

N: 25,947.4570, E: 17,911.1770
PROPOSED WATER WELL.

IRRIGATION IMPROVEMENTS
C.O.W. PROJ. NO. 472-84990

NOTE: THE CONTRACTOR SHALL NOTIFY THE OWNER 5 WORKING DAYS PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM INSTALLATION SO THE OWNER OR OWNERS REPRESENTATIVE CAN MARK THE SHRUB BED LOCATIONS.

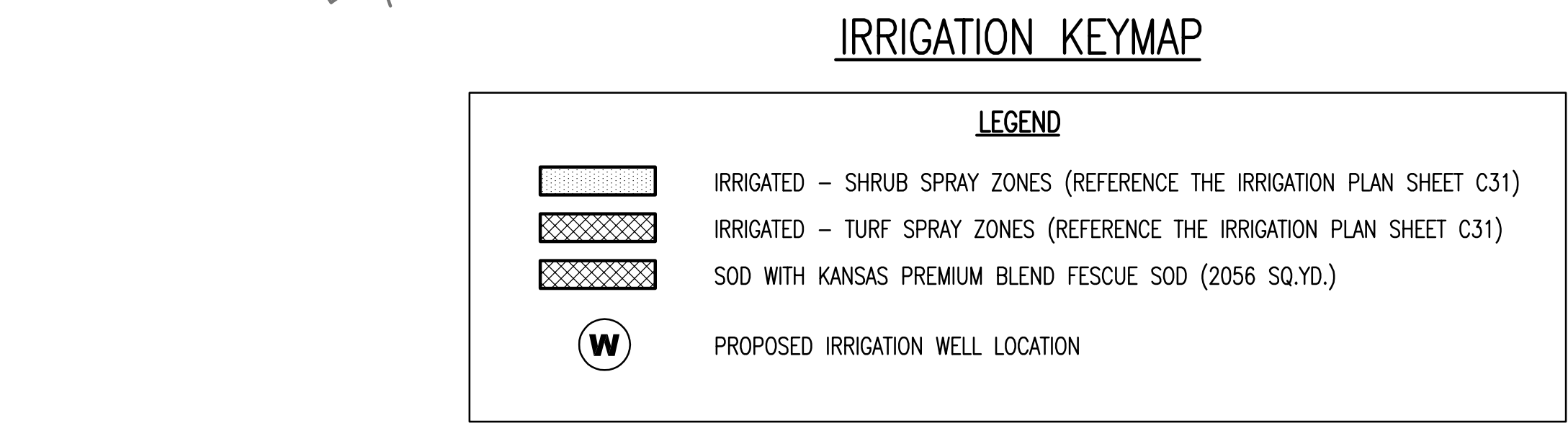
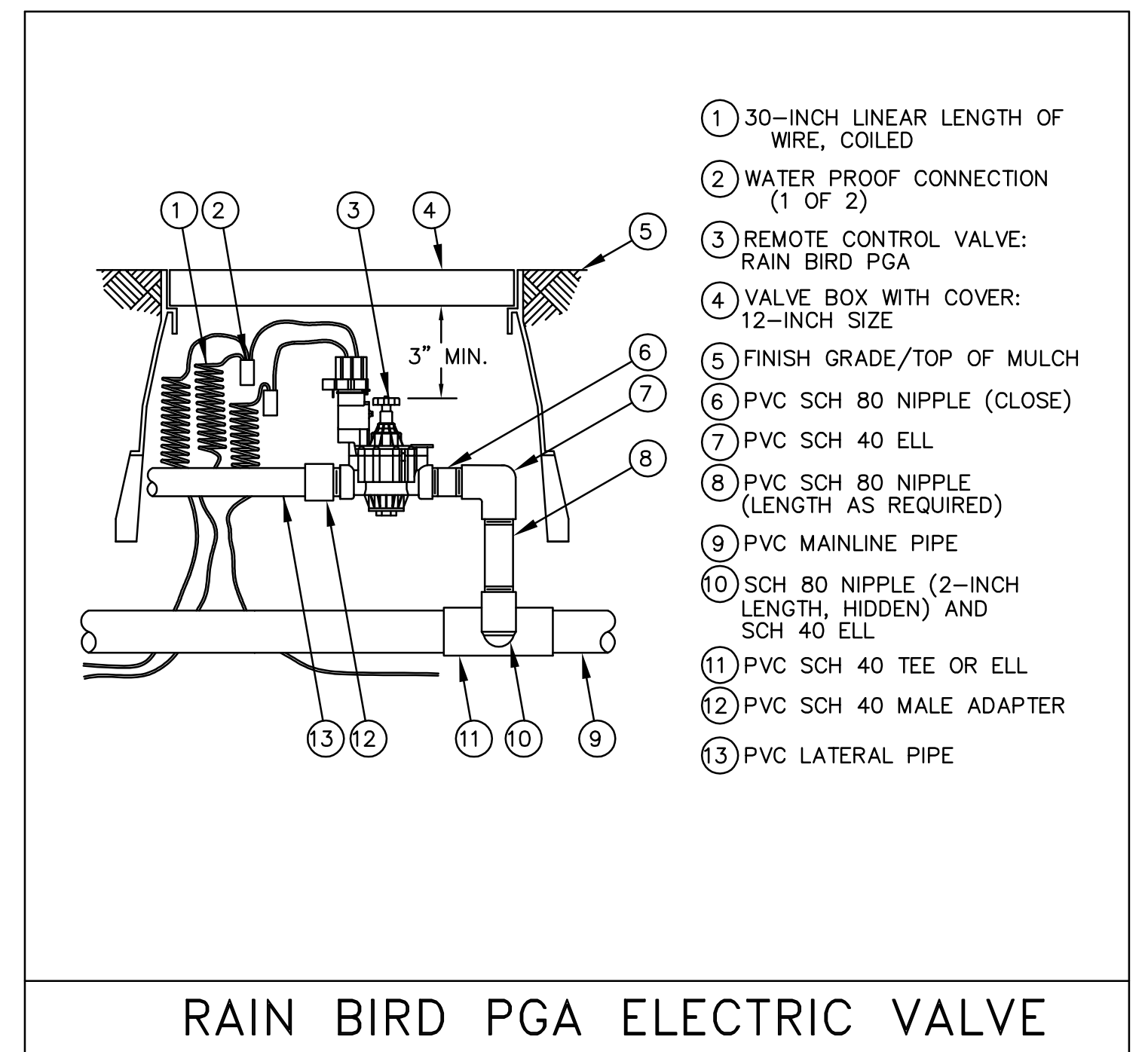
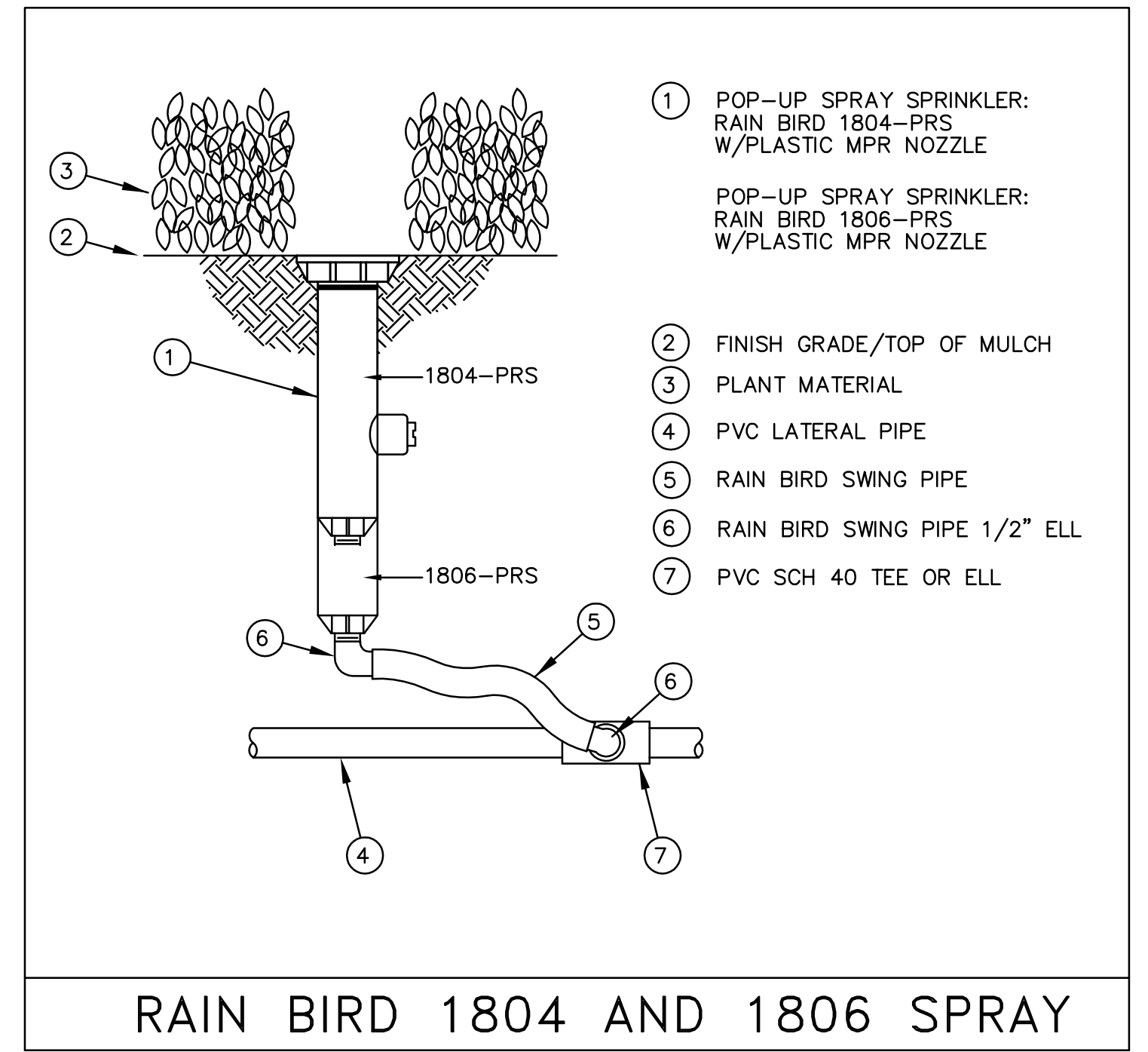
IRRIGATION NOTES:

- CONTRACTOR SHALL LOCATE THE PROPERTY BOUNDARY/STREET RIGHT OF WAY PRIOR TO CONSTRUCTION. ALL TRENCHING AND IRRIGATION EQUIPMENT SHALL BE WITHIN THE STREET RIGHT OF WAY OR RESERVES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PRESERVING PROPERTY IRONS. THE CONTRACTOR WILL BE REQUIRED TO RE-ESTABLISH ANY PROPERTY IRONS WHICH ARE DAMAGED OR DESTROYED BY HIS CONSTRUCTION OPERATIONS. SUCH IRONS SHALL BE RE-ESTABLISHED BY A LICENSED LAND SURVEYOR IN ACCORDANCE WITH STATE LAWS.
- CONTRACTOR SHALL PROVIDE A MINIMUM SEVENTY-TWO (72) HOURS ADVANCE NOTICE (EXCLUDING WEEKENDS AND HOLIDAYS) PRIOR TO BEGINNING ANY EXCAVATION, TO KANSAS ONE-CALL SYSTEM, A UTILITY LOCATION SERVICE, (OR THE APPROPRIATE LOCAL UTILITY LOCATION SERVICE) AT 811 TO REQUEST LOCAL UTILITY COMPANIES TO LOCATE ANY EXISTING LINES IN THE PROJECT AREA.
- CONTRACTOR WILL BE REQUIRED TO WORK AROUND IMPROVEMENTS CONSTRUCTED UNDER OTHER PROJECTS AND SHALL BE RESPONSIBLE FOR REPAIR OF DAMAGE TO IMPROVEMENTS IN PLACE. COSTS FOR COORDINATION AND REPAIRS TO IMPROVEMENTS IN PLACE, IF REQUIRED, SHALL BE BORNE BY THE CONTRACTOR.
- HEAD TO HEAD COVERAGE IS REQUIRED. ANY ADJUSTMENTS THAT ARE NECESSARY DUE TO FIELD CONDITIONS SHALL BE SUBMITTED TO THE ENGINEER IN WRITING FOR APPROVAL AND SHALL BE NOTED IN THE AS-BUILT DRAWINGS.
- ALL SPRAY HEADS SHALL BE RAINBIRD 1800 SERIES (1804 AND 1806) PRS (PRESSURE REGULATED) HEADS OR APPROVED EQUAL. SEE DETAIL, THIS SHEET.
- THE SYSTEM IS DESIGNED BASED ON A MINIMUM WORKING PRESSURE = 60 GPM AND 60 PSI. THE CONTRACTOR IS RESPONSIBLE FOR REPORTING OPERATING PRESSURES THAT DEVIATE FROM THE DESIGN PRESSURE TO THE ENGINEER PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM.
- ALL IRRIGATION MATERIALS AND INSTALLATION MUST BE IN COMPLIANCE WITH ALL LOCAL CODES AND CITY OF WICHITA SPECIFICATIONS (SECTION 906 IRRIGATION).
- THE CONTRACTOR SHALL MAINTAIN A CLEAN JOB SITE AND CLEAN UP TRASH DAILY.
- CONTROLLER = HUNTER ACC-99D - 2 WIRE DECODER CONTROLLER WITH A WEATHERPROOF METAL CABINET AND 99 STATION CAPACITY OR APPROVED EQUAL (BY RAINBIRD OR TORO). (REFERENCE ELECTRICAL PLAN FOR MOUNTING LOCATION IN MILBANK SERVICE PEDESTAL).
- RAIN SENSOR = RAINBIRD RSD-BEX (OR APPROVED EQUAL BY HUNTER OR TORO) FOR AUTOMATIC SHUT OFF WATER FLOW DURING RAIN.
