

F.A. ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
08-00520-02-MS	WINNEBAGO	10	3	
ILLINOIS PROJECT				

IRRIGATION NOTES

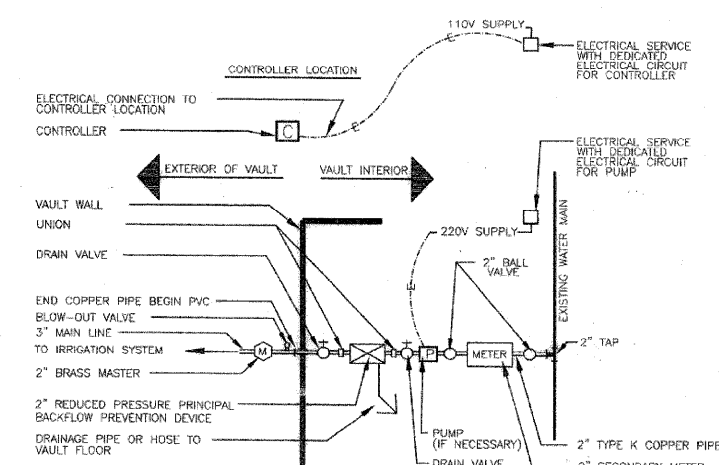
Harrison Avenue

EQUIPMENT SCHEDULE

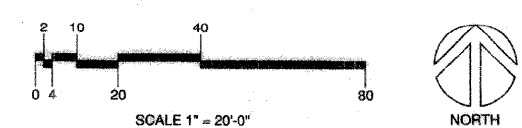
SYMBOL	ITEM
	HUNTER 1-40/41 SERIES ROTOR HEAD
	HUNTER 1-25/31 SERIES ROTOR HEAD
	HUNTER 1-20 SERIES ROTOR HEAD
	HUNTER INSTITUTIONAL SERIES SPRAY HEAD
	HUNTER INSTITUTIONAL SERIES SPRAY HEAD
	HUNTER SS SERIES SPRAY HEAD
	QUICK COUPLING VALVES W/ HOSE SWIVEL
	2" BRASS MASTER VALVE
	HUNTER ACC-99D CONTROLLER
	HUNTER WIRELESS RAIN CLIK
	SLEEVE/CROSSING POINT
	IRRIGATION MECHANICAL VAULT
	WILKINS RPZ REDUCED PRESSURE VALVE

