NOTICE
GLENPOOL UTILITY SERVICE AUTHORITY
REGULAR MEETING

A Regular Session of the Glenpool Utility Service Authority will be held at 6:00 p.m. immediately following the Glenpool City Council Meeting on January 4, 2021, at Glenpool City Hall, City Council Chambers, 12205 S. Yukon Ave., 3rd Floor, Glenpool, Oklahoma.

NOTE: The Glenpool Utility Service Authority will be assembled for the meeting at the City Council Chambers, 12205 S. Yukon Ave, Glenpool, Oklahoma. Members of the public are invited to attend the in-person meeting, or join a live broadcast at this link:
Join Zoom Meeting
https://us02web.zoom.us/j/82475032139?pwd=VnhQUW9uMnZPbWZaejBvRC9wOFkrQT09
Meeting ID: 824 7503 2139
Passcode: 642062
One tap mobile
+12532158782,,82066748452#,,,,,,0#,,755483# US (Tacoma)
+13462487799,,82066748452#,,,,,,0#,,755483# US (Houston)
Dial by your location
+1 253 215 8782 US (Tacoma)
+1 346 248 7799 US (Houston)

Meeting ID: 824 7503 2139
Passcode: 642062
Find your local number: https://us02web.zoom.us/u/kcV3f0Gko8

The GUSA Board welcomes comments from citizens of Glenpool who wish to address any item on the agenda.

- Speakers attending in **PERSON** are required to complete the Request to Speak form located on the agenda table and return to the City Clerk **PRIOR TO THE CALL TO ORDER.**
- Speakers attending via **ZOOM** are required to complete the Request to Speak form located on our website: https://glenpoolonline.civicweb.net/document/19057/Request%20to%20Speak%20Form.pdf and email it to the City Clerk: Wknight@cityofglenpool.com **PRIOR TO 6:00 PM, JANUARY 4, 2021.**

AGENDA

Page

A) **Call to Order - Timothy Lee Fox, Chairman**

B) **Roll Call, Declaration of Quorum – Wendy Knight, Secretary; Timothy Lee Fox, Chairman**

C) **Public Works Director Report - Rob Werley**

1) GUSA PW report Dec 2020 3 - 4

D) **Scheduled Business**

1) Discussion and possible action to approve minutes from December 7, 2020 meeting. 5 - 8
(Wendy Knight, Secretary)
GUSA - 07 Dec 2020 - Minutes - Html

2) Discussion and possible action to accept ownership of a public waterline extension serving *Twin Ponds Addition*, including the corresponding 'As-Built' documents and one-year Maintenance Bond, conditioned on the recording of the final subdivision plat of *Twin Ponds Addition* in the public records of Tulsa County. 9 - 17
(Lynn Burrow, Community Development Director)
Waterline Acceptance Twin Ponds

3) Discussion and possible action to approve a quote from Environmental Improvements, Inc. for wastewater treatment plant equipment, in an amount not to exceed $12,764.00, to be funded from the FY 2020/2021 GUSA Budget Item No.02-6-16-6278 Sewer Improvements. 18 - 25
(Lynn Burrow, Community Development Director)
Treatment Plant Equipment Replacement

4) Discussion and possible action to approve the Amended 2021 Meeting Schedule. 26
(Wendy Knight, City Clerk)
Amended 2021 Meeting Schedule

E) **Adjournment**

This notice and agenda was posted at Glenpool City Hall, 12205 S. Yukon Ave., Glenpool, Oklahoma, on December 31, 2020, by 4:00 pm.
Signed: Wendy Knight
Secretary

City Of Glenpool
Creating Opportunity

4 January 2021

To: Honorable Chairman and Trustee's, Glenpool Utility Service Authority

From: Rob Werley, Public Works Director

RE: December 2020 Public Works Operations Report

The following information is a summary of the work that is in progress or has been completed by Public Works crews for the month of November:

Wastewater:

- 4th quarter WET system samples submitted last month passed
- Had contractor come out to trouble shoot chemical pumps at the WWTP as well as the disinfection building by the river outfall. A temporary pump was left in place at the disinfection building
- 4 sewer backups, 3 were in City mains caused by grease and 1 was on customers' side. We inspected our main and found large amounts of roots coming from the customers sewer service causing his problem.

Water:

- Meter reading started on the 2nd of December and were completed by the 7th of December to include 1 re-read
- Replaced 15 defective registers
- No cutoffs were done this month
- 9 blue tags were sent out for non-sufficient funds
- 135 service orders were completed for the Utility Billing Department
- Monthly bac-t samples were taken, all samples passed
- 181 locates were completed
- Crews have been going through neighborhoods cleaning out meters boxes to improve the AMR meter single.
- Contractor replaced Water booster station SCADA antenna and radio receiver
- Replaced two out of service hydrants, one at 13609 Poplar St. and one at 13771 Poplar St
- Made tap, ran service line, set meter and meter box for irrigation system at the Beehive Assisted Living Center
- Repaired a leak on a 2" meter; repaired a leak on water line at WWTP that goes to the Animal shelter building

- Contractor attempted to start repairs t two broken vales in Kenndalwood South but had issues with inserta vale machin

Parks:

- Daily check of parks, pick up trash and empty trash cans
- Cleaned out debris from low water crossings in Morris Park and Black Gold Park
- Trimmed bushes, cleaned up planter area at the Veterans / POW monument area
- Trimmed bushes at Utility Billing and the northern City of Glenpool sign
- Cleaned, removed debris from gutters at Public Works building

Streets:

- Replaced 25MPH sign that was damaged at 141st and Warrior Rd.
- Cleaned out concrete drainage structures in front of Warrior Station on 141st at Elwood
- Cleaned out drainage ditches at Kendallwood South Park
- Replaced a 15MPH sign on 141st Pl South
- Replaced a 35MPH sign on 141st west of Hwy 75
- Removed debris from the concrete culvert to the rear of Alder View Apartments, replaced fencing around the concrete culverts
- Plowed, sanded Public Safety drive and parking area due to snowstorm 12/13
- Plowed, sanded streets due to snowstorm on 12/13
- Repaired potholes on 141st & Elwood, various other locations
- Beginning crack sealing streets, various locations
- Contractor repaired a failing storm sewer manhole structure on S Hickory St @ 141st

MINUTES
GUSA Meeting
Monday, December 7, 2020 Council Chambers 6:00 PM

TRUSTEES PRESENT:
Tim Fox
Momodou Ceesay
Joyce Calvert
Jacqueline Triplett-Lund
Brandon Kearns

STAFF PRESENT:
David Tillotson
Susan White
Lowell Peterson
Wendy Knight
John Gonsalves
Lynn Burrow
Jim Martin
Rob Werley
Lea Ann Reed

A) Call to Order - Timothy Lee Fox, Chairman
Chairman Fox called the meeting to order at 8:25 p.m.

B) Roll Call, Declaration of Quorum – Wendy Knight, Secretary; Timothy Lee Fox, Chairman
Wendy Knight called the roll, Chairman Fox declared a quorum present.

C) Public Works Director Report - Rob Werley

GUSA PW report Nov 2020

D) Scheduled Business

1) Discussion and possible action to approve minutes from November 2, 2020 meeting.
(Wendy Knight, Secretary)

Moved by Momodou Ceesay, seconded by Jacqueline Triplett-Lund

To approve the minutes as presented.

	For	Against	Abstained	Absent
Tim Fox	x			
Momodou Ceesay	x			
Joyce Calvert	x			
Jacqueline Triplett-Lund	x			
Brandon Kearns	x			
	5	0	0	0

CARRIED.

GUSA - 02 Nov 2020 - Minutes - Html

2) Discussion and possible action to acknowledge receipt of audited FY2018-2019 Financial Report and Operating Report and direct that the Report be placed in the permanent files.
(John Gonsalves, Finance Director)

Mr. Gonsalves presented the audited FY2018-2019 Financial Report and Operating Report.

Moved by Joyce Calvert, seconded by Jacqueline Triplett-Lund

To acknowledge receipt of audited FY2018-2019 Financial Report and Operating Report and direct that the Report be placed in the permanent files.

	For	Against	Abstained	Absent
Tim Fox	x			
Momodou Ceesay	x			
Joyce Calvert	x			
Jacqueline Triplett-Lund	x			
Brandon Kearns	x			
	5	0	0	0

CARRIED.

GUSA FY2018-2019 Audited Financial Report and Operating Report Final

3) Discussion and possible action to approve 3rd quarter blanket purchase orders in the amount of $924,375.48.
(John Gonsalves, Finance Director)

Mr. Gonsalves presented and recommended Board approval of 3rd quarter blanket purchase orders in the amount of $924,375.48.

Moved by Momodou Ceesay, seconded by Jacqueline Triplett-Lund

To approve 3rd quarter blanket purchase orders in the amount of $924,375.48.

	For	Against	Abstained	Absent
Tim Fox	x			
Momodou Ceesay	x			
Joyce Calvert	x			
Jacqueline Triplett-Lund	x			
Brandon Kearns	x			
	5	0	0	0

CARRIED.

GUSA FY 20-21 3rd QTR Blanket Po's

4) Discussion and possible action to receive and approve the Annual Audit of Compliance with Agreement of Settlement, Compromise and Release ("Settlement Agreement") as required by Sec. 10 of such Settlement Agreement, dated May 15, 2015 and which settled outstanding litigation between the City and GUSA (together, "Glenpool") and Creek County Rural Water District No. 2 ("Creek-2").
(Wendy Knight, City Clerk)

Ms. Knight presented and recommended the Board receive and approve the Annual Audit of Compliance with Agreement of Settlement, Compromise and Release ("Settlement Agreement") as required by Sec. 10 of such Settlement Agreement, dated May 15, 2015 and which settled outstanding litigation between the City and GUSA (together, "Glenpool") and Creek County Rural Water District No. 2 ("Creek-2").

Moved by Jacqueline Triplett-Lund, seconded by Momodou Ceesay

To receive and approve the Annual Audit of Compliance with Agreement of Settlement, Compromise and Release ("Settlement Agreement") as required by Sec. 10 of such Settlement Agreement, dated May 15, 2015 and which settled outstanding litigation between the City and GUSA (together, "Glenpool") and Creek County Rural Water District No. 2 ("Creek-2").

