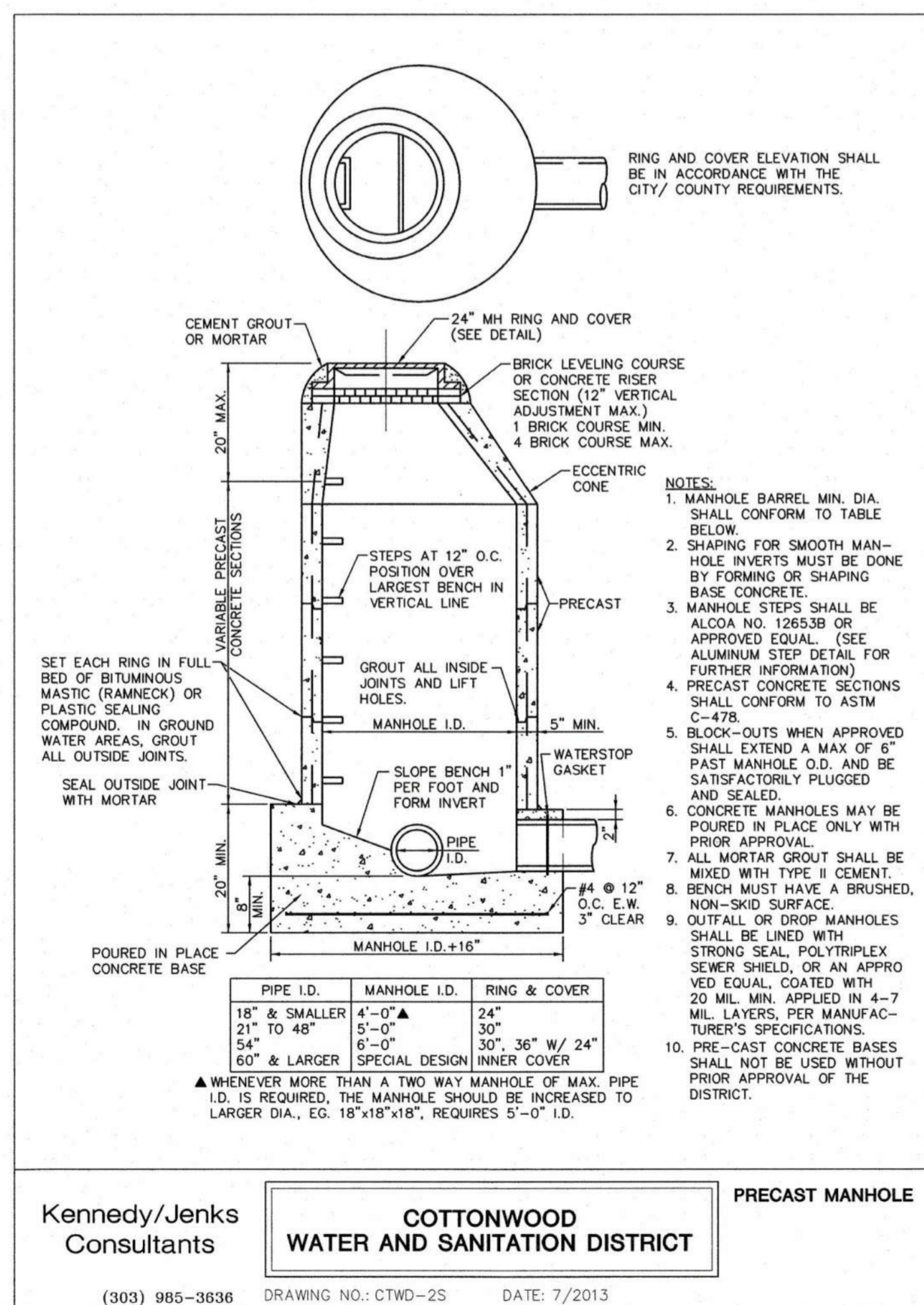
Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 BASE AND DEFLECTOR
 (303) 985-3636 DRAWING NO.: CTWD-3S DATE: 7/2013



