

PLANS OF IMPROVEMENTS FOR: 2016 TUMA SOCCER COMPLEX METER INSTALLATION CITY OF CEDAR RAPIDS, IOWA CIP NUMBER NO. 621-621010-522104 CHARTFIELD NO. 2016087-01

UTILITY AND EMERGENCY PHONE NUMBERS	
Agency	Contact Number
City of Cedar Rapids, Iowa	
Public Works:	(319) 286-5802
Engineering	
Traffic Engineering	
Sewer Maintenance Program	
Utilities Department	
Water Division	(319) 286-5910
Police Department	
Business	(319) 286-5491
Emergency	911
Fire Department	
Business	(319) 286-5200
Emergency	911
Iowa One Call (Utilities)	(800) 292-8989
MidAmerican Energy	
Business	(319) 286-5162
Emergency	(800) 595-5325
Centurylink	
Engineer	(319) 399-7600
Alliant (Electric, Steam)	
Business	(319) 398-4406
Locates	(800) 292-8989
Mediacom	
Business	(319) 395-9699
Locates	(800) 292-8989
AT&T (Telephone)	(319) 364-6111
ImOn Communications	
Business	(319) 261-4640
Emergency	(800) 298-6484
Linn County REC	
Business	(319) 377-1587
(Leave Message After Hours)	



LOCATION MAP

NOT TO SCALE

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
A. 1	TITLE SHEET
A. 2	GENERAL PLAN, LEGEND AND NOTES
C. 1	QUANTITY TABULATIONS
C. 2	EXISTING LAYOUT AND REMOVAL PLAN
U. 1	PROPOSED IMPROVEMENTS


NOTE:
THE PROPOSED IMPROVEMENTS INCLUDED IN THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE CEDAR RAPIDS METROPOLITAN AREA DESIGN STANDARDS MANUAL (LATEST EDITION) WITH NO EXCEPTIONS.

CITY OF CEDAR RAPIDS	
THIS ENGINEERING DOCUMENT IS RECOMMENDED FOR FILING WITH THE CITY CLERK	
CITY ENGINEER OR DESIGNEE	DATE
UTILITIES ENGINEER OR DESIGNEE	DATE
CITY TRAFFIC ENGINEER OR DESIGNEE	DATE



PLANS PREPARED BY: CITY OF CEDAR RAPIDS UTILITIES - WATER ENGINEERING 1111 SHAVER RD NE, CEDAR RAPIDS, IA 52402 PHONE: 319-286-5950

PLANS PREPARED FOR:

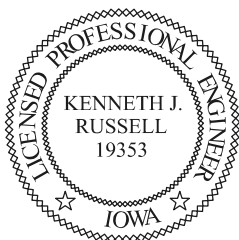


CEDAR RAPIDS

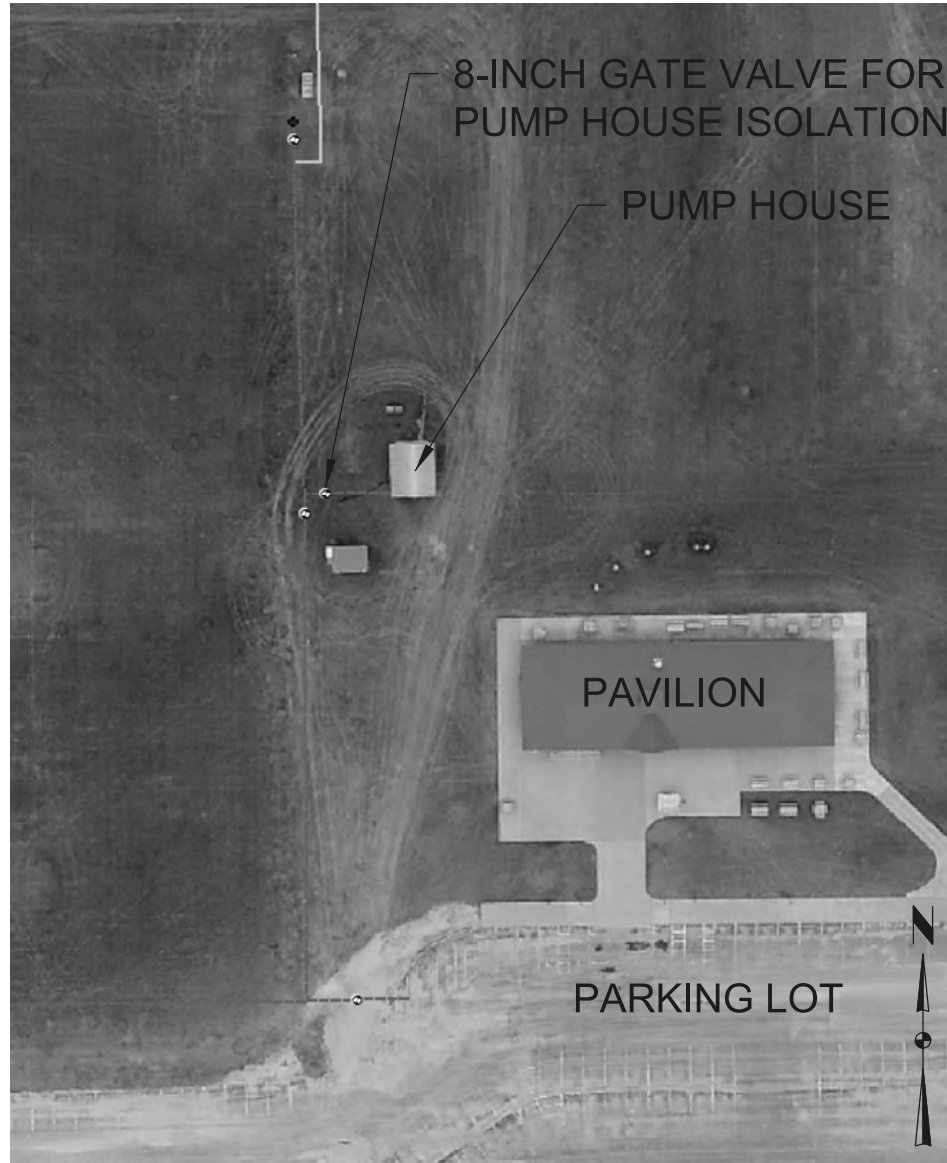
City of Five Seasons

CITY COUNCIL:

MAYOR:	RON CORBETT
AT LARGE:	SUSIE WEINACHT
AT LARGE:	ANN POE
AT LARGE:	RALPH RUSSELL
DISTRICT 1:	KRIS GULICK
DISTRICT 2:	MONICA VERNON
DISTRICT 3:	PAT SHEY
DISTRICT 4:	SCOTT OLSON
DISTRICT 5:	JUSTIN SHIELDS

	<p>I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF IOWA.</p> <p>KENNETH J. RUSSELL, P.E. & L.S. DATE LICENSE NUMBER: 19353 MY LICENSE RENEWAL DATE IS: DECEMBER 31, 2016</p> <p>PAGES OR SHEETS COVERED BY THIS SEAL: ALL</p>
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EXISTING SITE PLAN



PUMP HOUSE EXTERIOR



FACING NORTH



FACING WEST

PUMP HOUSE INTERIOR



FACING WEST



FACING SOUTHWEST



FACING NORTHWEST

GENERAL NOTES (ENTIRE PROJECT):

1. THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CEDAR RAPIDS METROPOLITAN AREA STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC IMPROVEMENTS, LATEST EDITIONS.
2. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL EXISTING UTILITIES AND PAVED AREAS, INCLUDING ANY NOT SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IF ANY CONFLICTS WITH THE DRAWINGS OCCUR. ANY DAMAGE TO EXISTING UTILITIES, SOD, LANDSCAPE AND/OR PAVED AREAS CAUSED BY TRENCHING, GRADING, AND PAVING OPERATIONS NOT IDENTIFIED FOR REPLACEMENT SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE.
3. PROVIDE POSITIVE DRAINAGE AT ALL TIMES WITHIN THE CONSTRUCTION AREAS. DO NOT ALLOW WATER TO DRAIN OR TO POND ONTO ADJOINING PROPERTY OR PUBLIC RIGHT-OF-WAY.
4. ALL DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS SHALL BE PROPERLY DISPOSED OF OFF-SITE.
5. ALL WORK TO BE COMPLETED WITHIN EASEMENTS AND PUBLIC R.O.W.
6. WORK ITEMS NOT SPECIFICALLY CALLED OUT FOR PAYMENT SHALL BE INCIDENTAL TO CONTRACT ITEMS.

