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Schedule (Appendix G)									
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<u>Common Name</u>	<u>Key #</u>	<u>Width</u>	<u>Size</u>	<u>Notes</u>					
Washington Hawthorn	45AS	20′	1-1/2″ B&B						
Common Hackberry	3457DA	40′	2-1/2″ B&B						
Blue Point Juniper	2568A	3′	6'-0" ht						
Total Trees 13 - 100%									
Blue Star Juniper	A	3′	5 Gal	Cont.					
Blue Chip Juniper	2568A	4′	5 Gal	Cont					
Goldflame Spirea	SA	3'-4'	5 Gal	Cont.					
Manhattan Euonymus	SA	5′	5 Gal	Cont.					
Compact Holly Grape	4S	4′	5 Gal	Cont.					
58% signature shrubs									
Blue Avena Grass	1235D	Grass	1 gal	Cont.					
Feather Reed Grass	A	Grass	1 Gal	Cont.					
Stella D'Oro Daylily	D	Flower	1 Gal	Cont.					

	ATE	FOR
TDG / ARCHITECTURE	TDG Architecture, Inc. 201 East Las Animas Street, Suite 113	Colorado Springs, CO 80903 719.623.5641 (Phone) 719.623.5643 (Fax)
EAST LAS ANIMAS LLC	BEE 123 and 127 E. LAS ANIMAS STREET BEE FBZ MINOR IMPROVEMENT PLAN AND CONDITIONAL USE	COLORADO SPRINGS, CO
DATE: DRAWN CHECKE PROJEC	10/15/ BY: p D BY: T NO: SHEET 1 4 of 5	24 jm TDG 24116 NO: - 1

FBZN-24-0012





IRRIGATION PLAN



SCALE: 1"=10'-0"



IRRIGATION LEGEND

- ----- Mainline pipe. 1" Schedule 40 PVC. See Irrigation Note G for depth. ——— Lateral pipe. 1" Class 200 PVC. See Irrigation Note G for depth. Sleeving. Class 200 PVC pipe. Size 3.0" for water pipe, Sleeve electric and all water pipes separately for maintenance. Joints under concrete should be minimized. See Irrigation Note G for depth.
- 2 Zone ID. See table for irrigation schedule.
- Hunter PGV-101G-x Electric Valve with flow-control. (Size 1") Install Hunter Pressure Regulator on valve to supply 35-40 PSI at rotary nozzles
- Hunter ACZ-075-25 Drip Zone Control Valve, Filter & Pressure egulating Kit (or approved equivalent.)
- Polyethylene distribution pipe. 1/2" diameter. Use Rainbird XB-10PC emitters--2 per shrub. Route according to plant material. Bury under turf, stake under mulch. See Irrigation Note G for depth.
- ∽ Flush Cap--Rainbird 700-CF-21 or approved equivalent. Hunter PROS-04 Spray Body (4" pop) with Nozzles as shown. Install nozzles of specified type with arc appropriate to plan: partial-circle through full circle.
- (C) Hunter MPR Corner Nozzle 0.34 GPM Hunter MPR 1000 Nozzle Radius 9.5—12' half arc 0.35 GPM
- 🖂 Backflow Prevention Device-Wilkins-Zurn 420XL 1" Pressure Vacuum Breaker (C) Irrigation Controller. Hunter PRO-C PC-4. 4 Station Controller
- (k_F) ET/Rain/Freeze Sensor--Hunter SOLAR-SYNC Sensor.

IRRIGATION SCHEDULE

- #	Berninter	Flow	Precipitation	Daily	0				
Zone #	Description	Rate	Rate	Runtime	Spring	Fall			
		(GPM)	(Inches/Hour)	(Minutes/Day)	(Min/Day)	(Min/Day)			
1	MPR Rotator	2.1	0.47	30	26	24			
2	Drip	< 4		30	26	24			
3	MP Rotator	2.1	0.42	34	29	27			
4	Drip	< 4		30	26	24			
E.T. inches	0.2	Seaso	nal Adjustment	100%	85%	80%			
Efficiency	<mark>8</mark> 4%								
Note: The runtimes shown in schedule are based on this E.T. and efficiency.									
Zone runtimes should be adjusted accordingly for seasonal changes and zone exposure									

Rain sensor set for automatic shut off at 1/2" of rainfall.