	For	Against	Abstained	Absent
Tim Fox	x			

Momodou Ceesay	x			
Joyce Calvert	x			
Jacqueline Triplett-Lund	x			
Brandon Kearns	x			
	5	0	0	0

CARRIED.

Staff Report FY 2019-2020 Creek II Audit
FY 2019-2020 Creek II Audit

E) Adjournment

Chairman Fox declared the meeting adjourned at 8:32 p.m.

City Of Glenpool

Creating Opportunity

MEMORANDUM

TO: **CHAIRMAN AND BOARD OF TRUSTEES**
GLENPOOL UTILITY SERVICES AUTHORITY

FROM: **LYNN BURROW, PE**
COMMUNITY DEVELOPMENT DIRECTOR

RE: **ACCEPTANCE OF PUBLIC WATERLINE EXTENSION SERVING 'TWIN PONDS' RESIDENTIAL ADDITION**

DATE: **JANUARY 4, 2021**

BACKGROUND

This item is for Board consideration and action regarding the approval and acceptance for ownership a certain public waterline extension constructed to serve the Twin Ponds residential development located on the north side of 181st Street - west of US Highway 75 per the attached 'As-Built' construction documents. This waterline extension was permitted for construction by the Oklahoma Department of Environmental Quality (ODEQ) and was inspected by City staff during construction for compliance with the approved construction plans and State and City design criteria. It should be noted that the subject waterline extension was constructed within general utility easements to be created by the Final Subdivision Plat for this addition. The attached Maintenance Bond issued by the Developer (Southwind Homes) covers 100% of the total cost of the waterline facilities in question for the required one-year period from GUSA acceptance.

Staff Recommendation:

Staff recommends that the Board approve the acceptance of these facilities for ownership as illustrated - including the corresponding 'As-Built' construction documents supported by the required one-year Maintenance Bond. Said approval to be specifically conditioned on the recording of the final subdivision plat of Twin Ponds Addition in the public records of Tulsa County.

Attachments:

A. 'As-Built" Waterline Construction Plans
B. Associated Maintenance Bond

OKLAHOMA SURETY COMPANY

P. O. Box 1409
TULSA, OKLAHOMA 74101

MAINTENANCE BOND

BOND NUMBER 1021532

KNOW ALL MEN BY THESE PRESENTS:

THAT WE, Southwind Homes

8217 South Maybelle Ave. Tulsa, OK 74132 as Principal,
and **OKLAHOMA SURETY COMPANY**, an Ohio corporation, having its principal place of business in the City of Tulsa and State of Oklahoma,

as Surety, are held and firmly bound unto City of Glenpool

12205 South Yukon, Glenpool, OK 74033 as Obligee,
in the penal sum of Fifty Thousand & 00/100

Dollars ($ $50,000.00)
lawful money of the United States of America, for the payment of which, well and truly to be made, we bind ourselves, and each of our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS the said Principal has constructed certain improvements described as follows:

Install 6" Waterline-181st Street and HWY 75 South to serve Twin Ponds Subdivision

Which said improvements have been constructed to conform with specifications prepared by

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that, if the said Principal shall maintain said improvements for a period of One year(s) against any failure due to defective workmanship or defective materials, said One year(s) period to begin with the date of completion and acceptance of such completed improvements described above, then this obligation shall be null and void, otherwise to remain in full force and effect, subject however to the following express provision:

The Obligee, by and through its proper representative, shall give the Principal and the Surety written notice of all repairs required to fulfill the terms of this maintenance guarantee; and the said Principal and Surety shall, after receipt of any such notice, be allowed a reasonable period of time in which to make any such repairs.

Signed, Sealed and Dated this 8th day of December , 2020 .

Ramona Beeler
Witness

Southwind Homes
Principal
By Danny Beeler

OKLAHOMA SURETY COMPANY
By Cathy Combs
Cathy Combs Attorney-in-fact

OKLAHOMA SURETY COMPANY

1437 SOUTH BOULDER, SUITE 200 · TULSA, OKLAHOMA 74119 · 918-587-7221 · FAX 918-588-1253

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That the **OKLAHOMA SURETY COMPANY**, a corporation organized and existing under and by virtue of the laws of the State of Ohio, does hereby nominate, constitute and appoint the person or persons named below, each individually if more than one is named, its true and lawful attorney-in-fact, for it and in its name, place and stead to execute on behalf of the said Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof. Travis E. Brown, Jamie Burris, Cathy Combs, John Kelly Deer, Vaughn P. Graham, Vaughn Paul Graham, Jr., Mark Edward Long, Stephen M. Poleman and Michael J. Swenton, all of TULSA, OK

IN WITNESS WHEREOF, the **OKLAHOMA SURETY COMPANY** has caused these presents to be signed and attested by its appropriate officers and its corporate seal hereunto affixed this 20 day of February, 2020

OKLAHOMA SURETY COMPANY CORPORATE SEAL OHIO

ATTEST:

SHARON HACKL — Secretary

OKLAHOMA SURETY COMPANY

TODD BAZATA — VICE PRESIDENT

On this 20 day of February, 2020 before me personally appeared TODD BAZATA, to me known, being duly sworn, deposes and says that s/he resides in Broken Arrow, Oklahoma, that s/he is a Vice President of **Oklahoma Surety Company**, the company described in and which executed the above instrument; that s/he knows the seal of the said Company; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by authority of her/his office under the By-Laws of said Company, and that s/he signed his name thereto by like authority.

STATE OF OKLAHOMA } ss
COUNTY OF TULSA }

JULIE CALLAHAN NOTARY PUBLIC IN AND FOR STATE OF OKLAHOMA WAGONER COUNTY

Commission # 11008253

My Commission expires: 09-08-23

JULIE CALLAHAN — Notary Public

This Power of Attorney is granted by authority of the following resolutions adopted by the Board of Directors of **Oklahoma Surety Company** by unanimous written consent dated September 25, 2009.

RESOLVED: That the President, the Executive Vice President, the several Senior Vice Presidents and Vice Presidents or any one of them, be and hereby is authorized, from time to time, to appoint one or more Attorneys-in-Fact to execute on behalf of the Company, as surety, any and all bonds, undertakings and contracts of suretyship, or other written obligations in the nature thereof; to prescribe their respective duties and the respective limits of their authority; and to revoke any such appointment at any time.

RESOLVED FURTHER: That the Company seal and the signature of any of the aforesaid officers and any Secretary or Assistant Secretary of the Company may be affixed by facsimile to any power of attorney or certificate of either given for the execution of any bond, undertaking, contract of suretyship, or other written obligation in the nature thereof, such signature and seal when so used being hereby adopted by the Company as the original signature of such officer and the original seal of the Company, to be valid and binding upon the Company with the same force and effect as though manually affixed.

CERTIFICATION

I, SHARON HACKL, Secretary of **Oklahoma Surety Company**, do hereby certify that the foregoing Power of Attorney and the Resolutions of the Board of Directors of September 25, 2009 have not been revoked and are now in full force and effect.

Signed and sealed this 8th day of December, 2020

OKLAHOMA SURETY COMPANY CORPORATE SEAL OHIO

SHARON HACKL — Secretary

VOID IF BOX IS EMPTY

Sheet Index

COVER SHEET	WL1
CITY OF GLENPOOL PUBLIC WATERLINE PLAN	WL2
WATERLINE PROFILE	WL3
WATERLINE PROFILE & CONSTRUCTION NOTES	WL4

CITY OF GLENPOOL STANDARD DETAILS (ATTACHED)

Legend

A/C	AIR CONDITIONER UNIT/PAD
4GAI	4-GRATE AREA INLET
AMH	ACCESS MANHOLE
B/L	BUILDING SETBACK LINE
B/W	BARBED WIRE FENCE
BC	BOTTOM OF CURB
BM	BENCHMARK
BOP	BEGINNING OF PROJECT
C/L	CHAIN LINK FENCE
CCI	CONCRETE CURB INLET
CICI	CAST IRON CURB INLET
CONC.	CONCRETE
CPED	CABLE/TV PEDESTAL
CY	CUBIC YARDS
EOP	END OF PROJECT
ELEC	ELECTRIC
EPED	ELECTRIC PEDESTAL
ESMT	EASEMENT
EX	EXISTING
F/E	FENCE EASEMENT
FG	FINISHED GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FLT	THROAT FLOWLINE
FP	FLAG POLE
GLT	GROUND LIGHT
GM	GAS METER
GRSR	GAS RISER
GUY	DOWN GUY
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE
IPF	IRON PIN FOUND
LF	LINEAR FEET
LNA	LIMITS OF NO ACCESS
LP	LIGHT POLE
MA/E	MUTUAL ACCESS EASEMENT
MB	MAILBOX
OD/E	OVERLAND DRAINAGE ESMT
OE	OVERHEAD ELECTRIC
OL	ORNAMENTAL LIGHT
PG	PROPOSED GRADE
PP	POWER POLE
RW/E	RESTRICTED WL EASEMENT
RCP	REINFORCED CONC. PIPE
RET. WALL	RETAINING WALL
S/W	SIDEWALK
SD	STORM DRAIN
SDMH	STORMWATER MANHOLE
SF	SQUARE FEET
SGAI	SINGLE GRATE AREA INLET
SPHD	SPRINKLER HEAD
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSLH	SANITARY SEWER LAMPHOLE
SSMH	SANITARY SEWER MANHOLE
SY	SQUARE YARD
TC	TOP OF CURB
TG	TOP OF GRATE
TP	TOP OF PAVING
TPED	TELEPHONE PEDESTAL
TR	TOP OF RIM
TS	TRAFFIC SIGN
TW	TOP OF WALL
U/E	UTILITY EASEMENT
UG	UNDERGROUND GAS LINE
UTMH	UTILITY MANHOLE
W/ DIP	WITH UNDERGROUND RISER
WL	WATERLINE
WLMH	WATERLINE MANHOLE
WM	WATER METER
WRSR	WATER SPIGOT
WV	WATER VALVE

Disclaimer

THESE PLANS AND DRAWINGS ARE NOT TO BE CHANGED IN ANY FORM OR MANNER WHATSOEVER WITHOUT FIRST OBTAINING THE EXPRESS WRITTEN PERMISSION AND CONSENT OF ENGINEERED BY DESIGN, PLLC. ANY CHANGES MADE FROM THESE PLANS WITHOUT CONSENT OF ENGINEERED BY DESIGN, PLLC ARE UNAUTHORIZED, AND SHALL RELIEVE ENGINEERED BY DESIGN, PLLC OF RESPONSIBILITY FOR ALL CONSEQUENCES ARRIVING OUT OF SUCH CHANGE(S).