- IRRIGATION CONTRACTOR (CONTRACTOR) SHALL PROVIDE COMPLETE DESIGN AND INSTALLATION SERVICES FOR FOUR AUTOMATIC IRRIGATION SYSTEMS OF LAWN AND PLANTING AREAS. SUPPLY AND INSTALL ALL MATERIALS NECESSARY TO PROVIDE COVERAGE OF INDICATED AREAS. THE INTENT OF THE SYSTEM IS TO PROVIDE FULL COVERAGE OF THE BOULEVARD ISLANDS AND AS MUCH COVERAGE OF THE R.O.W. PARKWAYS (SIDES) AS POSSIBLE HAVING HEADS PLACED AT THE BACK OF CURB AS THE SUGGESTED HEAD LAYOUT INDICATES. THE RADIUS OF THE SPRAY PATTERN FOR EACH HEAD SHALL BE DETERMINED BY THE DISTANCE FROM BACK OF CURB TO R.O.W. LINE. PLACEMENT OF HEADS ALONG THE CURB SHALL BE SUCH THAT HEAD TO HEAD COVERAGE ALONG THE CURB IS ACCOMPLISHED. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND AREAS PRIOR TO BEGINNING PROJECT.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO BEGINNING CONSTRUCTION ON HIS WORK. ELECTRIC, GAS, TELEPHONE, CABLE TELEVISION AND BADGER PIPELINE MAY BE LOCATED BY CALLING J.U.L.I.E. AT 1-800-892-0123. ANY DAMAGE OR INTERRUPTION OF SERVICES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL COORDINATE ALL RELATED ACTIVITIES WITH OTHER TRADES ON THE JOB AND SHALL REPORT ANY UNACCEPTABLE JOB CONDITIONS TO OWNER'S REPRESENTATIVE PRIOR TO COMMENCING WORK.
- MAIN PIPE SHALL BE 3" CLASS 200 PVC, INSTALLED AT A MINIMUM DEPTH OF 12" BELOW FINISHED GRADE. LATERAL PIPE SHALL BE POLY PIPE AT A MINIMUM DEPTH OF 8" BELOW FINISHED GRADE.
- BACK FILL SHALL BE FREE FROM ROCK AND THOROUGHLY TAMPED AND COMPACTED IN ALL TRENCHES. TRENCHES SHALL NOT BE LEFT OVERNIGHT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ANY DAMAGE CAUSED BY SETTLED TRENCHES, REPAIR OF LAWNS, DRIVES OR OTHER STRUCTURES.
- MAIN PIPE AND LATERAL PIPES SHOULD BE RUN IN ONE TRENCH WHERE POSSIBLE. VALVES TO BE LOCATED DIRECTLY ON MAIN LINE.
- VALVE TO BE INSTALLED IN "AMETEK" POLYPLASTIC BOXES, 12" x 8" x 18". INSTALL VALVE BOXES FLUSH WITH ADJACENT GRADE, WHETHER IN PLANTING BEDS OR IN LAWNS. USE 3" DEPTH PEA GRAVEL IN BASE OF ALL VALVE BOXES. GROUP VALVES WHERE POSSIBLE.
- ALL HEADS SHALL BE HUNTER "I" SERIES (1-10/1-20, 1-25/21, 1-40/41, 1-60, 1-90 ROTORS & INSTITUTIONAL SPRAYS) HEADS, (OR APPROVED EQUAL) IN QUANTITIES AND LOCATIONS SUCH AS TO PROVIDE FULL COVERAGE OF INDICATED LAWN AND PLANTING AREAS. DO NOT ALLOW SPRAY PATTERNS ONTO LANES OF TRAFFIC, INTO AREAS OUTSIDE OF R.O.W. AND OTHER SITE ITEMS. INSTALL AS PER MANUFACTURER'S RECOMMENDATIONS.
- INSTALL SHRUB HEADS 3" ABOVE GRADE AND 6" FROM CURBS, WALKS, OR OTHER STRUCTURES. INSTALL LAWN HEADS AT GRADE, 6" FROM CURBS, WALKS, WALLS OR OTHER STRUCTURES. ADJUST HEADS AS NECESSARY TO AVOID OVER SPRAY ONTO BUILDINGS, SIGNS, SWITCH BOXES, ETC.. DO NOT PLACE HEADS WITHIN 6' OF ANY TREE OR SHRUB UNLESS THE HEAD IS DESIGNED TO DO SO, (I.E. SHRUB HEADS).
- AFTER SYSTEMS ARE INSTALLED, REMOVE END HEADS AND OPERATE SYSTEM AT FULL PRESSURE UNTIL ALL RUST, SCALE, AND SAND IS REMOVED.
- SYSTEM SHALL BE A TWO-WIRE DECODER TECHNOLOGY SYSTEM. CONTRACTOR TO SUPPLY AND INSTALL ALL EQUIPMENT NECESSARY TO OPERATE SUCH A SYSTEM. ALL REMOTE CONTROL VALVE CABLE TO BE IDWIRE1 (14 AWG) OR IDWIRE2 (12 AWG), DIRECT BURIAL. TAPE AND BUNDLE @ 20' INTERVALS. RUN ALL WIRE IN PIPE TRENCH WHERE POSSIBLE.

