

FLAG NOTES:

- PROPOSED TELEPHONE & CABLE SERVICE. COORD. WITH MEP & UTILITY PROVIDER FOR ROUTING AND INSTALL 3-4" CONDUITS.
- PROPOSED SECONDARY UNDERGROUND ELECTRIC SERVICE FROM TRANSFORMER TO BUILDING. COORD. WITH MEP FOR CONDUIT SIZE, QUANTITY AND ROUTING.
- PROPOSED PRIMARY UNDERGROUND ELECTRIC SERVICE. COORD. WITH MEP & UTILITY PROVIDER INSTALLATION OF 1-4" SCH. 40 PVC CONDUIT. 1-2" CONDUIT SHALL BE INSTALLED FROM JUNCTION BOX TO CLUBHOUSE TRANSFORMER. CONDUITS SHALL BE INSTALLED UNDER THIS CONTRACT.
- PROPOSED CONCRETE PAD AND TRANSFORMER. COORD. WITH MEP PLANS & UTILITY PROVIDER FOR SIZING AND REQUIREMENTS. PAD SHALL BE INSTALLED UNDER THIS CONTRACT.
- PROPOSED 6" AWWA C900 PIPE W/60" MIN. COVER.
- PROPOSED 3" SCH. 80 PVC PIPE W/60" MIN. COVER.
- PROPOSED 2" SCH. 80 PVC PIPE W/60" MIN. COVER.
- PROPOSED 4" AWWA C900 PIPE W/60" MIN. COVER.
- PROPOSED POST INDICATOR VALVE (APPROXIMATE LOCATION) TO BE INSTALLED PER CITY OF AMES REQUIREMENTS. FINAL LOCATION OF POST INDICATOR VALVE SHALL BE AT THE DISCRETION OF THE FIRE INSPECTOR.
- NOT USED
- PROPOSED 4" SCH. 40 SANITARY SEWER SERVICE @ MIN. 2.08%.
- PROPOSED 6" SCH. 40 SANITARY SEWER SERVICE @ MIN. 1.04%.
- PROPOSED SANITARY SEWER CLEAN OUT. SEE DETAIL SHEET C8.01.
- SERVICE CONNECTION TO PUBLIC MAIN. SEE SHEET C5.03 FOR WATER AND SHEET C5.01 FOR SEWER.
- PROPOSED PUBLIC IMPROVEMENT WATER MAIN. SEE SHEET C5.03 TO C5.06. PROPOSED PUBLIC IMPROVEMENT SEWER MAIN. SEE SHEET C5.02.
- PROPOSED PUBLIC IMPROVEMENT FIRE HYDRANT ASSEMBLY. SEE SHEET C5.03 TO C5.05.
- PROPOSED KNOX BOX. (CONTRACTOR TO COORD. WITH LOCAL FIRE DEPT. FOR LOCATION)
- PROPOSED ELECTRIC JUNCTION BOX. COORD. WITH UTILITY PROVIDER FOR INSTALLATION.

GENERAL NOTES:

- SANITARY SEWER LATERALS SHALL BE 4", 6" OR 8" SDR-35 PVC PIPE. MINIMUM SLOPE FOR SANITARY SEWER LATERALS:
4" SEWER LATERALS = 2.08% MIN.
6" SEWER LATERALS = 1.04% MIN.
- ALL UTILITY CROSSINGS SHALL HAVE A MINIMUM OF 18" CLEARANCE UNLESS OTHERWISE SHOWN.
- ALL UTILITY TRENCHES SHALL HAVE AN IMPERVIOUS TRENCH CHECK OUTSIDE OF THE BUILDING WALL. SEE DETAIL ON SHEET C8.01.

LEGEND

W	PROPOSED DOMESTIC WATER SERVICE LINE
FP	PROPOSED FIRE PROTECTION SERVICE LINE
S	PROPOSED SANITARY SEWER SERVICE
UGE	PROPOSED UNDERGROUND ELECTRIC SERVICE
G	PROPOSED GAS SERVICE
COMM	PROPOSED COMMUNICATION SERVICE
	PROPOSED PARKING LOT LIGHT POLE

SURVEY LEGEND

WATER LINE	
ELECTRIC LINE	
SANITARY SEWER	
GAS LINE	
TELEPHONE LINE	
TV CABLE	
STORM SEWER	
EXIST. 'X' IN CONCRETE	
EXIST. FIRE HYDRANT	
EXIST. POWER POLE	
EXIST. LIGHT POLE	
EXIST. GUY ANCHOR	
EXIST. SPOT ELEVATION	
EXIST. GAS METER	
EXIST. WATER VALVE OR CURB BOX	
EXIST. BEEHIVE INTAKE	
EXIST. ELECTRIC BOX	
EXIST. UTILITY POLE	
EXIST. TELEPHONE PEDESTAL	
EXIST. SANITARY CLEAN-OUT	
EXIST. IRRIGATION CONTROL	
EXIST. SIGN POST	
EXIST. GROUND LIGHTING	
EXIST. PK OR MAG NAIL FOUND OR SET AS NOTED	
EXIST. 24" STORM INTAKE	
EXIST. ELECTRIC METER	
EXIST. BOLLARD	
PROPERTY BOUNDARY	
SECTION LINE	
STREET CENTERLINE	
RIGHT OF WAY LINE	
EASEMENT LINE	
BUILDING SETBACK LINE	
SECTION CORNER FOUND OR SET AS NOTED	
FOUND IRON PIN OR PIPE AS NOTED	
SET 1/2" REBAR W/ YELLOW CAP #17161	