Owner / Developer

DANNY R. & ZACHARY BEELER
8217 SOUTH MAYBELLE AVENUE
TULSA, OK 74132
PHONE: (918) 269-0095

Surveyor

FORESIGHT LAND SURVEYING, LLC
318 WEST MAIN STREET
HENRYETTA, OKLAHOMA 74437
PHONE: (918) 268-2502
EMAIL: foresightsurveying.net
C.A. # 7652 EXPIRES: 6-30-2020

Engineer

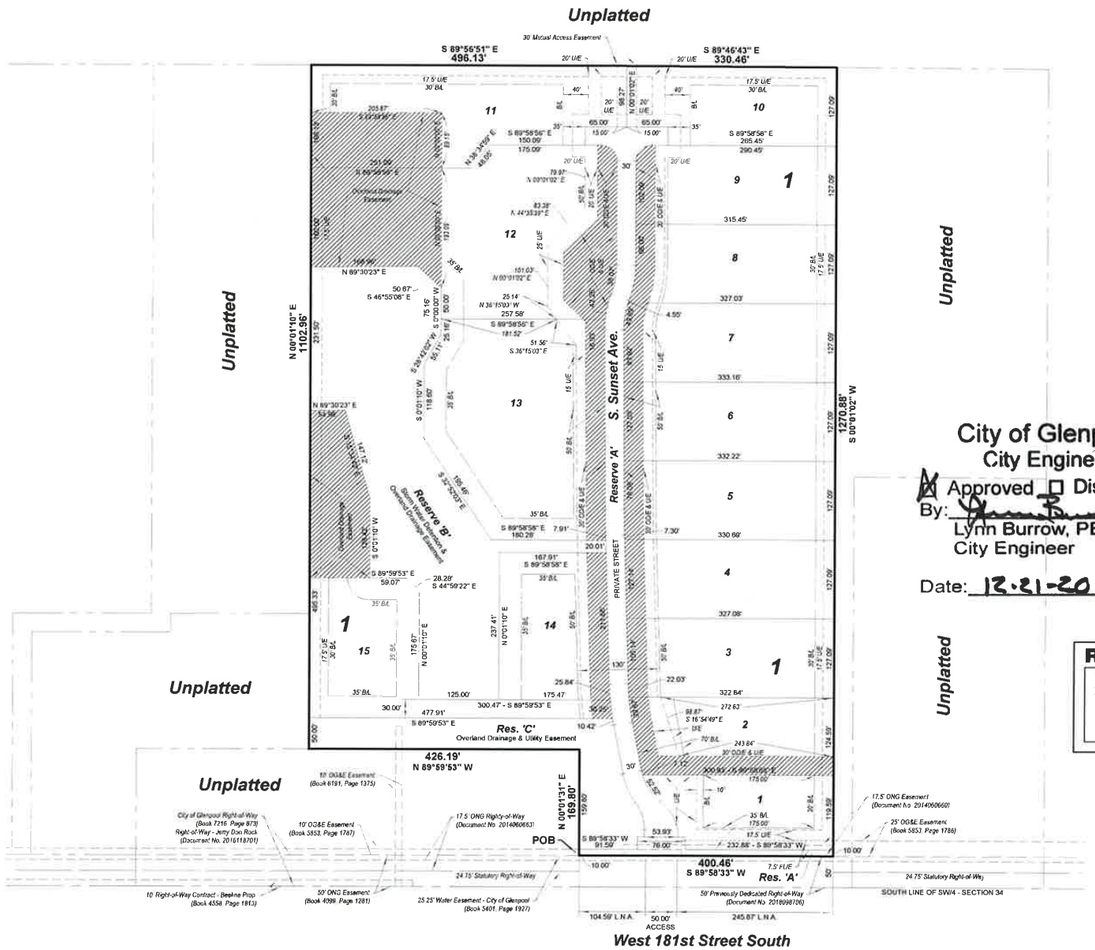
ENGINEERED BY DESIGN, PLLC
P.O. BOX 15567
DEL CITY, OKLAHOMA 73155
PHONE: (405) 234-0980
ahale@engineeredbydesign.pro
C.A. # 7655 EXPIRES 6-30-2020

Public Waterline Plans

Twin Ponds

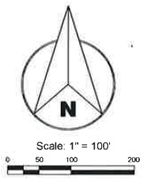
PUD No. 41

A SUBDIVISION IN THE CITY OF GLENPOOL, TULSA COUNTY, OKLAHOMA BEING A PART OF THE SW/4 OF SECTION THIRTY-FOUR (34), TOWNSHIP SEVENTEEN (17) NORTH, RANGE TWELVE (12) EAST OF THE INDIAN BASE AND MERIDIAN.



R 12 E

Location Map
SCALE 1"=2000'



Notes

ALL STREETS IN RESERVE 'A' ARE PRIVATE STREETS OWNED AND MAINTAINED BY THE HOMEOWNER'S ASSOCIATION.

ADDRESSES SHOWN ON THIS PLAT WERE ACCURATE AT THE TIME THIS PLAT WAS FILED. ADDRESSES ARE SUBJECT TO CHANGE AND SHOULD NEVER BE RELIED ON IN PLACE OF LEGAL DESCRIPTION.

ALL WATER SERVICES WILL BE SUPPLIED AND MAINTAINED BY THE CITY OF GLENPOOL.

Summary

SUBDIVISION CONTAINS FIFTEEN (15) LOTS IN ONE (1) BLOCK AND THREE (3) RESERVE AREAS.

GROSS SUBDIVISION AREA: 979,214.15 SF / 22.48 ACRES

Basis of Bearings

THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW/4) OF SECTION 34, T-17-N, R-12-E, AS NORTH 89°58'33" EAST.

Monumentation

ALL CORNERS SHOWN HEREON WERE SET USING A 1/2" x 18" IRON ROD WITH A BLUE PLASTIC CAP STAMPED "FORESIGHT CA7652"

Benchmark

VERTICAL DATUM SHOWN HEREON IS NAVD88 (2011) AND WAS DETERMINED BY POST-PROCESSED STATIC GPS OBSERVATIONS

City of Glenpool
City Engineer

☒ Approved ☐ Disapproved

By: _____
Lynn Burrow, PE
City Engineer

Date: 12-21-20

RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

By: _____

Date: 9/23/2020

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN.

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF GLENPOOL ENGINEERING STANDARD SPECIFICATIONS, INCLUDING O.D.O.T. 2009 EDITION AND APPLICABLE SUPPLEMENTS.

CONSULTANTS

ENGINEERED BY DESIGN
Engineered by Design, PLLC
P.O. Box 15567 Del City, OK 73155
Ph: 405-234-0980
CA# 7655 - Expires 6/30/2022

Select design
DEVELOPMENT ANALYSIS
PROJECT MANAGEMENT
DRAFTING & DESIGN
P.O. Box 548
Bixby, Oklahoma 74008
Phone: (918) 798-8356

PROJECT NAME

Twin Ponds
PUD No. 41
Glenpool, Oklahoma
Project No. 2104

SEAL

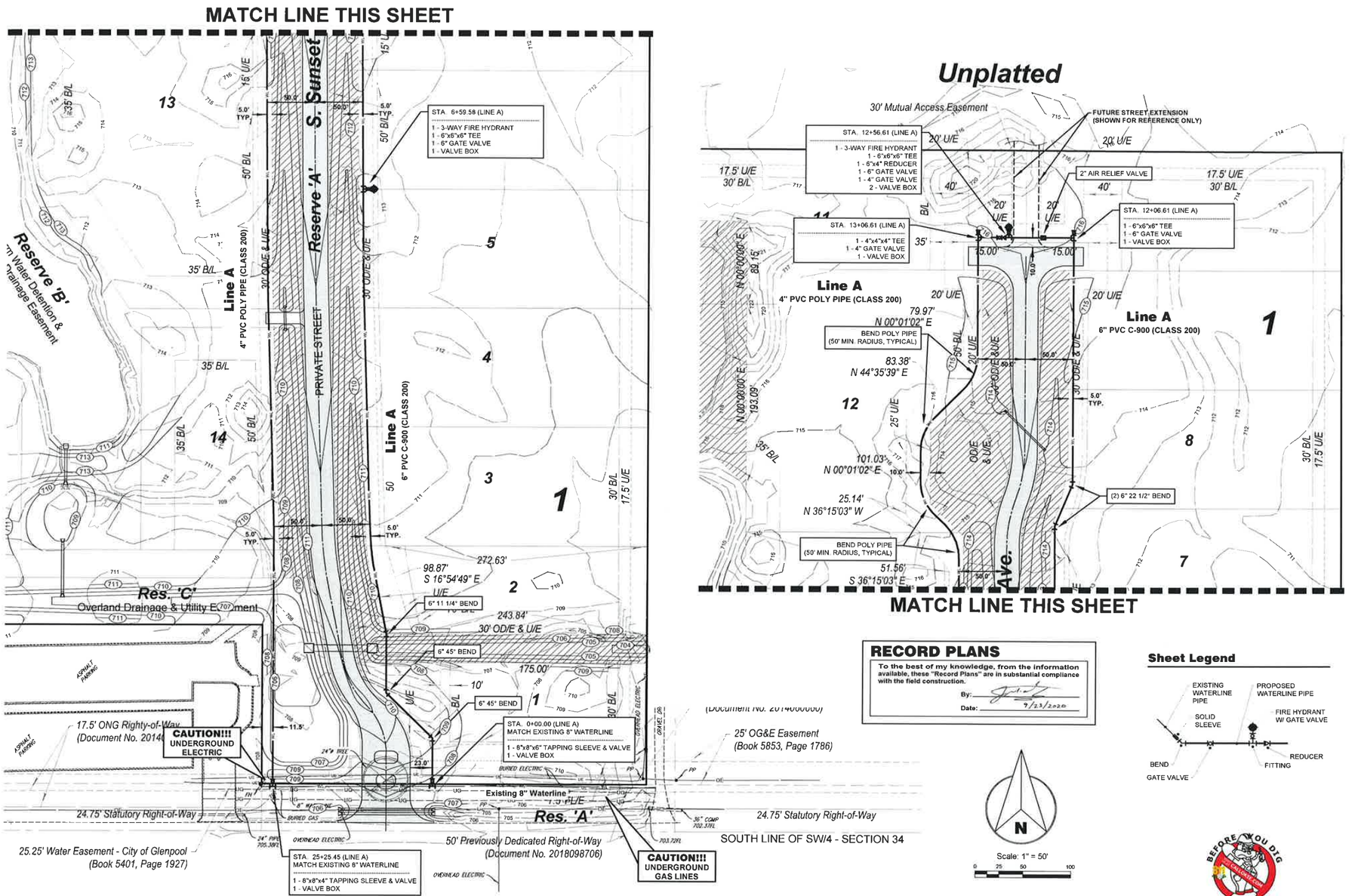
REVISIONS

ISSUE DATE
12/1/2020

SCALE
1"=100

SHEET NAME
COVER SHEET

SHEET NO.
WL1



RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

By: _____

Date: 9/23/2020

Sheet Legend

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN.