- IT IS ASSUMED THAT EXISTING PRESSURE AT THE POINT OF CONNECTIONS ARE ADEQUATE TO SUPPLY SYSTEM. THE FOLLOWING ARE FLOW TEST RESULTS FOR THE AREA PROVIDED BY THE CITY OF ROCKFORD:
 UPLAND-HARRISON: STATIC: 72 PSI, RESIDUAL: 62 PSI @ 2353 GPM (PERFORMED BY ROCKFORD FIRE DEPARTMENT IN 2004).
 FORESTVIEW-HARRISON: STATIC: 63 PSI, RESIDUAL: 61 PSI @ 2353 GPM (PERFORMED BY ROCKFORD FIRE DEPARTMENT IN 2004).
 MARIPOSA-HARRISON: STATIC: 64 PSI, RESIDUAL: 63 PSI @ 2353 GPM (PERFORMED BY ROCKFORD FIRE DEPARTMENT IN 2004).
 ARNOLD-HARRISON: STATIC: 57 PSI, RESIDUAL: 56 PSI @ 2015 GPM (PERFORMED BY ROCKFORD FIRE DEPARTMENT IN 2004).
 MULFORD-HARRISON: STATIC: 70 PSI, RESIDUAL: 58 PSI @ 2091 GPM (PERFORMED BY ROCKFORD FIRE DEPARTMENT IN 2007).
 CONTRACTOR TO VERIFY PRESSURE PRIOR TO SUBMISSION OF BID. IF EXISTING PRESSURE IS FOUND TO BE INADEQUATE TO SUPPLY SYSTEM(S), CONTRACTOR TO ADD PUMP(S) AS NECESSARY AND INCLUDE AS PART OF BID. (ALSO SEE NOTE 19 BELOW).
- CONTRACTOR TO TEST SYSTEM TO DETERMINE THAT ALL SPRINKLERS FUNCTION ACCORDING TO MANUFACTURER'S SPECIFICATIONS AND GIVE INDICATED COVERAGE. REPLACE, ADJUST, OR ADD HEADS, VALVES AND OTHER ITEMS NECESSARY TO ATTAIN INDICATED COVERAGE WITHOUT ADDITIONAL COST TO OWNER.
- IRRIGATION CONTRACTOR TO ESTABLISH WATER TAPS IN LOCATIONS AS SHOWN (OR AS NECESSARY) ON THE PLAN AND DETAILS.
- CONTRACTOR SHALL SUBMIT A PLAN OF THE PROPOSED IRRIGATION SYSTEM AT THE PRECONSTRUCTION MEETING AND PRIOR TO COMMENCING WORK. PLAN TO SHOW THE PROPOSED HEAD LAYOUT (INCLUDING TYPE AND QUANTITIES), VALVE LOCATIONS AND QUANTITIES (INCLUDING INDICATION OF PROPOSED ZONES) LAYOUT AND QUANTITY OF MAINLINE, LATERALS, QUICK COUPLERS, MECHANICALS AND ALL OTHER ITEMS NECESSARY TO COMPLETE SYSTEM. PLAN SHALL BE SUBMITTED IN THE FOLLOWING FORMAT:
 1). AS A PAPER COPY.
 UPON COMPLETION OF WORK, CONTRACTOR TO PROVIDE A COMPLETE "AS BUILT" IRRIGATION PLAN SHOWING THE ACTUAL INSTALLED PLACEMENT OF ALL HEADS, VALVES, PIPING, AND ASSOCIATED HARDWARE. ZONE LAYOUT TO BE INDICATED IN RELATIONSHIP TO CONTROLLER(S). AS-BUILT PLAN SHALL BE SUBMITTED IN THE FOLLOWING FORMATS: 1). AS A PAPER COPY, 2). AS A .PDF ELECTRONIC FILE, AND 3). AS A DWG FORMAT AUTOCAD VER. 2007 ELECTRONIC FILE.
- IRRIGATION CONTRACTOR TO INSTALL ONE (1) HUNTER 'ACC99D' CONTROLLER PER SYSTEM (4 TOTAL), (OR APPROVED EQUAL). CONTROLLERS TO BE IN WEATHERPROOF LOCKING METAL CABINET ON PEDESTAL TO BE SUPPLIED AND INSTALLED BY IRRIGATION CONTRACTOR, VERIFY EXACT LOCATIONS WITH OWNER PRIOR TO INSTALLATION. PROVIDE A DEDICATED 110V SERVICE TO EACH CONTROLLER LOCATION AS INDICATED ON PLAN, OR AS NECESSARY.
- CONTRACTOR IS RESPONSIBLE FOR SECURING ALL PERMITS AND APPROVALS TO MEET LOCAL CODES AND TO INCLUDE ASSOCIATED COSTS IN THE BASE BID.
- CONTRACTOR SHALL MAKE IRRIGATION SYSTEM FULLY OPERATIONAL, PROVIDE LATE FALL WINTERIZATION AND NEXT SEASON'S SPRING CHARGING AND INSPECTION AS PART OF CONTRACTED WORK.