No.	REVISION DESCRIPTION	APPROVED	DATE

ITEM NO.	DESCRIPTION	EST. QTY.	UNIT	ESTIMATE REFERENCE INFORMATION
01400-39	REMOVAL AND RELOCATION OF PVC DRAIN PIPE	7	LF	1. PIPE TO BE SCHEDULE 40 PVC
01400-63	REMOVAL AND SALVAGE OF EXISTING FLANGED PIPE, FITTINGS, AND VALVES	1	LS	1. ITEMS TO BE SALVAGED AND REUSED IN PROPOSED LAYOUT ARE NOTED ON SHEETS C.1 AND U.1
02500-02	RE-INSTALLATION OF SALVAGED FLANGED PIPE, FITTINGS, AND VALVES	1	LS	1. REPLACE ALL REMOVED FLANGE GASKETS AND HARDWARE 2. HARDWARE TO BE 304 STAINLESS STEEL HEX HEAD NUTS/BOLTS
02500-03	FURNISH AND INSTALLATION OF 8-INCH RPZ STANDS	2	EA	1. RPZ STANDS TO BE SCHEDULE 40 BLACK PIPE 2. EACH RPZ STAND, TO CONSIST OF: A. (2) FLOOR FLANGES WITH CONCRETE ANCHORS B. (2) UPRIGHT PIPES C. (2) 90° BENDS D. (1) HORIZONTAL SUPPORT
02500-04	FURNISH AND INSTALLATION OF 6-INCH VALVE STANDS	2	EA	1. VALVE STANDS TO BE SCHEDULE 40 BLACK PIPE 2. EACH VALVE STAND, TO CONSIST OF: A. (1) FLOOR FLANGE ATTACHED WITH CONCRETE ANCHORS B. (1) UPRIGHT PIPE C. (1) VALVE SUPPORT
02500-05	FURNISH AND INSTALLATION OF 4-INCH PIPE CLAMPS	2	EA	1. PIPE CLAMPS TO BE STEEL 2. TWO-BOLT TYPE 3. ATTACHED WITH (2) THREADED CONCRETE ANCHORS
02500-22	INSTALLATION OF 8-INCH STRAINER	1	EA	1. CITY TO SUPPLY 8-INCH STRAINER
02500-23	INSTALLATION OF 8-INCH METER	1	EA	1. CITY TO SUPPLY 8-INCH METER
02500-32	FURNISH AND INSTALLATION OF 4-INCH DIAMETER FLANGED SPOOL	2	EA	
02500-60	DISINFECTION AND HYDROSTATIC TESTING	1	LS	

PREPARED BY: CITY OF CEDAR RAPIDS
 UTILITIES - WATER ENGINEERING
 1111 SHAVER RD NE, CEDAR RAPIDS, IA 52402
 PHONE: 319-286-5950