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF GLENPOOL ENGINEERING STANDARD SPECIFICATIONS, INCLUDING O.D.O.T. 2009 EDITION AND APPLICABLE SUPPLEMENTS.

CONSULTANTS

ENGINEERED BY DESIGN

Engineered by Design, PLLC
P.O. Box 15567 Del City, OK 73155
Ph: 405-234-0980
CA## 7655 - Expires 6/30/2022

Select design
DEVELOPMENT ANALYSIS
PROJECT MANAGEMENT
DRAFTING & DESIGN

P.O. Box 548
Bixby, Oklahoma 74008
Phone: (918) 798-8356

PROJECT NAME

Twin Ponds
PUD No. 41

Glenpool, Oklahoma

Project No. 2104

SEAL

LICENSED PROFESSIONAL ENGINEER — AARON D. BIRD — 24309 — OKLAHOMA

SIGNATURE ON FILE

REVISIONS

ISSUE DATE

12/1/2020

SCALE

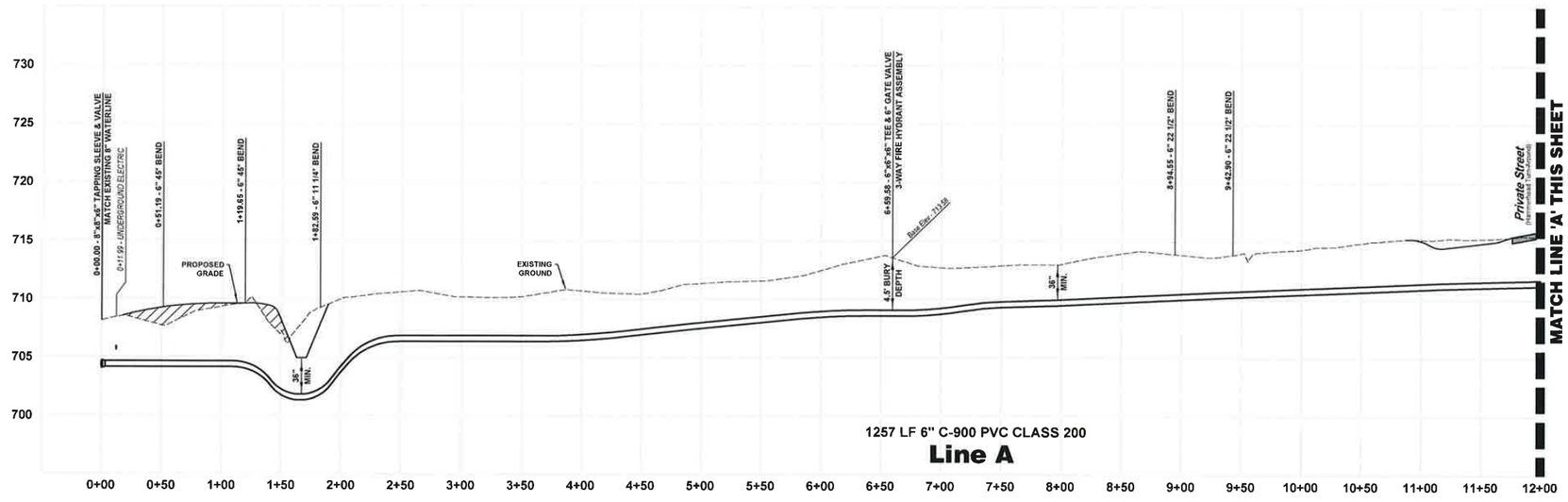
1"=50'

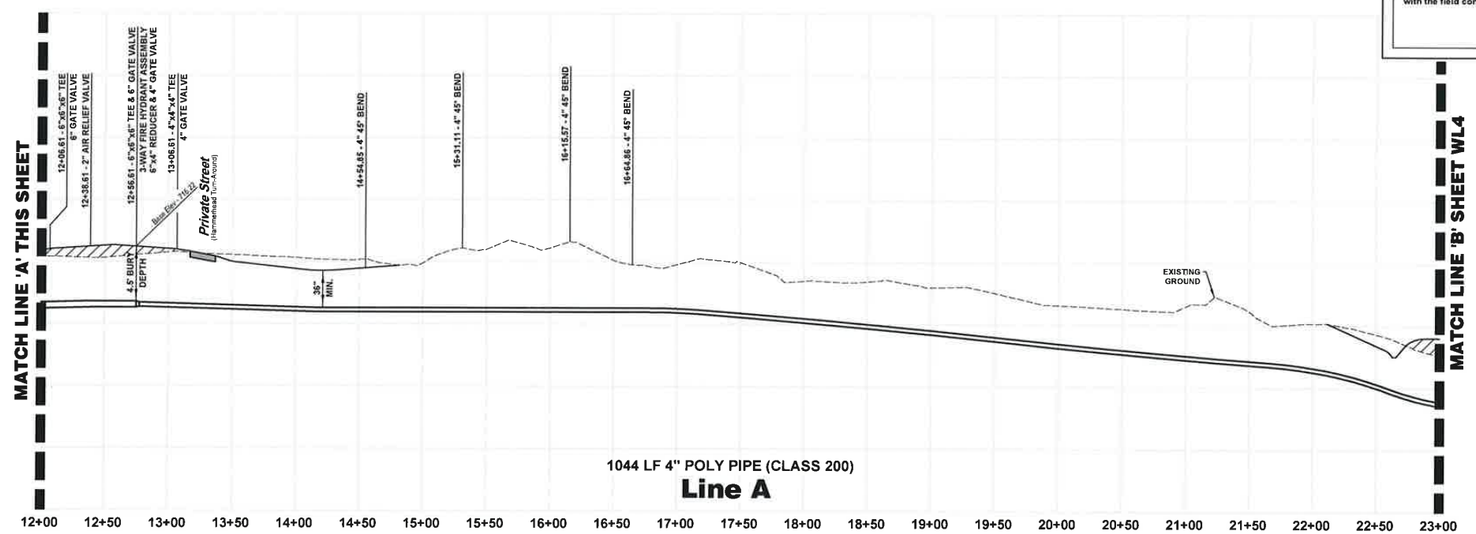
SHEET NAME

CITY OF GLENPOOL
PUBLIC
WATERLINE PLAN

SHEET NO.

WL2





RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

By: _____

Date: 7/23/2020

NOTE:

ALL WATERLINE BENDS ARE HORIZONTAL BENDS, UNLESS OTHERWISE NOTED.

FILL COMPACTED TO 90% STANDARD PROCTOR DENSITY PRIOR TO PIPE INSTALLATION

BEFORE YOU DIG OKLAHOMA 811

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN.

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF GLENPOOL ENGINEERING STANDARD SPECIFICATIONS, INCLUDING O.D.O.T. 2009 EDITION AND APPLICABLE SUPPLEMENTS.

CONSULTANTS

ENGINEERED BY DESIGN

Engineered by Design, PLLC
P.O. Box 15567 Del City, OK 73155
Ph: 405-234-0980
CA# 7655 - Expires 6/30/2022

Select design
DEVELOPMENT ANALYSIS
PROJECT MANAGEMENT
DRAFTING & DESIGN

P.O. Box 648
Bixby, Oklahoma 74008
Phone: (918) 798-8356

PROJECT NAME

Twin Ponds
PUD No. 41

Glenpool, Oklahoma
Project No. 2104

SEAL

LICENSED PROFESSIONAL ENGINEER AARON D. HALL 24309 OKLAHOMA

SIGNATURE ON FILE

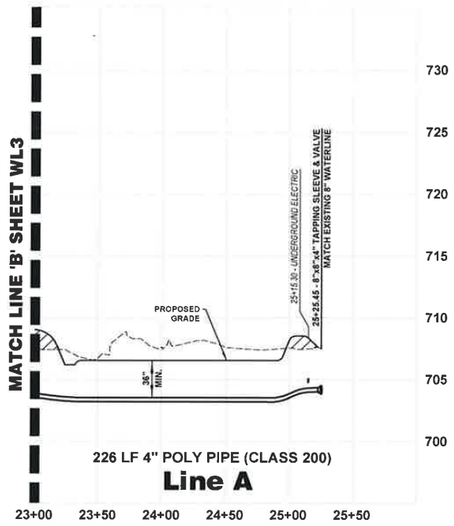
REVISIONS

ISSUE DATE
12/1/2020

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

SHEET NAME
WATERLINE PROFILE

SHEET NO.
WL3



General Construction Notes

1. ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF GLENPOOL STANDARDS AND SPECIFICATIONS.
2. EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN AND LOCATIONS HAVE BEEN VERIFIED BY THE OWNERS OF SAID LINES. THE EXACT LOCATIONS AND NOTIFICATIONS OF THE PROPER AGENCY IS THE RESPONSIBILITY OF THE CONTRACTOR PRIOR TO ANY EXCAVATION.
3. AFTER CONSTRUCTION IS COMPLETE, ALL DISTURBED AREAS SHALL BE RESEEDED ACCORDING TO CITY OF GLENPOOL, OKLAHOMA, SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDED AREAS UNTIL GROWTH IS ESTABLISHED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY WORK ORDERS AND PERMITS FROM THE CITY OF GLENPOOL, INCLUDING PROVISIONS OF BONDS AND INSURANCE AS REQUIRED.
5. ALL GRADES ARE BASED ON NAVD 1988 U.S.G.S. VERTICAL DATUM.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL FOR ANY WORK WITHIN STREET RIGHT OF WAY. TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION AND CITY OF GLENPOOL STANDARDS AND SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE PROPER TRAFFIC CONTROL IS IN PLACE FOR CONSTRUCTION. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROPERLY MAINTAINING TRAFFIC CONTROL DEVICES THROUGHOUT THE DURATION OF THE WORK. THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLANS TO THE CITY OF GLENPOOL AS REQUIRED.
7. ENGINEER'S STATEMENT THIS PROJECT COMPLIES WITH ALL OKLAHOMA DEPARTMENT OF ENVIRONMENTAL QUALITY (ODEQ) REQUIREMENTS. ENTIRE PROJECT IS WITHIN CORPORATE LIMITS OF CITY OF GLENPOOL.