October 2024 Existing System Update Requirements

Install drip emitters to new shrubs.

New tree in lawn area will receive sufficient irrigation from spray heads, drip not required.

Install a PVB per this plan at the point of connection on 123 E. Las Animas property. (There is no visible backflow prevention device.)

Both properties require a rain sensor to meet code. The specified rain sensors are wireless and can be mounted on the south side of the buildings in clear view of the skv.

Existing spray zones have traditional spray nozzles instead of those specified in this plan. (Not all spray heads could be located at the time of this plan.) The turf quality is good; existing nozzles are providing adequate coverage and do not need to be changed. As-built should reflect the installed nozzles and locations.

IRRIGATION COMPONENTS

Water supply Each building/lot has an individual point of connection (POC) provided at rear/outside corner of buildings. Domestic water supply is protected by a separate pressure vacuum breaker (PVB) on each building.

Design is based on building service sourced by a 3/4" tap. Pressure is expected at 60 psi static. Design requires 40 psi dynamic pressure at 4 GPM at output of PVB..

Contractor is responsible for connection to water supply within the building. Contractor must test to verify that adequate pressure and flows are available at the PVB before beginning work. This design requires flows of 4 GPM with 40 PSI dynamic pressure. Notify owner's representative and Tapis Associates, Inc before starting outdoor installation if this pressure and flow are not available.

Backflow Protection Device

This design specifies Pressure Vacuum Breaker with freeze-resistant design to be installed on outside of building. This device must be located 12" above the highest outlet and positioned for convenient maintenance access. Contractor to provide and install locking metal enclosure for PVB. The specified PVB is freeze-*resistent*, however, this **device must be properly winterized** to prevent freeze damage. Recommended location on the west side of 123 E Las Animas and the east side of 127 Las Animas near the rear of the building or some other vandal-resistant location.

Irrigation Controller

System to be controlled by a Hunter PRO-C controller. Controller to be wall-mounted outside near Backflow in a locking metal enclosure. Contractor responsible for installation of enclosure, controller and electrical power to enclosure. If changes must be made, a ll electrical wiring must be installed in accordance with local codes in approved conduit by a licensed electrician.

Contractor to provide a Hunter Solar Sync with appropriate mounting hardware. Mount sensor in a location approved by owner's rep

and in full compliance with manufacturer specification.

Layout Irrigation heads positioned in scale. Mainline & lateral layout shown diagrammatically. This design intentionally minimized mainline length. Placement of equipment may not be possible as indicated. Consult Owner's Representative prior to making field changes.

Install drain with 1 cu. ft. sump at low points of mainline. Drain locations to be shown on as-built plans.

Final Adjustment

Minor adjustments may be necessary to optimize coverage and manage overspray. These adjustments will be reflected on the as-built plans provided by contractor.

Verify that existing meter, and interconnections are fully functional and are in full compliance with current state and local codes and ordinances. Correct as necessary.

Contractor to meet or exceed all applicable code specifications for water connections, electrical connections and for irrigation systems.