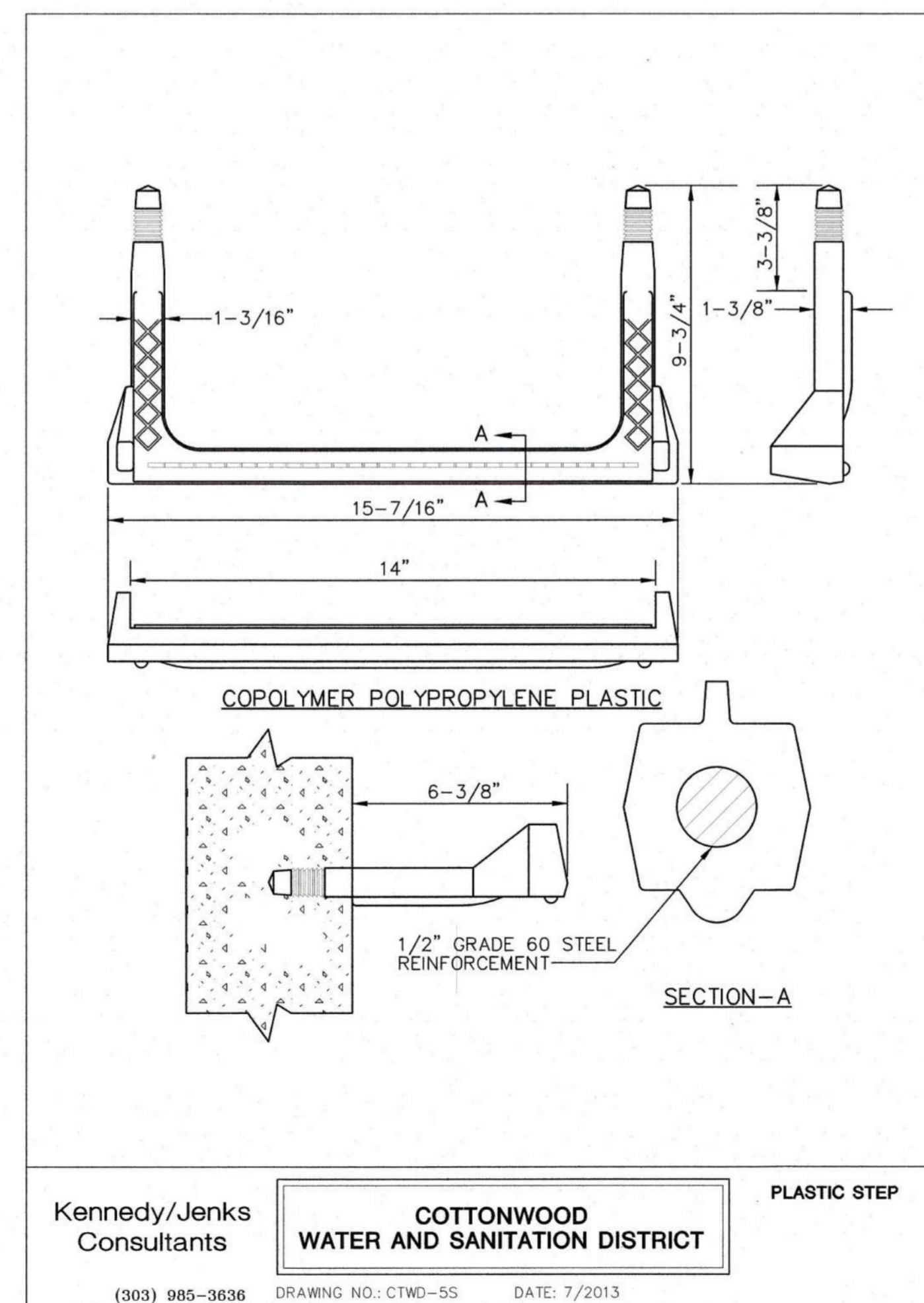
Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 24" MANHOLE RING AND COVER
 (303) 985-3636 DRAWING NO.: CTWD-6S DATE: 7/2013