Waterline Notes

1. ALL WATER DISTRIBUTION SYSTEMS SHALL BE DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF GLENPOOL LAND SUBDIVISION CODE AND CONSTRUCTED IN ACCORDANCE WITH THE CURRENT CITY OF GLENPOOL STANDARD CONSTRUCTION SPECIFICATIONS.
2. PRIOR TO STARTING CONSTRUCTION THE CONTRACTOR SHALL PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE WITH THE CITY OF GLENPOOL. AT THIS CONFERENCE THE CONTRACTOR SHALL FURNISH CERTIFICATION FROM THE MANUFACTURER/SUPPLIER THAT ALL MATERIALS MEET APPLICABLE SPECIFICATIONS. CERTIFICATIONS SHALL BE SUPPLIED IN TWO (2) COPIES WITH ONE (1) COPY STAMPED AND APPROVED, BY THE CITY, RETURNED TO THE CONTRACTOR. MATERIALS SHALL NOT BE INSTALLED UNTIL THEY HAVE BEEN APPROVED BY THE CITY.
3. ALL WATER DISTRIBUTION SYSTEM CONSTRUCTION SHALL BE INSPECTED BY THE CITY OF GLENPOOL UTILITY INSPECTORS.
4. DIG THROUGH METALLIC LOCATOR TAPE WILL BE BURIED 2 FEET ABOVE THE LINE.
5. WHEN C-900 PVC IS USED, A NO. 8 INSULATED COPPER WIRE SHALL BE TAPED TO THE TOP SURFACE OF THE PIPE AND CONNECTED TO EACH FIRE HYDRANT BY ATTACHING TO A BOLT, JUST ABOVE GROUND LEVEL.
6. ALL IRON PIPE AND FITTINGS SHALL BE POLYWRAPPED.
7. ALL DISTRIBUTION LINES IN CONDUIT AND AT DRAINAGE FEATURE CROSSINGS SHALL BE CONSTRUCTED WITH RESTRAINED JOINTS AS SHOWN.
8. ALL MAIN LINES SHALL HAVE A MINIMUM OF THREE (3) FEET OF COVER.
9. BEDDING, BACKFILL, AND COMPACTION OVER WATER LINES SHALL BE IN ACCORDANCE WITH STANDARD DRAWINGS. BACKFILL AND COMPACTION REQUIREMENT FOR STREETS SHALL EXTEND TWO (2) FEET BACK OF CURB.
10. ALL WATER DISTRIBUTION SYSTEM LINES, EXCEPT DEAD END FOR FIRE HYDRANTS ONLY, SHALL BE LOOPED TO PROVIDE CIRCULATION.
11. DISTRIBUTION LINES SMALLER THAN FOUR (4) INCHES (INSIDE DIAMETER) SHALL NOT BE INSTALLED.
12. WHEN CONDUIT IS PROVIDED FOR SERVICE LINES IT SHALL BE SCHEDULE 40 PVC OR STRONGER.
13. FIRE HYDRANTS MAY ONLY BE AVK, MUELLER, KENNEDY OR AMERICAN DARLING HYDRANTS ARE TO BE PAINTED RED.
14. WHEN WORKING IN OR ADJACENT TO EXISTING SUBDIVISIONS ONLY ONE (1) DAYS WORTH OF TRENCH MAY BE OPEN AT A GIVEN TIME. THIS REQUIREMENT MAY BE MODIFIED, IN WRITING BY THE CITY ENGINEER, FOR A SPECIFIC PROJECT.
15. ROAD CLOSURES MUST BE COORDINATED A MINIMUM OF FOURTY-EIGHT (48) HOURS IN ADVANCE. ROADS WILL NOT BE CLOSED FOR OVER EIGHT (8) HOURS WITHOUT WRITTEN PERMISSION FROM THE CITY ENGINEER.
16. DOMESTIC WATER SERVICE TAPS SHALL BE INSTALLED ACCORDING TO CITY OF GLENPOOL SPECIFICATIONS BY AN APPROVED WATER SERVICE INSTALLATION CONTRACTOR / PLUMBER.

RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

By: _____

Date: 9/23/2020

NOTE:

ALL WATERLINE BENDS ARE HORIZONTAL BENDS, UNLESS OTHERWISE NOTED.

FILL COMPACTED TO 90% STANDARD PROCTOR DENSITY PRIOR TO PIPE INSTALLATION

EXISTING UNDERGROUND LINES HAVE BEEN SHOWN TO THE EXTENT KNOWN

ALL CONSTRUCTION TO BE IN STRICT ACCORDANCE WITH CURRENT CITY OF GLENPOOL ENGINEERING STANDARD SPECIFICATIONS, INCLUDING O.D.O.T. 2009 EDITION AND APPLICABLE SUPPLEMENTS.

CONSULTANTS

ENGINEERED BY DESIGN
Engineered by Design, PLLC
P.O. Box 15567 Del City, OK 73155
Ph: 405-234-0980
CA# 7655 - Expires 6/30/2022

Select design
DEVELOPMENT ANALYSIS
PROJECT MANAGEMENT
DRAFTING & DESIGN
P.O. Box 548
Bixby, Oklahoma 74008
Phone (918) 798-8356

PROJECT NAME

Twin Ponds
PUD No. 41
Glenpool, Oklahoma
Project No. 2104

SEAL

LICENSED PROFESSIONAL ENGINEER AARON D. HAYES 24309 OKLAHOMA
SIGNATURE ON FILE

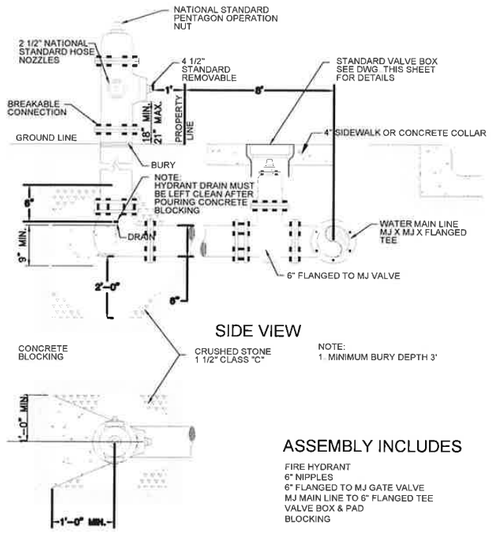
REVISIONS

ISSUE DATE
12/1/2020

SCALE
HORIZONTAL: 1"=50'
VERTICAL: 1"=5'

SHEET NAME
WATERLINE PROFILE & CONSTRUCTION NOTES

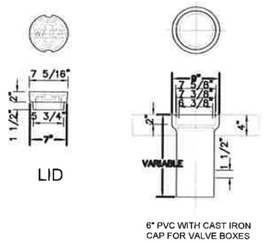
SHEET NO.
WL4



FIRE HYDRANT ASSEMBLY DETAIL

ASSEMBLY INCLUDES

FIRE HYDRANT
6" NIPPLES
6" FLANGED TO MJ GATE VALVE
MJ MAIN LINE TO 6" FLANGED TEE
VALVE BOX & PAD
BLOCKING

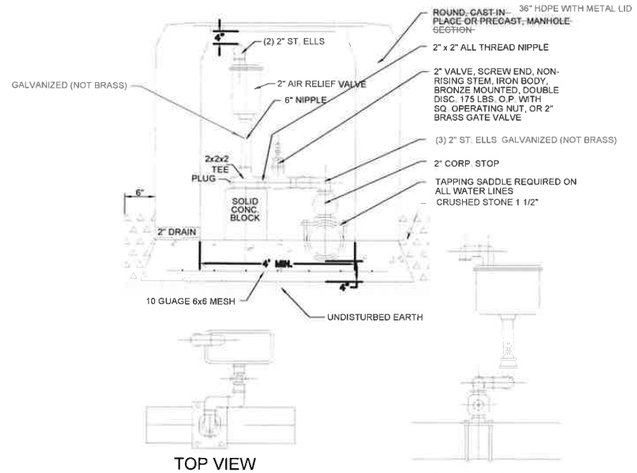


TOP VALVE BOX DETAIL

REQUIRED WEIGHTS	
LID	15 LBS
TOP (16")	30 LBS
BOTTOM (24")	35 LBS

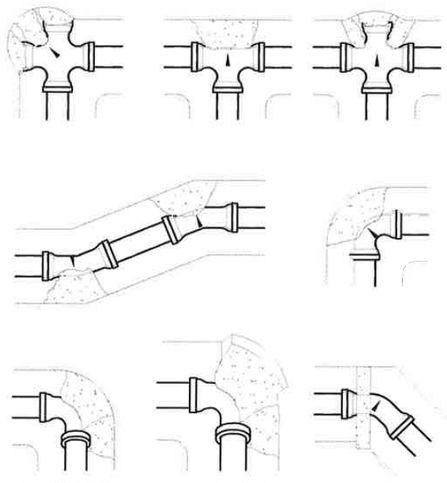
NOTES:
1. WATER LINE CONTRACTOR TO PLACE 2 FOOT SQUARE CONCRETE PAD AROUND EACH WATER VALVE AFTER FINAL GRADING HAS BEEN COMPLETED AND TRENCHES HAVE SETTLED.
2. VALVE BOXES REQUIRING OVER 2 ADDITIONAL BOTTOM SECTIONS SHALL BE EXTENDED USING C900 DR14 PVC PIPE WITH A BOTTOM AND TOP SECTION PLACED ON TOP OF THE C900 DR14 PVC PIPE.