No.	REVISION DESCRIPTION	APPROVED	DATE



Date: 5/19/2016
 Drawn By: MDZ
 Approved By: KJR
 PROJECT No: 2016087-01

**TUMA SPORTS COMPLEX
 METER INSTALLATION**

QUANTITY TABULATIONS

SHEET No.
C.1

FROM CEDAR RAPIDS DISTRIBUTION SYSTEM

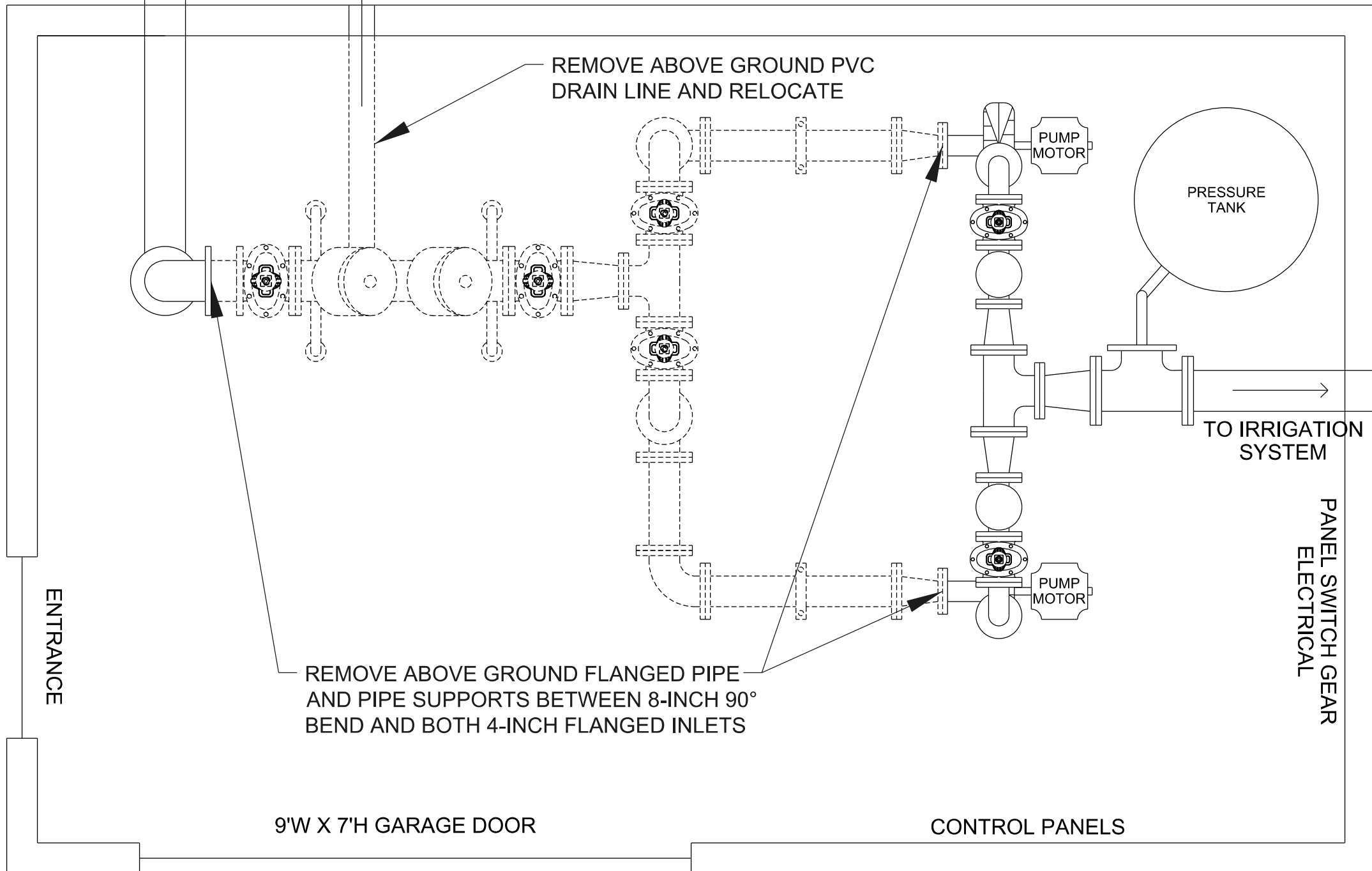
PVC DRAIN LINE TO OUTSIDE

PLAN VIEW - PUMP HOUSE INTERIOR



REMOVE ABOVE GROUND PVC DRAIN LINE AND RELOCATE

REMOVE ABOVE GROUND FLANGED PIPE AND PIPE SUPPORTS BETWEEN 8-INCH 90° BEND AND BOTH 4-INCH FLANGED INLETS



ENTRANCE

9'W X 7'H GARAGE DOOR

CONTROL PANELS

PRESSURE TANK

TO IRRIGATION SYSTEM

PANEL SWITCH GEAR ELECTRICAL

REMOVALS

FROM EXISTING 90° BEND TO EXISTING TEE

QTY	DIAMETER (IN.)	TYPE	END
1	8	SILENT CHECK	PBE
1	8	GATE VALVE	FLG X FLG *
1	N/A	RPZ STAND	N/A
1		PVC DRAIN LINE	N/A
1	8	RPZ ASSEMBLY	FLG X FLG *
1	N/A	RPZ STAND	N/A
1	8	GATE VALVE	FLG X FLG *
1	8 X 6	ECCENTRIC REDUCER	FLG X FLG *
1	6	TEE	FLG X FLG X FLG *

FROM EXISTING TEE TO EXISTING PUMP INLET (EAST LEG)