7157 Vista Drive
West Des Moines, IA 50266
TEL 515.331.6517
FAX 515.331.6518
OA #015-2763
www.olsonassociates.com

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SHEET NAME:
UTILITY
PLAN
SHEET:
C5.00

DOMESTIC WATER & FIRE PROTECTION GENERAL NOTES:

- CONTRACTOR TO VERIFY WITH ARCHITECTURAL PLANS FOR SIZE AND LOCATION OF UTILITY SERVICE TO BUILDING BEFORE CONSTRUCTION.
- WHERE THE WATER SERVICE IS TO BE CONSTRUCTED BELOW OR WITHIN 18 INCHES OF ANY SEWER PIPE, THE CONTRACTOR SHALL LAY A FULL LENGTH OF WATER SERVICE PIPE CENTERED ON THE SEWER OR SUCH LENGTH AS WILL PROVIDE THE MAXIMUM POSSIBLE SEPARATION OF THE JOINTS IN THE WATER SERVICE FROM THE SEWER LINE. IF NOT ALREADY SO, THE CONTRACTOR SHALL CONSTRUCT SANITARY SEWER WITH ONE 20 FOOT NOMINAL LENGTH OF PRESSURE PIPE MATERIAL CENTERED ON THE WATER SERVICE, SUCH THAT THE MAXIMUM POSSIBLE SEPARATION BETWEEN THE WATER SERVICE AND THE SEWER PIPE JOINTS WILL RESULT. THE BACKFILL MATERIAL SHALL BE SELECT, LOW PERMEABILITY SOIL. REMOVE SPOIL MATERIAL FROM SITE.
- THE CONTRACTOR SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS FOR MAXIMUM PIPE JOINT DEFLECTIONS.
- PRIOR TO MOVING OFF THE JOB THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DO A FINAL WALK-THROUGH OF THE CONSTRUCTION SITE.
- PRIOR TO FINAL ACCEPTANCE ALL WATER SERVICE PIPE SHALL BE PRESSURE TESTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF AMES REQUIREMENTS.
- PRIOR TO FINAL ACCEPTANCE ALL WATER SERVICE PIPE SHALL BE DISINFECTED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY OF AMES REQUIREMENTS.
- LOCATION AND ELEVATIONS OF IMPROVEMENTS TO BE MET (OR AVOIDED) BY WORK TO BE DONE SHALL BE CONFIRMED BY THE CONTRACTOR THROUGH FIELD EXPLORATIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL REPORT TO THE ENGINEER OR CITY INSPECTOR ANY DISCREPANCIES BETWEEN HIS MEASUREMENTS AND THESE PLANS.
- ALL WATER SERVICE CONSTRUCTION SHALL BE DONE UNDER A PLUMBERS PERMIT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- MAINTAIN 66" MINIMUM COVER OVER TOP OF WATER SERVICE PIPE.
- WATER SERVICE PIPE MATERIALS SHALL BE AWWA C900 FOR 8" & 6" DOMESTIC SERVICE AND FIRE PROTECTION SERVICE.
- INSTALLATION OF FIRE MAIN SHALL BE IN ACCORDANCE WITH CURRENT NFPA 24 GUIDELINES.
- CONTRACTOR SHALL BE RESPONSIBLE TO DEFLECT PIPE OR ADD FITTINGS AS NECESSARY TO MAINTAIN A MINIMUM 18" OF CLEARANCE BETWEEN FIRE/WATER LINES AND ALL OTHER UNDERGROUND UTILITIES.

UTILITY PROVIDERS:

GAS: ALLIANT ENERGY: PAUL RYAN (515-268-3487)
ELECTRIC: CITY OF AMES ELECTRIC SERVICES: MARK IMHOFF (515-239-5175)
SEWER/WATER: CITY OF AMES (515-239-5162)
TRAFFIC: CITY OF AMES (515-239-5535)
PHONE/COMMS: CENTURYLINK: ANDREW SALTER (515-263-7219)
WINDSTREAM/MCLEOD (800-289-1901)
MEDIA: IOWA STATE UNIVERSITY (515-294-2716)
MEDIACOM: TIM ADREON (515-233-2318)
UNITE PRIVATE NETWORKS (515-321-3336)