VALVE BOX DETAIL

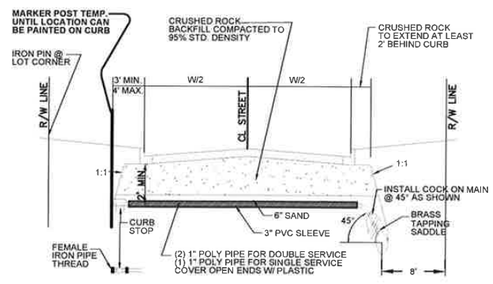


NOTES:
1. ALL PIPING AND CONNECTORS SHALL BE BRONZE, EXCEPT TAPPING SADDLE.
2. STAINLESS STEEL BOLTS WILL BE USED ON TAPPING SADDLES.
3. FRAME AND LID FOR VAULT SHALL BE AS SHOWN ON STANDARD DRAWING W 03.

AIR RELIEF VALVE AND VAULT DETAIL



THRUST BLOCK LOCATION DETAILS



PLAN VIEW

NOTES:
1. LOT CORNERS SHALL BE STAKED PRIOR TO CONSTRUCTION OF SERVICE LINES, CROSSING TO BE ON LOT LINE.
2. DETECTABLE MYLAR MARKING TAPE (LIFEGUARD TYPE II OR EQUAL) TO BE INSTALLED OVER POLY SERVICE AS SHOWN.
3. CROSSING NOT REQUIRED IN LOOPED CUL-DE-SAC.
4. POLY SHALL NOT BE SPLICED.
5. CROSSING TO BE INSPECTED BEFORE TRENCH IS BACKFILLED.

WATER LINE STREET CROSSING DETAIL

RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

By: _____

Date: 9/23/2020

WATER LINE APPURTENANCES INSTALLATION DETAILS

CITY OF GLENPOOL, OKLAHOMA

WL5

REVISION	BY	DATE

PLAN SCALE: HORIZONTAL / VERTICAL

DRAWN / DESIGNED / CHK'D ENGR / RECOMMENDED DIRECTOR / RECOMMENDED / RECOMMENDED SERVICES

APPROVED

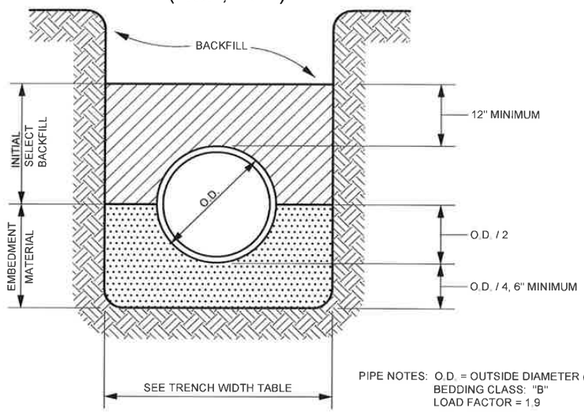
CITY ENGINEER/DEPT

DATE

SHEET OF

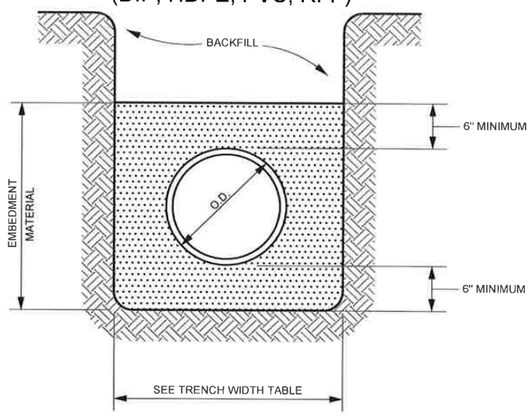
ATLAS PAGE NO.

RIDGED PIPE INSTALLATION (RCP, VCP)



PIPE NOTES: O.D. = OUTSIDE DIAMETER (IN.)
BEDDING CLASS: "B"
LOAD FACTOR = 1.9

FLEXIBLE PIPE INSTALLATION (DIP, HDPE, PVC, RFP)



REINFORCED CONCRETE PIPE (RCP) MINIMUM PIPE DESIGN

1. HIGHWAYS -- Minimum pipe class for diameter twenty-four (24") inches to one-hundred-two (102") inches meeting the requirements of ASTM C-76 shall be as follows:

MAXIMUM DEPTH OF COVER (feet)	MINIMUM CLASS
10	III
10	III
10	III

For maximum depth of cover of thirty (30') feet, pipes ranging from twenty-four (24") inches to fifty-four (54") inches in diameter shall be designed and manufactured in accordance with ASTM C-655 and shall have the following minimum three-edge bearing strength for 0.01 crack (D 0.01) in pounds per lineal foot of inside diameter.

PIPE NOMINAL SIZE (in.)	$D_{0.01}$ (lb./lineal ft. per ft. of inside diameter)
24	3200
27	3050
30	3050
33	3475
36	3475
42	3450
48	3300
54	3125

Pipes ranging in diameter from sixty (60") to one-hundred-two (102") inches in diameter shall be class V for a minimum depth of cover of thirty (30') feet when manufactured in accordance with ASTM C-76.

2. RAILROADS -- Minimum pipe class for E-80 Railroad live load pipe size twenty-four (24") inches to one-hundred-two (102") inches in diameter meeting the requirements of ASTM C-76, or ASTM C-655 shall be as follows:
   a MAXIMUM DEPTH OF COVER TEN (10') FEET – Diameters twenty-four (24") inches to one-hundred-two (102") inches shall be Class VI.
   b MAXIMUM DEPTH OF COVER FIFTEEN (15') FEET -- diameters twenty-four (24") inches to forty-two (42") inches shall be Class V and forty-eight (48") inches to one-hundred-two (102") inches shall be Class VI.
   c MAXIMUM DEPTH OF COVER TWENTY (20') FEET -- Diameter twenty-four (24") inches to one-hundred-two inches shall be class V.
   d MAXIMUM DEPTH OF COVER TWENTY-FIVE (925") FEET -- Diameter twenty-four (24") inches shall have D 0.01 of thirty-one-hundred (3100lb./l.f.) pound/lineal foot per foot of inside diameter. Diameters twenty-seven (27") inches to one-hundred-two (102") inches shall be Class V.

PIPE NOMINAL SIZE (in.)	$D_{0.01}$ (lb./lineal ft. per ft. of inside diameter)
24	3300
27	3125
30	3150
33	3575
36	3575
42	3550
48	3400
54	3225
60	3100

Diameters sixty-six (66") inches to one-hundred-two (102") inches shall be Class V.

BACKFILLING

1. DESCRIPTION -- Backfill is that portion of the total backfill down to but not including the pipe embedment material. The back fill shall be only material approved by the Engineer consisting of loose earth, free of cloda, stones, organic matter, debris or other objectionable material. All backfilling shall be done in such a manner as not to disturb or injure the pipe or structures over or against which it is being placed. Any pipe or structure injured or moved from its proper line or grade during backfilling operations shall be opened up and repaired then rebackfilled as herein specified.
   The placing of backfill mater shall not begin until approved for so doing has been given by the Engineer, but backfilling about structures or portion of structures shall be done immediately when so ordered by the Engineer. The top surface of all slopes of all backfill shall be neatly graded off where selected topsoil, or sod or other material is removed and piled separately, such material shall be carefully replaced in a manner satisfactory to the Engineer. The top twelve inches of backfill shall be of as good quality as the original topsoil, which is removed.

2. COMPACTING REQUIREMENTS -- All backfill shall be placed and compacted in six (6") inch lifts for hand-tamped equipment and thirty (30") lifts of self-propelled or power driven equipment to the following minimum percent of Standard Proctor Density of Related Density as determined by ASTM D-698, "Test for Moisture-Density Relations of Soil and Soil Aggregate Mixtures", and ASTM D-2049 "Text for Relative Density of Cohesionless Soils", respectively. ASTM Test D-2049 shall be performed on cohesionless (Granular) soils.
   Cohesive backfill material shall reach the indicated compaction levels at plus (+) or minus (-) three (3%) percent of optimum moisture content. The lift thickness shall be reduced, if necessary, to meet the compaction requirements specified herein.

General Location	Percent Compaction (%) Standard Proctor Density (ASTM D-698)	Standard Proctor Density (ASTM D-698)
Under Traffic Area or Improved Existing Surfaces	95	75
Urban & Residential Areas	90	70
Underdeveloped & Other Areas	85	70

3. COMPACTING METHODS -- Compacting methods may vary depending on the materials or as approved by the Engineer.
   a COHESIVE MATERIALS -- Compaction of cohesive materials may be obtained by the use of impact type equipment in confined areas; pneumatic tampers and engine driven rammers may also be used. In relatively narrow trenches, self propelled rammers may also be used. In wide trenches, sheepsfoot rollers may be used.

EMBEDMENT MATERIAL

Embedment is that material to be placed from a minimum of six (6") inches below bottom of the pipe to the springline (half pipe diameter) or to a minimum of six (6") inches above top of pipe for rigid and flexible pipes, respectively. the remaining material to be placed over the embedment is considered backfill.

MATERIAL MATERIAL REQUIREMENTS

1. GENERAL -- Embedment material for all rigid and flexible pipes shall be sand or in areas that is unstable crushed rock meeting the requirement of either ASTM D-2321, Class 1A, or ASTM C-33, Number 57 or 67 and graduations shown below:

Nominal Sieve Size	Percent Passing ASTM D-2321	ASTM C-33	
	Class 1A	Number 57	Number 67
1 1/2 inch	100%	100%	.....
1 inch	ASTM D-2321	95 to 100%	100%
3/4 inch	.....	.....	90 to 100%
1/2 inch	.....	25 to 60%	.....
3/8 inch	.....	.....	20 to 55%
Number 4	≤10%	0 to 10%	0 to 10%
Number 8	.....	0 to 5%	0 to 5%
Number 200	≤5%	.....	.....

2. COMPACTION REQUIREMENTS -- All embedment material shall be placed in six (6") inch lefts to the following minimum percent of Standard Proctor Density as determined by ASTM D-698. "Tests for Moisture -- Density Relations of Soil-- Aggregate Mixtures', and ASTM D-2049, "Test for Related Density of Cohesionless Soils", respectively.