QTY	DIAMETER (IN.)	TYPE	END
1	6	GATE VALVE	FLG X FLG *
1	N/A	VALVE STAND	N/A
1	6	90° BEND	FLG X FLG *
1	6	SPOOL	FLG X FLG *
1	6	90° BEND	FLG X FLG *
1	6	SPOOL	FLG X FLG *
1	6	90° BEND	FLG X FLG *
1	6	SPOOL	FLG X FLG *
1	6	PIPE CLAMP	N/A
1	6 X 4	ECCENTRIC REDUCER	FLG X FLG *

FROM EXISTING TEE TO EXISTING PUMP INLET (WEST LEG)

QTY	DIAMETER (IN.)	TYPE	END
1	6	GATE VALVE	FLG X FLG *
1	N/A	VALVE STAND	N/A
1	6	90° BEND	FLG X FLG *
1	6	SPOOL	FLG X FLG *
1	6	90° BEND	FLG X FLG *
1	6	SPOOL	FLG X FLG *
1	6	PIPE CLAMP	N/A
1	6 X 4	ECCENTRIC REDUCER	FLG X FLG *

1. * DENOTES ITEM TO BE REUSED IN PROPOSED LAYOUT

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No.	REVISION DESCRIPTION	APPROVED	DATE



Date: 4/7/2016
Drawn By: MDZ
Approved By: KJR
PROJECT No: 2016087-01

TUMA SPORTS COMPLEX
METER INSTALLATION

EXISTING LAYOUT AND REMOVAL PLAN

SHEET No.
C.2

FROM CEDAR RAPIDS
DISTRIBUTION SYSTEM

PVC DRAIN LINE
TO OUTSIDE

PLAN VIEW - PUMP HOUSE INTERIOR



RELOCATE AND INSTALL NEW
ABOVE GROUND PVC DRAIN LINE

INSTALL NEW 8-INCH
STRAINER AND METER

RELOCATE AND INSTALL
NEW PIPE SUPPORTS

RELOCATE AND INSTALL
NEW PIPE CLAMPS

MINIMUM 20" OF STRAIGHT
RUN PIPE BEFORE BOTH
PUMP INLETS

9'W X 7'H GARAGE DOOR

CONTROL PANELS

PUMP
MOTOR

PUMP
MOTOR

PRESSURE
TANK

TO IRRIGATION
SYSTEM

PANEL SWITCH GEAR
ELECTRICAL

INSTALLS			
FROM EXISTING 90° BEND TO PROPOSED TEE			
QTY	DIAMETER (IN.)	TYPE	END
1	8	STRAINER	FLG X FLG
1	8	METER	FLG X FLG
1	8	GATE VALVE	FLG X FLG
1	N/A	RPZ STAND	N/A
1	8	RPZ ASSEMBLY	FLG X FLG
1	N/A	RPZ STAND	N/A
1	8	GATE VALVE	FLG X FLG
1	8 X 6	ECCENTRIC REDUCER	FLG X FLG
1	6	TEE	FLG X FLG
FROM PROPOSED TEE TO EXISTING PUMP INLET (EAST LEG)			
QTY	DIAMETER (IN.)	TYPE	END
1	6	GATE VALVE	FLG X FLG
1	N/A	VALVE STAND	N/A
1	6	90° BEND	FLG X FLG
1	6	SPOOL	FLG X FLG
1	6	90° BEND	FLG X FLG
1	6	SPOOL	FLG X FLG
1	6	90° BEND	FLG X FLG
1	6 X 4	ECCENTRIC REDUCER	FLG X FLG
1	4	SPOOL	FLG X FLG
1	4	PIPE CLAMP	N/A
FROM PROPOSED TEE TO EXISTING PUMP INLET (WEST LEG)			
QTY	DIAMETER (IN.)	TYPE	END
1	6	GATE VALVE	FLG X FLG
1	N/A	VALVE STAND	N/A
1	6	90° BEND	FLG X FLG
1	6	SPOOL	FLG X FLG
1	6	90° BEND	FLG X FLG
1	6 X 4	ECCENTRIC REDUCER	FLG X FLG
1	4	SPOOL	FLG X FLG
1	4	PIPE CLAMP	N/A

- * DENOTES ITEM TO BE REUSED FROM EXISTING LAYOUT
- REPLACE ALL EXISTING FLANGE GASKETS AND HARDWARE
- ECCENTRIC REDUCERS TO BE INSTALLED WITH TOP FLAT

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TUMA SPORTS COMPLEX
METER INSTALLATION

PROPOSED IMPROVEMENTS

SHEET No.
U.1