

THE CONTRACTOR SHALL INSTALL SOD 8 FOOT WIDE FROM THE BACK OF CURB WITH METAL EDGING BETWEEN THE 1804 TURF SPRAYS AND 1806 SHRUB SPRAY ZONES.

IRRIGATION IMPROVEMENTS
C.O.W. PROJ. NO. 472-84991
RESERVE "A"

EXISTING WATER WELL AND CONTROLLER LOCATION.

PHASE 1 EXISTING IRRIGATION IMPROVEMENTS
C.O.W. PROJ. NO. 472-84990

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. EXISTING PHASE 1 IRRIGATION SYSTEM COMPONENTS LISTED BELOW ARE FOR REFERENCE ONLY AND SHALL BE FIELD VERIFIED PRIOR TO BIDDING. 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.
- THE CONTRACTOR SHALL CONNECT TO THE EXISTING CONTROLLER INSTALLED IN PHASE 1. (CONTROLLER SPECIFICATION FROM PHASE 1 FOR REFERENCE: HUNTER ACC-99D - 2 WIRE DECODER CONTROLLER WITH A WEATHERPROOF METAL CABINET AND 99 STATION CAPACITY OR APPROVED EQUAL (BY RAINBIRD OR TORO).
- EXISTING RAIN SENSOR INSTALLED IN PHASE 1 = 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.
- EXISTING PRESSURE RELIEF VALVE INSTALLED IN PHASE 1 = 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:
1. RAINBIRD 10" ROUND VALVE BOX AND LID WITH NON-POTABLE WATER MARKING (ONE VALVE ONLY) OR APPROVED EQUAL.
2. RAINBIRD "JUMBO VALVE BOX" AND LID WITH NON-POTABLE WATER MARKING (TWO VALVES ONLY) OR APPROVED EQUAL.
- EXISTING BLOW OUT INSTALLED IN PHASE 1: "JUMBO VALVE BOX" - 1" PORT. INSTALL PRESSURE RELIEF VALVE IN SAME BOX.
- EXISTING WELL AND PUMP INSTALLED IN PHASE 1.
WELL = PROPOSED DEPTH OF 130 FEET. THE PUMP SHALL INCLUDE 6" 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.
- 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

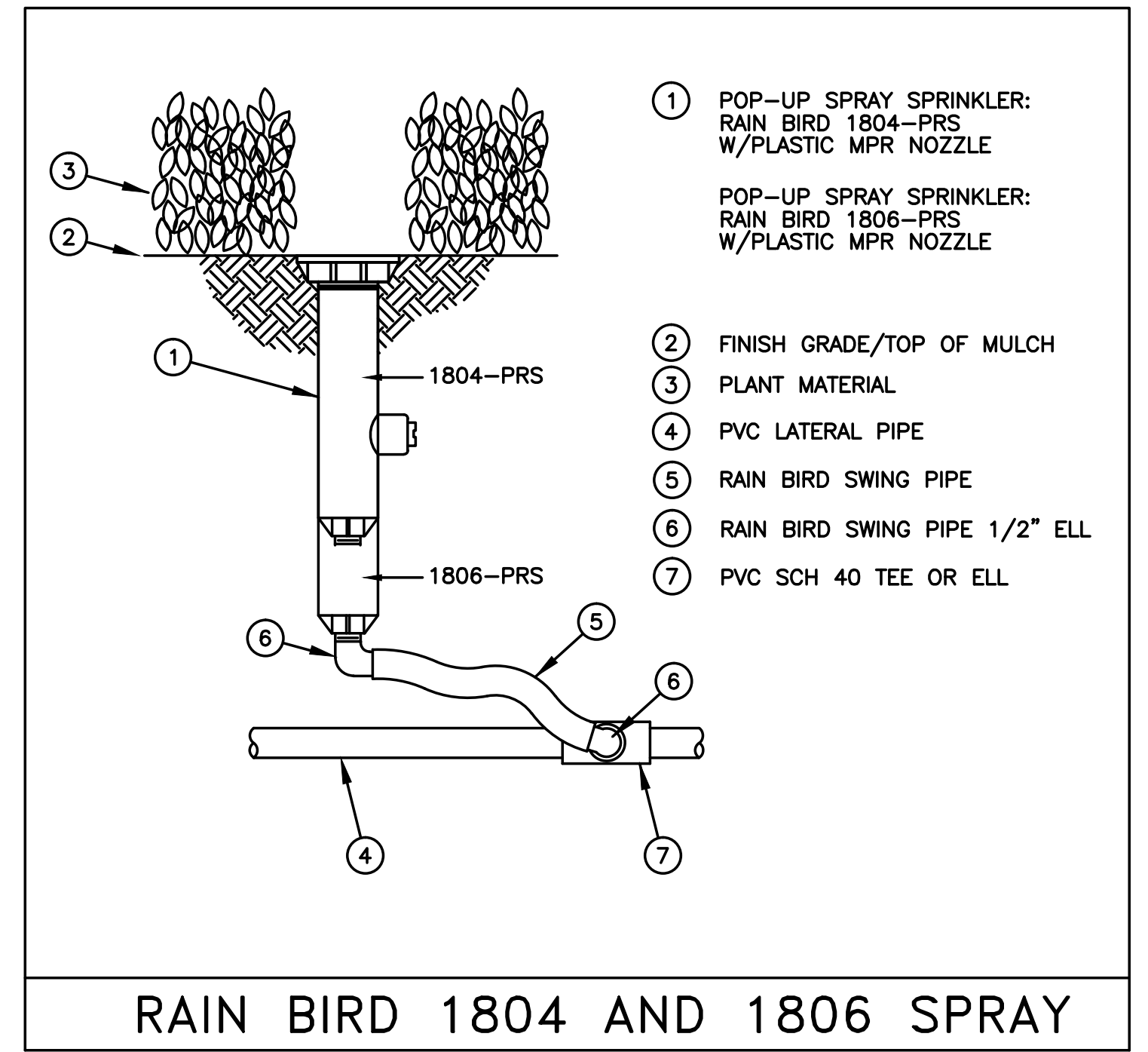
- VALVE BOX INSTALLATION: INSTALL VALVE BOX TOPS FLUSH WITH FINISHED GRADE. INSTALL 6" GRAVEL IN BASE OF VALVE BOX. COMPACT SUB BASE AS NECESSARY TO PREVENT SETTLING.