Compaction Test	Compaction Requirement
Standard Proctor Density	95%
Relative Density	75%

3. **COMPACTION METHODS** -- All embedment material shall be compacted in accordance with the methods described in Part "3" of "Backfilling."

RECORD PLANS

To the best of my knowledge, from the information available, these "Record Plans" are in substantial compliance with the field construction.

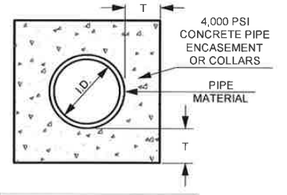
By: _____

Date: 7/23/2020

TRENCH WIDTH TABLE

Pipe Nominal Size (inches)	Minimum Trench Width (feet)	Maximum Trench Width (feet)
≤12	3.00	5.00
15	3.25	5.00
18	3.50	5.00
21	3.75	5.25
24	4.00	6.00
27	4.25	6.25
30	4.50	6.75
33	4.75	8.25
36	5.25	9.00
42	6.25	9.50
48	7.00	11.00
54	8.00	11.50
60	9.00	12.00
66	9.75	13.00
72	10.50	13.00
78	10.50	13.50
84	11.00	14.00
90	11.50	14.50
96	12.00	15.00
102	12.50	15.50

PIPE ENCASEMENT AND COLLARS



NOMINAL DIAMETER (INCHES)	T (INCHES)
≤18"	6"
>18" & <30"	8"
>30" & <42"	10"
≤42"	12"

NOTE: FOR COLLARS, THE CONCRETE ENCASEMENT SHALL BE PLACED TO A MINIMUM OF TWELVE (12") INCHES ON EITHER SIDE OF THE JOINT.

WATER LINE
PIPE INSTALLATION
DETAILS

CITY OF GLENPOOL, OKLAHOMA

WL6

City Of Glenpool
Creating Opportunity

MEMORANDUM

TO: CHAIRMAN FOX
GLENPOOL UTILITY SERVICES AUTHORITY

FROM: LYNN BURROW, PE
COMMUNITY DEVELOPMENT DIRECTOR

RE: ACCEPTANCE OF QUOTATIONS FOR REPLACEMENT EQUIPMENT
WASTEWATER TREATMENT FACILITY

DATE: JANUARY 4, 2021

BACKGROUND

This item is for Board consideration and action regarding the approval and acceptance of a quotation received from Environmental Improvements, Inc. in the total amount of $12,764.00 per the attached documentation. The quotes cover the purchase and installation of two separate chemical feed pumps dealing with the City's wastewater treatment facilities. One quote covers the replacement of the chemical pump at the treatment plant that delivers and injects stored chlorine (bleach) into the treatment system for disinfection purposes. The second pump and enclosure are intended to replace the chemical injection pump at the dichlorination facility near the sewage effluent discharge point at the Arkansas River. The new equipment will replace pumps at the two locations within the treatment system and will serve as back-up pumps per ODEQ requirements. The existing primary and back-up pump systems are part of the original equipment that was installed during the last treatment plant upgrade project completed in 2011.

Staff Recommendation:

Staff has reviewed the quotations from Environmental Improvements, Inc. and recommends Board approval of same in the total amount of $12,764.00 to be funded from the FY 2020/2021 GUSA Budget under Item No.02-6-16-6278 Sewer Improvements.

Attachments:

A. Quotation Documentation: Environmental Improvements, Inc.

environmental EI² improvements, inc.

Phone (405) 562 5436 Fax (405) 757 2347
755 W. Covell, Suite 170, Edmond, OK 73003

QUOTATION

TO: *City of Glenpool*

DATE: 12-22-20

PAGES: 1

ATTN.: *Rob Werley*

MAKE P.O. ORDER TO: Environmental Improvements inc.

REF: **Option 2 - Watson Marlow Qdos 60 pump for Bleach**

F.O.B.: Factory – PPA

TERMS: Net 30 Days with Approved Credit

BY: Todd Ray
(918) 625-5137
tray@ei2ok.com

DELIVERY: TBD

ENGINEER: None

ANY PURCHASE ORDER ISSUED AS A RESULT OF THIS QUOTATION IS SUBJECT TO ALL OF THE MANUFACTURER'S CONDITIONS AND FINAL ACCEPTANCE BY THE MANUFACTURER

QTY	DESCRIPTION	NET COST EACH	Extended Cost
1	Qdos 60 Universal+ 24VDC/115VAC (4) Relay pump 60l/hr 4 bar, 60 PSI ReNu pumphead to the right #0M0.385R.GRA	$4,272.00	$4,272.00
1	ReNu pumphead - Spare - SEBS Tubing with PFPE Lubricant 0M3.3800.PFP	$320.00	$320.00
1	Interface tubing 5m length 10mm ID 16mm OD PVC tubing 0M9.2225.VAD	$50.00	$50.00
2	PVDF Compression Fitting - 16mm OD x 1/2" MNPT 10-10-8-K-PG	$15.00	$30.00
	Shipping included in price		
	TOTAL		$4,672.00

- Please Note Pricing is Valid for Thirty- (30) Days from the date of quotation.

Should you have any questions, comments, or need further information please feel free to contact me.

Respectfully,

Todd Ray

environmental EI² improvements, inc.

Phone (405) 562 5436 Fax (405) 757 2347
755 W. Covell, Suite 170, Edmond, OK 73003

QUOTATION

TO: *City of Glenpool*

DATE: 12-16-20

PAGES: 1

ATTN.: *Rob Werley*

MAKE P.O. ORDER TO: Environmental Improvements inc.

REF: **Watson Marlow Qdos 60 pump for Bisulfate**

F.O.B.: Factory – PPA

TERMS: Net 30 Days with Approved Credit

BY: Todd Ray
(918) 625-5137
tray@ei2ok.com

DELIVERY: TBD

ENGINEER: None

ANY PURCHASE ORDER ISSUED AS A RESULT OF THIS QUOTATION IS SUBJECT TO ALL OF THE MANUFACTURER'S CONDITIONS AND FINAL ACCEPTANCE BY THE MANUFACTURER

QTY	DESCRIPTION	NET COST EACH	Extended Cost
1	Qdos 60 Universal+ 24V Relay pump 60l/hr 7bar, 100 PSI ReNu pumphead to the right #0M0.325R.GRA	$4,272.00	$4,272.00
1	Spare Santoprene pump head #0M3.3200.PFP	$320.00	$320.00
1	Simplex Qdos chemical feed skid	$3,500.00	$3,500.00
	Shipping included in price		
	TOTAL		$8,092.00

- Please Note Pricing is Valid for Thirty- (30) Days from the date of quotation.

Should you have any questions, comments, or need further information please feel free to contact me.

Respectfully,

Todd Ray

qdos 20, 30, 60 and 120

qdos Peristaltic Metering

Watson-Marlow Pumps

FEATURES AND BENEFITS

- Flow rates 0.1–2000ml/min (0.001–31.7USGPH) and up to 7 bar (100psi) RMS pressure
- ReNu pumphead provides accurate, linear and repeatable flow
- Process uptime is maximised with no gas-locking, no valve blocking and rapid no-tools pumphead replacement
- Fluid recovery ensures operator safety and avoids chemical waste
- Flow control up to 20000:1 with ±1% accuracy
- Manual, analogue, PROFIBUS or contact mode functionality available
- PROFIBUS Bus speed 9.6–1,500 kb/s
- Compatible with 12–24V DC

24 hour duty

3 YEARS WARRANTY

Watson-Marlow...Innovation in Full Flow

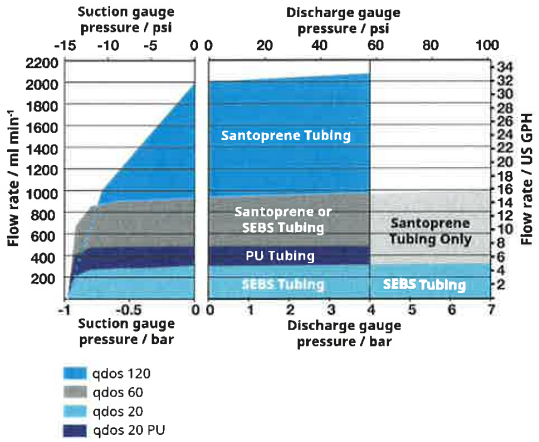
PERFORMANCE

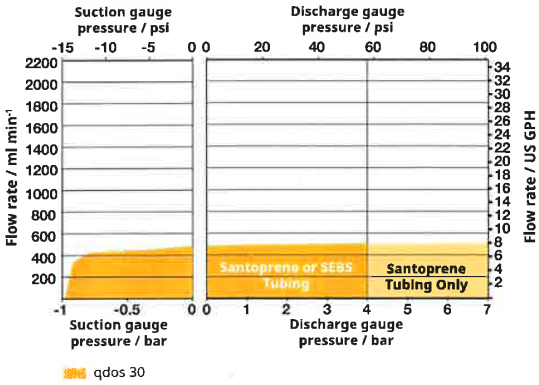
qdos pump typical flow rates

	qdos		qdos remote	
	Speed (rpm)	Flow ml/min (USGPH)*	Speed (rpm)	Flow ml/min(USGPH)*
qdos 20	0.017-55	0.1-333 (0.001-5.3)	0.034-55	0.2-333 (0.003-5.3)
qdos 20 PU	0.017-55	0.1-484 (0.001-7.67)	NA	NA
qdos 30	0.025-125	0.1-500 (0.001-7.93)	0.078-125	0.3-500 (0.005-7.93)
qdos 60	0.013-125	0.1-1000 (0.001-15.85)	0.078-125	0.6-1000 (0.01-15.85)
qdos 120	0.006-125	0.1-2000 (0.001-31.7)	0.078-125	1.25-2000 (0.02-31.7)