- DECODERS = HUNTER ICD-100 ONE STATION DECODER WITH INTEGRATED SURGE PROTECTION (OR APPROVED EQUAL BY RAINBIRD OR TORO). INSTALL A 3M DBRY ON THE INLET OF DECODER AND A 3M DBY ON THE SOLENOID SIDE OF DECODER.
- CONTROL WIRE = 14 GAUGE MAXI-COM WIRE. EACH DIRECTION OF 2-WIRE PATH IN CLOCK. SEPARATE PORTS IN THE ELECTRIC BUS TERMINAL AND LABEL THE DIRECTION IT IS GOING. THERE SHALL BE A 4' LOOP OF WIRE LEFT AT ANY CHANGE IN DIRECTION ON THE MAIN LINE.
- GROUND RODS = 8 FOOT COPPER BONDED GROUND RODS SHALL BE INSTALLED AT ALL ENDS OF THE WIRE PATH, EVERY 500 FEET, AND AT THE CONTROLLER PER THE CONTROLLER SPECIFICATIONS. THE GROUND WIRE SHALL BE IN A SEPARATE CONDUIT TO THE CONTROLLER.
- PRESSURE RELIEF VALVE = INSTALL ONE MERRILL PRVHD 1"x1" PRESSURE RELIEF VALVE CUSTOM SETTING OF 75 PSI LOCATED NEAR THE WELL IN A "JUMBO VALVE BOX" TO DISCHARGE ABOVE GRADE 10 FEET FROM WELL DIRECTED IN THE OPPOSITE DIRECTION OF THE CONTROLLER AND ELECTRICAL EQUIPMENT, AND TOWARD THE DETENTION POND.
- CONTROL VALVES SHALL BE RAINBIRD PGA ELECTRIC PLASTIC GLOBE VALVES OR APPROVED EQUAL. SEE DETAIL, THIS SHEET.
- VALVE BOXES:
 - RAINBIRD 10" ROUND VALVE BOX AND LID WITH NON-POTABLE WATER MARKING (ONE VALVE ONLY) OR APPROVED EQUAL.
 - RAINBIRD "JUMBO VALVE BOX" AND LID WITH NON-POTABLE WATER MARKING (TWO VALVES ONLY) OR APPROVED EQUAL.
- BLOW OUT: INSTALL IN "JUMBO VALVE BOX" - 1" PORT. INSTALL PRESSURE RELIEF VALVE IN SAME BOX.
- WELL AND PUMP
WELL = PROPOSED DEPTH OF 130 FEET. THE PUMP SHALL INCLUDE 5" CASING AND ALL WELL HOUSING. THE WELL DRILLER SHALL VERIFY PRESSURE AND GPM AND PROVIDE TO THE GENERAL CONTRACTOR PRIOR TO INSTALLATION OF THE IRRIGATION SYSTEM.
PUMP = 7.5 HP 3-PHASE SUBMERSIBLE PUMP CAPABLE OF 100 GPM AT 60 PSI. THE PUMP INCLUDES WIRING FROM THE PUMP TO THE WELL HEAD.
PUMP START RELAY = THE WELL DRILLER SHALL SUPPLY THE PUMP START RELAY. (TO BE CONNECTED BY THE ELECTRICAL CONTRACTOR.
- BACKFILL TRENCHES WITH TOPSOIL FREE OF ROCKS AND DEBRIS. WATER SETTLE TRENCHES TO NEAR ORIGINAL COMPACTION - THE CONTRACTOR IS RESPONSIBLE FOR CORRECTING SETTLING PROBLEMS WITHIN THE ONE YEAR WARRANTY PERIOD.
- SEE PIPE FLOW CHART FOR MAXIMUM ALLOWABLE FLOW THROUGH PIPES. THE FLOW SHALL NOT EXCEED 5 FT/SECOND MAXIMUM FLOW RATES.