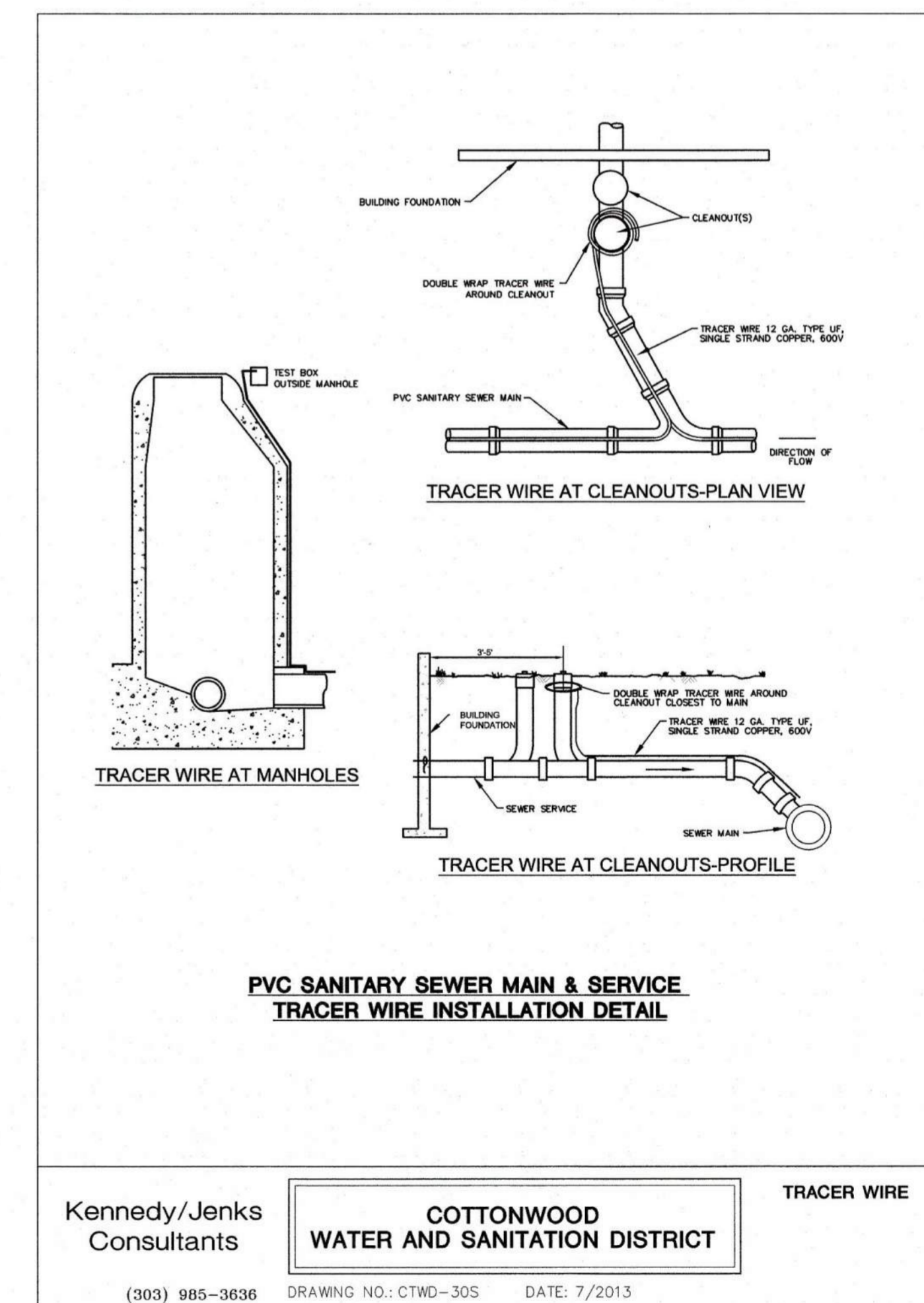
Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 STANDARD BEDDING
 (303) 985-3636 DRAWING NO.: CTWD-14S DATE: 7/2013



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 PRECAST MANHOLE
 (303) 985-3636 DRAWING NO.: CTWD-2S DATE: 7/2013



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 PLASTIC STEP
 (303) 985-3636 DRAWING NO.: CTWD-5S DATE: 7/2013



Kennedy/Jenks Consultants
COTTONWOOD WATER AND SANITATION DISTRICT
 TRACER WIRE
 (303) 985-3636 DRAWING NO.: CTWD-30S DATE: 7/2013

REV.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		
8		

CLIENT NAME: **PARKER ADVENTIST HOSPITAL**
 PROJECT NAME: **PARKER MOB III 9403 CROWN CREST BLVD.**
 DRAWING TITLE: **SANITARY SEWER DETAILS**
 FILE PATH: J:\Jobs\18057 Parker MOB III\05 CAD\Plans and Details\C631-UTIL-DTLLS.dwg C-534 - 12/18/2019



DESIGNED BY: MHV
 DRAWN BY: DAT
 CHECKED BY: JDC
 DATE: 12/10/2019
 MIRO JOB NUMBER: 18057
 CLIENT JOB NUMBER: 18057
 DRAWING NUMBER: **C-534**

IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION
⊗	Hunter MP1000 PROS-06-PRS40-CV-R Turf Rotator, 6" (15.24 cm) pop-up with check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. M=Maroon adj arc 90 to 210, L=Light Blue 210 to 270 arc, O=Olive 360 arc.
⊗	Hunter MP2000 PROS-06-PRS40-CV-R Turf Rotator, 6" (15.24 cm) pop-up with factory installed check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. K=Black adj arc 90-210, G=Green adj arc 210-270, R=Red 360 arc.
⊗	Hunter MP3000 PROS-06-PRS40-CV-R Turf Rotator, 6" (15.24 cm) pop-up with factory installed check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. B=Blue adj arc 90-210, Y=Yellow adj arc 210-270, A=Gray 360 arc.
⊗	Hunter MP Strip PROS-06-PRS40-CV-R Turf Rotator, 6" (15.24 cm) pop-up with factory installed check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. LST=Ivory left strip, SST=Brown side strip, RST=Copper right strip.
⊗	Hunter MP Corner PROS-06-PRS40-CV-R Turf Rotator, 6" (15.24cm) pop-up with factory installed check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. T=Turquoise adj arc 45-105.
⊗	Hunter MP800SR PROS-06-PRS40-CV-R Turf Rotator, 6.0" pop-up with check valve, pressure regulated to 40 psi (2.76 bar), MP Rotator nozzle on PRS40 body. ADJ=Orange and Gray (arc 90-210), 360=Lime Green and Gray (arc 360)
⊗	Hunter ICV-G-FS-R 1", 1-1/2", and 2" Plastic Electric Remote Control Valves, Globe Configuration, with NPT Threaded Inlet/Outlet, for Commercial/Municipal Use. With Filter Sentry.
⊕	Hunter 1" ICZ-101-40-R - Drip Zone Control Kit
▶	Matco 514 - Bronze Gate Valve Assembly - Line Size With Reclaimed Water / Purple Handle
⊞	Stop and Waste Valve - 1"
⊞	Hunter HQ44-LRC-R - Quick Coupler
⊞	Master Valve Assembly - Weathermatic MAX-DW
⊞	Flow Sensor - Weathermatic SLFSI-B15
⊞	Hunter ACC2 75 Station Controller Model: A2C-75D-M Wire: 1D1 blue / red, 14awg Decoder: ICD 100 provided at each control valve Decoder Grounding: 5/8"x10" steel rod at 1,000 l.f. on center max. along mainline
⊞	Hunter Wired Solar Sync - Rain Shutoff Device Model: Solar-Sync-Sen
—	Irrigation Lateral Line: PVC Class 200 SDR 21 PVC Class 200 purple reclaimed irrigation pipe. 1" unless otherwise indicated.
—	Irrigation Mainline: PVC Class 200 SDR 21 PVC Class 200 purple reclaimed irrigation pipe. 1-1/2"
—	3/4" UV Resistant Polyethylene Dripline - Use Purple Colored Pipe for Reclaimed Water Applications. Layout is Diagrammatic - See Irrigation Details for Trees and Shrubs
●	Netamif TLSOV - manual flush valve
—	Pipe Sleeve: PVC Class 200 SDR 21 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall be 6" for all mainline pipe and twice the size of lateral pipes. Extend sleeves 18 inches beyond edges of paving or construction.
⊞	Valve Number
⊞	Valve Flow
⊞	Valve Size

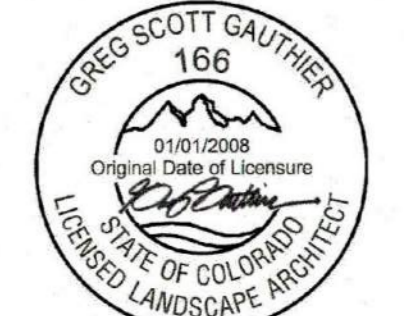
COTTONWOOD WATER AND SANITATION DISTRICT SIGNATURE

THE DISTRICT ENGINEER AND MANAGER MUST BE NOTIFIED AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION. CALL THE DISTRICT AT 303-548-9857. THE DISTRICT ENGINEER AND SUPPORTING STAFF WILL OBSERVE THE WORK FOR COMPLIANCE WITH THE DISTRICT SPECIFICATIONS. THE DEVELOPER/OWNER WILL BE CHARGED FOR CONSTRUCTION OBSERVATION AND BE BILLED BY THE DISTRICT. PAYMENT MUST BE RECEIVED IN FULL PRIOR TO FINAL ACCEPTANCE OF THE NEW LINES. CONSTRUCTION OBSERVATION ASSISTS IN QUALITY CONTROL IN ACHIEVING CONFORMANCE WITH THE DISTRICT SPECIFICATIONS, BUT DOES NOT GUARANTEE THE CONTRACTORS PERFORMANCE. SUCH CONSTRUCTION OBSERVATION SHALL IN NO WAY RELIEVE THE CONTRACTOR OF HIS/OHER OBLIGATION TO CONSTRUCT FACILITIES IN ACCORDANCE WITH REGULATIONS. WORK NOT PERFORMED IN ACCORDANCE WITH THE DISTRICT'S SPECIFICATIONS WILL NOT BE ACCEPTED. THESE PLANS HAVE BEEN REVIEWED FOR WATER AND SANITARY SEWER ONLY.