LANDSCAPE NOTES:

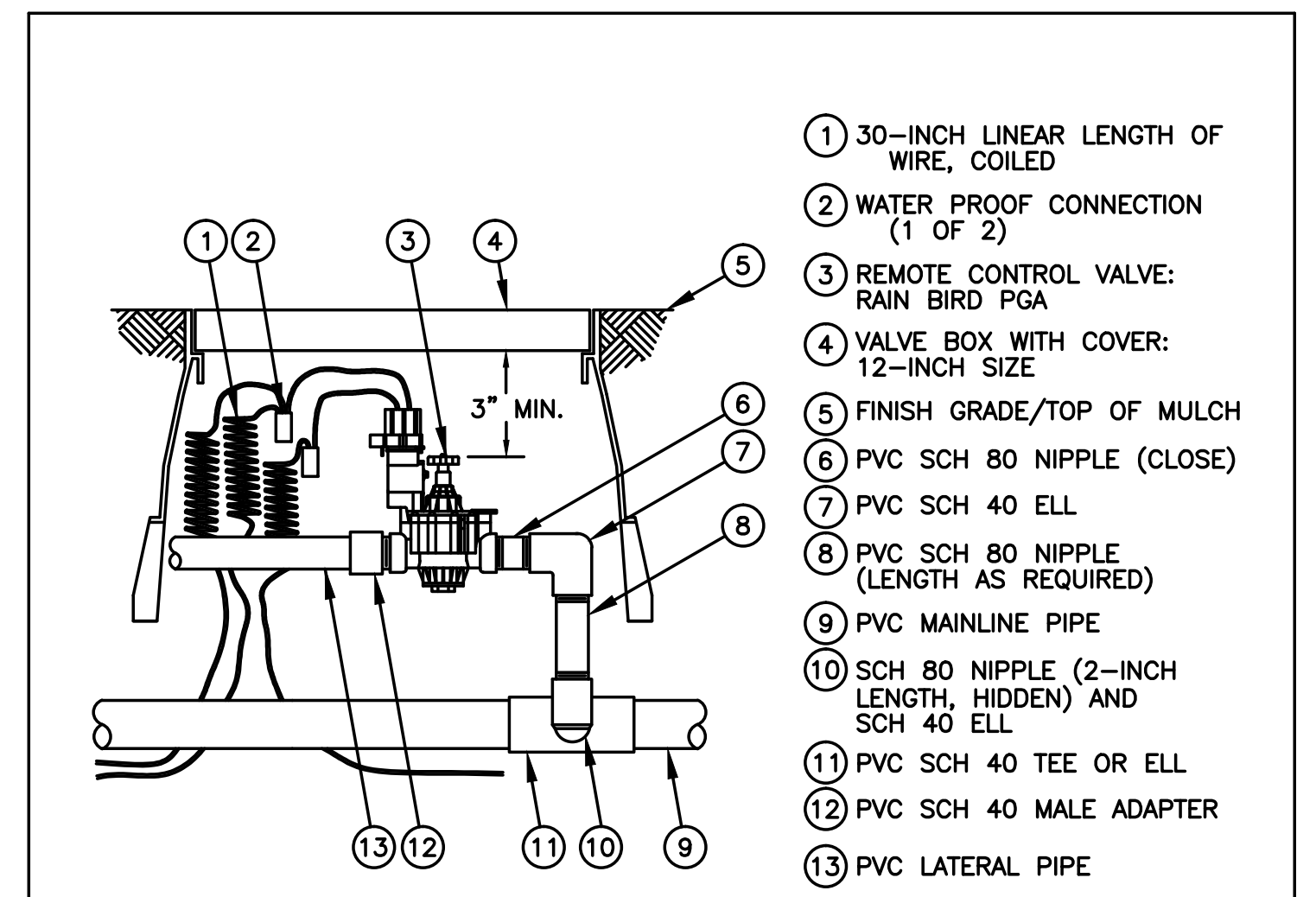
- INSTALL FESCUE SOD WHERE SHOWN ON THE PLAN THIS SHEET PER THE CITY OF WICHITA SPECIFICATIONS.