PVC PIPE SIZE (INCHES)	MAXIMUM FLOW (GPM)
1	18
1 1/4	28
1 1/2	36
2	56
2 1/2	80

- VALVE BOX INSTALLATION: INSTALL VALVE BOX TOPS FLUSH WITH FINISHED GRADE. INSTALL 6" GRAVEL IN BASE OF VALVE BOX. COMPACT SUB BASE AS NECESSARY TO PREVENT SETTLING.

SEE SHEET NO. 2 FOR HORIZONTAL AND VERTICAL CONTROL.
SEE SHEET NO. 4 FOR PLAT COORDINATES.



SCALE: 1" = 100'

No.	Revision	By	Date
NEWMARKET OFFICE 2ND PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS IRRIGATION KEY MAP AND NOTES GARY JANZEN, P.E. - CITY ENGINEER CITY OF WICHITA PROJ. NO. 472-84990 PROFESSIONAL ENGINEERING CONSULTANTS, P.A. 303 SOUTH TOPEKA WICHITA, KS 67202 316-262-2691 www.pec1.com			
Designed by	BMM, JAG, IDK	Job No.	35-11114-000
Drawn by	BJS, IDK	Date	July 2011
			Sht. 30 of 31

Sowed 12-21-2012 4:39:39 PM by BJS
 Plot Scale 1:100 12-21-2012 6:11:28 PM by BJS
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