- CONTRACTOR TO PROVIDE NECESSARY DIRECTIONAL BORING AND INSTALLATION OF SLEEVES NECESSARY FOR IRRIGATION SYSTEM IN LOCATIONS INDICATED AS "CROSSING POINT/SLEEVE" ON PLAN AND ALL OTHER PAVING OR LINEAR OBSTRUCTIONS NECESSARY. CONTRACTOR TO AVOID CUTTING AND PATCHING OF PAVEMENT EXCEPT WHERE ABSOLUTELY NECESSARY. PRIOR PERMISSION FROM THE OWNER, (CITY OF ROCKFORD), WILL BE REQUIRED BEFORE ANY PAVEMENT REMOVALS ARE ALLOWED.
 IN LOCATIONS THAT THE SLEEVES ARE ALLOWED TO BE TRENCHED IN, EACH LOCATION SHALL CONSIST OF ONE (1) 5" SCHEDULE 40 PVC SLEEVES OR CAST IRON PIPE UNLESS OTHERWISE NOTED. CONTRACTOR TO INSTALL SLEEVES TO A DEPTH OF 1'-0" BELOW FINAL GRADE, EXTEND BEYOND EDGE OF PAVING/CURB MINIMUM 1'-0" WITH 90° ELBOW CAPPED AT BOTH ENDS AND MARKED WITH MAGNETIZED RODS FOR FUTURE LOCATING. REPAIR TRENCH TO LIKE NEW CONDITIONS AFTER COMPLETION OF INSTALLATION.
 SEE SPECIFICATIONS FOR DIRECTIONAL BORING REQUIREMENTS.
- CONTRACTOR TO SUPPLY AND INSTALL BOOSTER PUMP(S) (IF REQUIRED) IN "IRRIGATION MECHANICALS" LOCATION(S) AS SHOWN ON PLAN. PUMP(S) TO BE STA-RITE MODEL #JHF, (OR APPROVED EQUAL), WITH THE APPROPRIATE HORSEPOWER TO PROVIDE FOR MINIMUM OPERATING PRESSURE, INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL A WILKINS (OR APPROVED EQUAL) RPZ BACKFLOW PREVENTION DEVICE(S) (OF APPROPRIATE SIZE FOR MAINTAINING MINIMUM OPERATING PRESSURE) FOR IRRIGATION SYSTEM(S) IN "IRRIGATION MECHANICALS" LOCATION(S) INDICATED ON PLAN. CONTRACTOR TO SUPPLY AND INSTALL A LOCKABLE FIBERGLASS "HOTBOX" BACKFLOW COVER BY CDR SYSTEMS CORPORATION (OR APPROVED EQUAL) OF APPROPRIATE SIZE TO HOUSE REQUIRED RPZ VALVE AND NECESSARY EQUIPMENT. ENCLOSURE TO BE LOCATED AT IRRIGATION MECHANICALS LOCATION. CONFIRM EXACT LOCATION WITH OWNER PRIOR TO INSTALLATION.
- CONTRACTOR TO SUPPLY AND INSTALL BADGER (OR APPROVED EQUAL) SECONDARY METER(S) (OF APPROPRIATE SIZE FOR MAINTAINING MINIMUM OPERATING PRESSURE) FOR IRRIGATION SYSTEM IN "IRRIGATION MECHANICALS" LOCATION(S) INDICATED ON PLAN.
- CONTRACTOR TO SUPPLY AND INSTALL QUICK COUPLING VALVES IN LOCATIONS INDICATED ON PLAN. QUICK COUPLING VALVES TO BE HUNTER MODEL #HQ-44LRC-AW, (OR APPROVED EQUAL), WITH KEY AND SWIVEL FOR EACH LOCATION, INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.
- CONTRACTOR TO SUPPLY AND INSTALL RAIN SENSORS IN LOCATIONS INDICATED ON PLAN. RAIN SENSORS TO BE HUNTER RAIN-CLIK MODEL #RAIN-CLIK, (OR APPROVED EQUAL), INSTALL AS PER MANUFACTURER'S SPECIFICATIONS.
- ANY DAMAGE TO EXISTING CONDITIONS, (LAWN, GRADING, HARD SURFACES, ETC.), SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO LIKE NEW CONDITIONS. MATCH EXISTING MATERIALS IN TECHNIQUE, COLOR AND MATERIALS WHEN REPAIRING ITEMS.