*accuracy ±1%, repeatability ±0.5%

Flow rate with discharge pressure for ReNu pumpheads





TECHNICAL SPECIFICATION

	qdos 20	qdos 30	qdos 60	qdos 120
Ingress rating	IP66			
Enclosure	Watertight / dustproof			
Humidity	Non-condensing 5%–95%			
Temperature (Santoprene)	N/A	5C–45C (41F–113F)		
Temperature (SEBS and PU)	5C–40C (41F–104F)			NA
Drive weight	4.6 kg (10lb 2oz)	4.1 kg (9lb 1oz)	4.6 kg (10lb 2oz)	
Pumphead weight	1.1kg (2lb 7oz)	0.95kg (2lb 2oz)	1.1kg (2lb 7oz)	
Control ratio ±1% accuracy	3330:1	5000:1	10000:1	20000:1
Control ratio (Remote)	1600:1			
Noise	< 70dB(A) at 1m			
Standard	CE, NSF 61, cETLus, IRAM S Mark, C-Tick, CSA			
Power supply options	Switch mode power supply ~100-240V 50-60Hz 190VA Country specific plug options			
	12-24V DC power supply Typical 12V current (100W) = 10A Typical 24V current (100W) = 5A Terminal connectors: M8 (5/16") studs (hole diameter 8.33mm (0.328")			

MATERIALS OF CONSTRUCTION

Component	Material			
	qdos 20	qdos 30	qdos 60	qdos 120
Keypad	Polyester			
Drive casework	20% Glass filled PPE/ PS			
Drive shaft	Stainless steel 440C			
Pumphead enclosure	30% Glass filled PPO/PS	40% Glass filled PPS	30% Glass filled PPO/PS	
Rotor	PP (qdos 20 PU) / Glass filled nylon	Glass filled nylon		
Rotor bearings	Steel, stainless steel (optional—contact Watson-Marlow applications)			
Tube*	PU (max 4 bar, 60 psi) / SEBS (max 4 bar, 60 psi)	Santoprene (max 7 bar, 100 psi) / SEBS (max 4 bar, 60 psi)		
Pumphead hydraulic ports	PVDF (SEBS or PU)	Polypropylene (Santoprene) or polypropylene (SEBS)	Polypropylene (Santoprene) or PVDF (SEBS)	Polypropylene (Santoprene)
Hydraulic connectors	Polypropylene (standard) PVDF (optional)			
Lubricant*	PFPE based			

*It is the user's responsibility to comply with local health and safety regulations, including ensuring chemical compatibility between the duty fluid, the tube and lubricant contained in the ReNu Pumphead. For guidance refer to www.qdospumps.com.

TECHNICAL DATA

Operational modes	Manual	Remote	PROFIBUS	Universal	Universal+
Manual	•		•	•	•
PROFIBUS—bus speed 9.6–1,500 kb/s			•		
Contact				• L or R	• L or R
4-20mA		•		•	•
Fault reporting	•	•	•	•	•

Features	Manual	Remote	PROFIBUS	Universal	Universal+
Numerical flow display	•		•	•	•
Numerical speed display	•		•	•	•
Fluid level monitor	•		•	•	•
Max (prime)	•		•	•	•
Auto restart (after power restored)	•	•	•	•	•
Fluid recovery	•		•	•	•
Leak detection	•	•	•	•	•
3.5" (88.9mm) colour TFT display	•		•	•	•
LED Pump status icons		•			

TECHNICAL DATA - CONTINUED

Control methods	Manual	Remote	PROFIBUS	Universal	Universal+
Input/Output Options*		L	L	L, H or R	L, H or R
Manual control capability	•		•	•	•
4-20mA input		•		•	•
4-20mA input two point calibration					•
4-20mA output		•			•
Contact input (pulse/batch)				• L or R	• L or R
Run stop input		•		•	•
Run status output		•		•	•
Alarm output		•		•	•
Remote fluid recovery		•		•	•

PROFIBUS	Manual	Remote	PROFIBUS	Universal	Universal+
Speed set point			•		
Speed feedback			•		
Flow calibration function			•		
Hours run			•		
Revolution counter			•		
Leak detection			•		
Low fluid level alarm			•		
Diagnostic feedback			•		

Security	Manual	Remote	PROFIBUS	Universal	Universal+
Keypad lock	•		•	•	•
PIN lock to protect set up	•		•	•	•

Power supply options	Manual	Remote	PROFIBUS	Universal	Universal+
12–24V DC	•	•		•	•
~100-240V AC	•	•	•	•	•

*Control options - Universal and Universal+ models	
Variant	**Standard pump (L)**
Input	5–24V DC
Output	Open collector
Variant	**Relay Module (H)**
Input	110V AC
Output	Contact rating 110V AC, 5A 30V DC, 5A
Variant	**Relay Module (R)**
Input	5–24V DC
Output	Contact rating 110V AC, 5A 30V DC, 5A

DIMENSIONS

Note: Pumphead appearance and fluid port positions may differ between models.

Model	A	B	C	D	E—Optional relay modules (H or R)	F	G	H	I
qdos 20	234mm (9.2")	214mm (8.4")	118mm (4.6")	266mm (10.5")	43mm (1.7")	173mm (6.8")	40mm (1.6")	140mm (5.5")	10mm (0.4")
qdos 30	234mm (9.2")	214mm (8.4")	82.5mm (3.2")	233mm (9.2")	43mm (1.7")	173mm (6.8")	40mm (1.6")	140mm (5.5")	10mm (0.4")
qdos 60	234mm (9.2")	214mm (8.4")	118mm (4.6")	266mm (10.5")	43mm (1.7")	173mm (6.8")	40mm (1.6")	140mm (5.5")	10mm (0.4")
qdos 120	234mm (9.2")	214mm (8.4")	118mm (4.6")	266mm (10.5")	43mm (1.7")	173mm (6.8")	40mm (1.6")	140mm (5.5")	10mm (0.4")

ORDER INFORMATION

0 M 0 • • • • G • •

Model
3: qdos 20
4: qdos 30
5: qdos 60
6: qdos 120

Tube material†
2: Santoprene
5: PU
8: SEBS

Model
1: Remote
3: Manual
4: Universal
5: Universal+
7: PROFIBUS

Pumphead orientation*
L = Left
R = Right

Plug options
A: US
E: European
U: UK
K: Australia
R: Argentina
C: Swiss
D: India/South Africa
V: 12–24V DC

† For guidance on chemical compatibility see www.qdospumps.com

Digital I/O type

Manual, Remote and PROFIBUS models
L: Standard pump variant

Universal and Universal+ models
L: Open collector outputs, 5–24V DC inputs
H: Volt free 110V AC relay contacts, 110V AC inputs
(only available with US mains leads)
R: Volt free 110V AC 30V DC relay contacts.
5–24V DC inputs

Pumphead product codes

Description	Partcode
ReNu 20 pumphead PU / PFPE 4 bar (60psi)	0M3.1500.PFP
ReNu 20 pumphead SEBS / PFPE 7 bar (100psi)	0M3.1800.PFP
ReNu 30 pumphead Santoprene / PFPE 7 bar (100psi)	0M3.2200.PFP
ReNu 30 pumphead SEBS / PFPE 4 bar (60psi)	0M3.2800.PFP
ReNu 60 pumphead Santoprene / PFPE 7 bar (100psi)	0M3.3200.PFP
ReNu 60 pumphead SEBS / PFPE 4 bar (60psi)	0M3.3800.PFP
ReNu 120 pumphead Santoprene / PFPE 4 bar (60psi)	0M3.4200.PFP

* The pumphead side location is required when ordering. The left/right perspective assumes the user is looking at the front of the pump. The pump in the dimensions diagram is considered a pumphead located to the left.

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. qdos drives are not ATEX rated and should not be used within explosive atmospheres.
Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the users responsibility to ensure product suitability for use within their application. Watson-Marlow, Qdos, ReNu, LoadSure, Bioprene, Pumpsil and Marprene are trademarks of Watson-Marlow Limited. STA-PURE PFL® and STA-PURE PCS® are registered trademarks of W.L Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

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+44 (0) 1326 370370

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qdos
Peristaltic Metering

Qdos Pod

Features and benefits

- Plug and play system
- Fully functional chemical feed skid enclosure
- Accommodates all Qdos pump models

Design

- Wall or tote mountable: 26"W x 20"H x 16"D
- Includes 125ml or 500ml calibration column, pressure gauge with isolator, pressure relief valve and piping
- Clear polycarbonate cover lid, hinged
- Designed to allow air flow to dissipate heat in outdoor applications
- Standard ½" inlet/outlet connections
- PVC piping, Viton O-rings and PE tubing

Operation

- Allows operators to properly calibrate the pump
- Side exit pumphead access panel
- Pressure relief valve ensures pump and piping are protected against over-pressure

Safety

- Protects equipment from environmental conditions
- Secondary containment protects operators

Quality

- Three year warranty

wmftg.com

WATSON MARLOW
Fluid Technology Group

2021 CALENDAR YEAR
SCHEDULE OF REGULAR MEETINGS
GLENPOOL UTILITY SERVICE AUTHORITY
GLENPOOL, OKLAHOMA

DATE	TIME	PLACE
JANUARY 4, 2021	6:00 P.M.	GLENPOOL CITY HALL
FEBRUARY 1, 2021	6:00 P.M.	GLENPOOL CITY HALL
MARCH 1, 2021	6:00 P.M.	GLENPOOL CITY HALL
APRIL 5, 2021	6:00 P.M.	GLENPOOL CITY HALL
MAY 3, 2021	6:00 P.M.	GLENPOOL CITY HALL
JUNE 7, 2021	6:00 P.M.	GLENPOOL CITY HALL
JULY 6, 2021*	6:00 P.M.	GLENPOOL CITY HALL
AUGUST 2, 2021	6:00 P.M.	GLENPOOL CITY HALL
SEPTEMBER 7, 2021*	6:00 P.M.	GLENPOOL CITY HALL
OCTOBER 4, 2021	6:00 P.M.	GLENPOOL CITY HALL
NOVEMBER 1, 2021	6:00 P.M.	GLENPOOL CITY HALL
DECEMBER 13, 2021	6:00 P.M.	GLENPOOL CITY HALL

* Denotes Tuesday Meeting

GLENPOOL CITY HALL, City Council Chambers, 12205 S Yukon Ave., Glenpool Oklahoma

AMENDED SCHEDULE APPROVED BY:
TRUSTEES OF THE GLENPOOL UTILITY SERVICE AUTHORITY
12205 S. YUKON
GLENPOOL, OK 74033
918-322-5409
Filed in the office of the City Clerk on the _____ day of January 4, 2021

Signed: _____