REVIEWED FOR COTTONWOOD
WATER AND SANITATION DISTRICT

DISTRICT MANAGER: *[Signature]* 1/3/2020
DISTRICT ENGINEER: *[Signature]* 1/3/2020

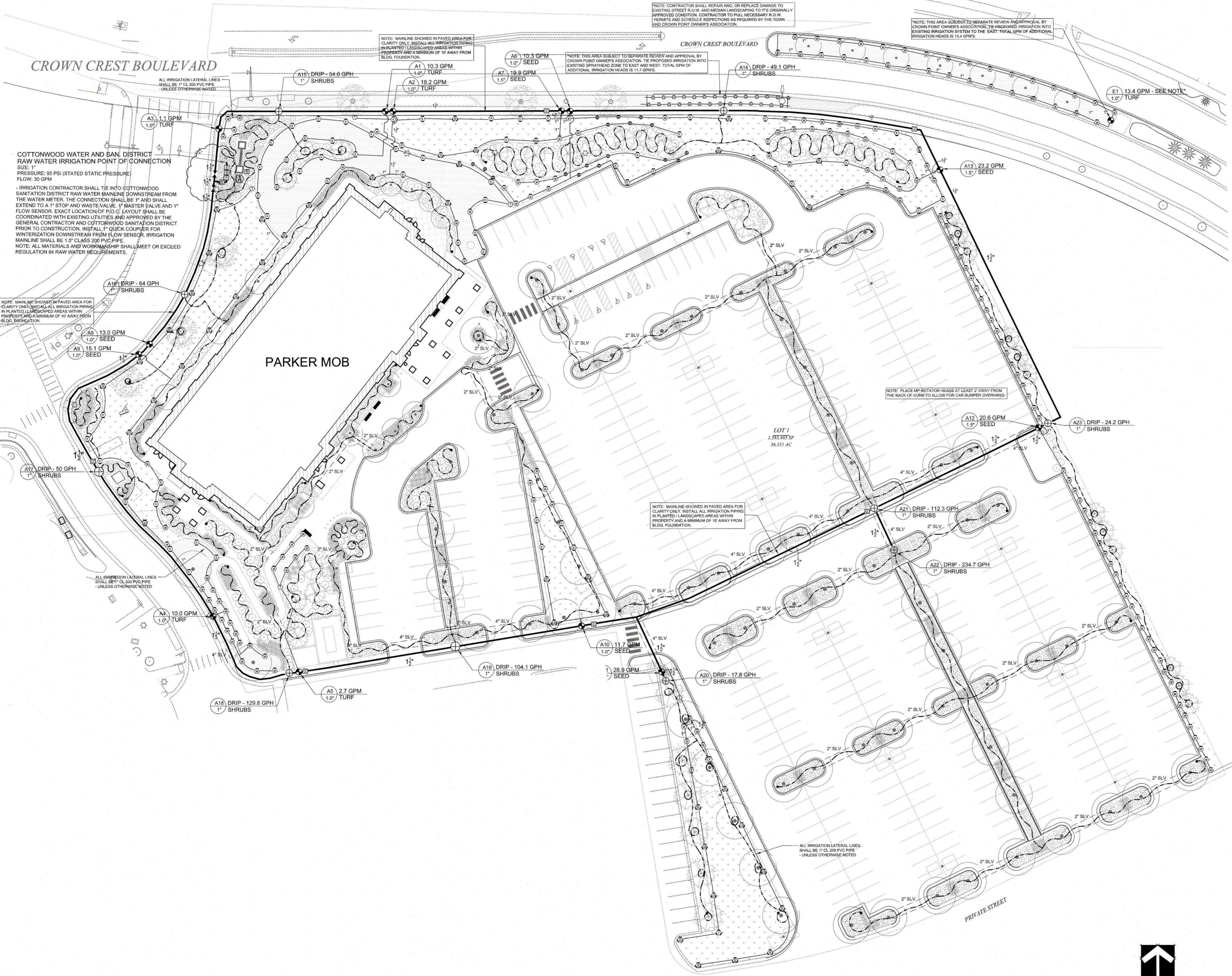
PROJECT LANDSCAPE ARCHITECT:



DATE APPROVAL: 09/09/2019
CHECKED BY: 09/09/2019
DATE: 09/09/2019

CONSTRUCTION DOCUMENTS

1101



IRRIGATION PLAN