- IRRIGATION IS PROPOSED THROUGHOUT MOST OF THE AREA ALONG THE RIGHT-OF-WAY FOR HARRISON AVENUE AS INDICATED ON PLAN. IT IS BELIEVED THAT THERE ARE SOME PROPERTIES IN THIS AREA THAT HAVE EXISTING AUTOMATIC IRRIGATION SYSTEMS OPERATING AND IN PLACE WITHIN THE R.O.W.. SOME OF THESE PROPERTIES ARE INDICATED ON PLAN, HOWEVER, THERE MAY BE OTHER PROPERTIES NOT INDICATED THAT ALSO HAVE SYSTEMS IN PLACE. CONTRACTOR IS TO EXCLUDE ANY PROPERTY THAT HAS EXISTING IRRIGATION SYSTEMS IN PLACE WHETHER INDICATED OR NOT. DO NOT INSTALL HEADS, VALVES, WIRES, OR LATERAL LINES FOR THIS IRRIGATION SYSTEM IF A PROPERTY IS PRESENTLY BEING IRRIGATED, HOWEVER, IF MAIN LINE IS NEEDED TO EXTEND THROUGH THE PROPERTY, THAT FUNCTION WILL STILL BE REQUIRED. (SEE NOTE 26 BELOW). FOR THE PURPOSE OF BIDDING, CONTRACTOR IS TO PROVIDE FOR IRRIGATION IN ALL INDICATED AREAS SHOWN ON PLAN. PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR SHALL NOTE THE PRIVATELY IRRIGATED AREAS THAT HAVE NOT BEEN ACCOUNTED FOR ON PLAN AND CONTACT THE CITY OR THE CITY'S REPRESENTATIVE TO ARRANGE FOR A CREDIT TO THE OWNER FOR ELIMINATION OF THESE AREAS FROM THE SCOPE OF WORK. CONTRACTOR SHALL ALSO VERIFY THAT THE PROPERTIES INDICATED AS BEING IRRIGATED DO IN FACT HAVE OPERATING SYSTEMS IN PLACE. IF AN INDICATED PROPERTY DOES NOT HAVE A WORKING SYSTEM, CONTACT THE CITY OR THE CITY'S REPRESENTATIVE TO ARRANGE FOR ADDING THESE AREAS TO THE WORK SCOPE.
- INSTALL THE CITY OF ROCKFORD MAIN LINE IRRIGATION PIPING AND WIRES AS NECESSARY THROUGH ALL PRIVATELY IRRIGATED AREAS WITHIN THE RIGHT-OF-WAY TO REACH NEEDED AREAS SHOWN ON PLAN. SHOULD PRIVATE IRRIGATION SYSTEMS BE DAMAGED DURING MAIN LINE INSTALLATION, THE CONTRACTOR WILL BE REQUIRED TO REPAIR ANY DAMAGES TO THESE SYSTEMS THAT WAS CAUSED BY THE INSTALLATION OF THE MAINLINE. PRIOR TO INSTALLATION OPERATIONS, CONTACT THE CITY OF THE CITY'S REPRESENTATIVES TO REPORT ANY AREAS WHERE SYSTEMS COULD POTENTIALLY BE DAMAGED AND THE PROPOSED SCHEDULE OF WORK IN THOSE AREAS, SO THAT THE OWNERS OF THE SYSTEMS IN QUESTION MAY BE CONTACTED AND NOTIFIED OF THE WORK.
- CONTRACTOR SHALL BE AWARE THAT THERE IS FIBER OPTIC CABLE, (FOR STOP LIGHT OPERATION), THAT RUNS ALONG THE BACK OF THE CURB THROUGH MUCH OF THE AREA OF THIS PROJECT. (THIS CABLE IS NOT INDICATED ON PLANS). EXTREME CARE TO AVOID DISRUPTION OF THIS CABLE IS REQUIRED. CONTRACTOR TO AVOID USE OF MACHINERY AROUND THIS CABLE, CAREFULLY HAND DIG TO VERIFY LOCATION OF THIS CABLE WHENEVER IN PROXIMITY OF THE CABLE, AND HAND DIG FOR INSTALLATION OF ANY EQUIPMENT IF CLOSE TO CABLE. REPAIR OF ANY DAMAGE TO THIS CABLE OF OTHER SITE ITEMS CAUSED BY THE CONTRACTOR, (OR HIS REPRESENTATIVES), WILL BE THE CONTRACTOR'S RESPONSIBILITY.



2 IRRIGATION PLUMBING SCHEMATIC
NO SCALE



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IRRIGATION NOTES & DETAILS
City of Rockford
Harrison Avenue Reconstruction
ALPINE TO MULFORD RDS.
ROCKFORD, ILLINOIS

SHEET
IR-1
PRCLJ 0509-A
DATE 2/09