SEE SHEET NO. 2 FOR HORIZONTAL AND VERTICAL CONTROL.

SEE SHEET NO. 27 FOR PLAT COORDINATES.



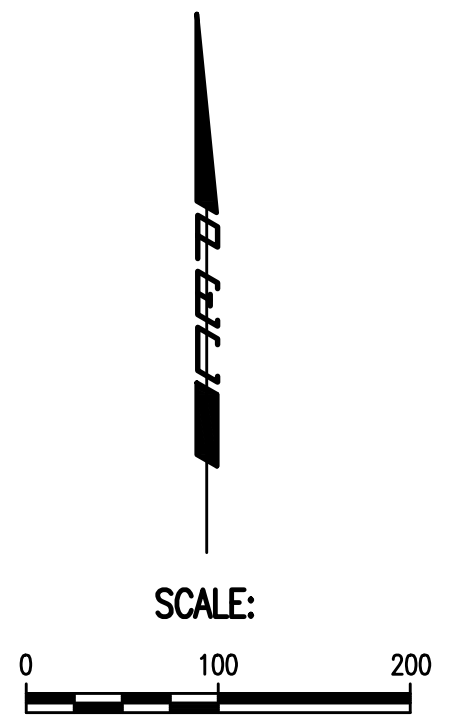
RAIN BIRD 1804 AND 1806 SPRAY



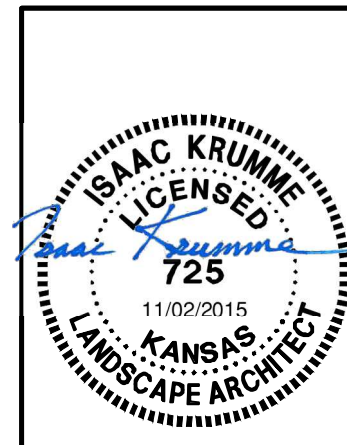
RAIN BIRD PGA ELECTRIC VALVE

LEGEND

- IRRIGATED - SHRUB SPRAY ZONES (REFERENCE THE IRRIGATION PLAN SHEET C25)
- IRRIGATED - TURF SPRAY ZONES (REFERENCE THE IRRIGATION PLAN SHEET C25)
- SOD WITH KANSAS PREMIUM BLEND FESCUE SOD (975 SQ.YD.)
- EXISTING IRRIGATION WELL LOCATION



Served 10-30-2015 12:44:00 PM by BJT
 Plot Scale 1:1 11-02-2015 9:05:14 AM by RET
 U:\Wichita-Civil\2015\15120\001\Drawings\15120-001-25C-IRRIGATION KEY MAP



No.	Revision	By	Date

NEWMARKET OFFICE 2ND-PHASE 2
PAVING AND INCIDENTAL DRAINAGE IMPROVEMENTS
IRRIGATION KEY MAP
 GARY JANZEN, P.E. - CITY ENGINEER
 CITY OF WICHITA PROJECT NO. 472-84991

PEC PROFESSIONAL ENGINEERING CONSULTANTS, P.A.
 303 SOUTH TOPEKA WICHITA, KS 67202
 316-262-2691 www.pec1.com

Designed by	BMM, TBK	Job No.	35-15120-001	Sht. 25 of 36
Drawn by	BJS	Date	November 2015	