SCOPE OF WORK

- Scope of work and materials to be provided and installed by Irrigation System Contractor (Contractor) includes, but is not limited to, the following: A. Procurement and installation of all equipment required per the drawings, equipment schedule, and specifications, including any incidental equipment-whether indicated or not-which is necessary to provide a complete and operable irrigation system from the water source. B. Coordination and/or installation of all subsurface sleeves as indicated on the drawing. Install irrigation sleeves and stamp location into concrete as per
- plans and specifications. C. Testing for static water pressure and adequate flows at point of connection and prior to beginning work downstream of point of connection (POC). Inadequate pressure or flow shall be brought to the attention of the Owner's Representative and deficiencies shall be corrected *prior* to beginning of work downstream of POC. The Contractor is required to provide optimum coverage of irrigated areas as intended by the design-any additional equipment and labor necessitated by a failure to test and verify adequate pressure and flow is the responsibility of the Contractor. D. Contact Tapis Associates, Inc (719.593.1540) to schedule all inspections. Provide a minimum of 7 days notice to schedule the following inspections:
- Mainline layout and pressure test. Provide (open trench) visibility to valves, joints and equipment. Flag laterals and head locations. Final acceptance inspection as detailed below.
- E. Procurement and installation of all controllers, cabinets, pedestal mountings, concrete pads, and any controller-related equipment as may be required per the drawings and specifications. Contractor is responsible for making all low-voltage wiring connections from controller(s) to remote control valves and for correct sequencing of all valve operation as indicated in the control valve zone schedule.
- Activation of all irrigation systems and adjustment of all flow controls and nozzles for optimum performance and coverage as intended by design. Overspray onto pavement must be minimized. Contractor is responsible for all adjustment to nozzles, risers, flow controls, etc. prior to request for inspection. All zones shall be programmed and operated automatically via controllers for a period of not less than a complete weekly cycle prior to spection by the Owner's Representative
- G. Demonstrate operation of system in an automatic mode in the presence of the Tapis Associates and the Owner's Representative. Acceptance for substantial completion may be given by the Owner's Representative on a "per tap" or "per controller" basis. Final acceptance for work and commencement of warranties shall be given upon completion, inspection, and acceptance of all work required per the drawings, specifications, and contract documents.
- H. Provide Warranty and seasonal maintenance as specified.
- Contractor will maintain a safe jobsite at all times. Trash and debris is to be removed daily. Complete cleanup of all dirt, unused materials, and other debris shall be performed by the Contractor prior to Owner's inspection for final acceptance. Pavement within the work areas shall be thoroughly swept and power-washed as necessary to remove dirt and debris. All road patches shall be complete, flags removed, and fine-tuning adjustments made prior to inspection for final acceptance.
- J. As-built reproducible record drawings, written warranties, seasonal maintenance instructions, and spare equipment shall be provided by the Contractor at inspection for final acceptance. Submittals shall be made in accordance with the specifications. Failure to make all project close-out submittals at the required time in the required format may result in the delay of final acceptance and release of applicable retainages by the Owner.
- K. Contractor to coordinate all work with general contractors, other subcontractors, site work and site conditions. Contractor to notify the Owner's Representative of any conflicts and resolve conflicts prior to proceeding with work.
- L. Upon entering into agreement for this work, progress towards final acceptance will be steady and without unreasonable delay or interruption.

IRRIGATION NOTES

FINISHING

- A. Contractor is responsible for providing a system which meets all local and national codes and ordinances.
- B. Contractor shall be responsible for scheduling and coordination of all system inspections with Owner's Representative, utilities provider and local inspectors. C. Contractor shall be responsible for the safety of those associated with the work, pedestrians and the general public throughout the duration of the
- contract. **D.** Locate all existing underground utilities prior to trenching or excavating. (Contact Utility Notification Center of Colorado 1.800.922.1987)
- E. Plans for mainline and laterals are diagrammatic; precise placement of equipment may not be possible as indicated. Head positions are shown in scale. Consult Owner's Representative prior to making field changes. Position spray heads 4"-6" from sidewalks and edges. . All installations shall be made in strict accordance with the drawings, specifications and documents, as well as, applicable building codes, ordinances
- and manufacturers' specifications. In the event of conflict between requirements, the most stringent requirements must be met. G. Piping and Sleeves--Depth
- 1. Mainline piping shall be installed at a depth of 18 inches and not within 12 inches of other utilities or irrigation pipes. This depth is measured from the top of the pipe to finish grade. Install two extra wires from the controller along the mainline in each direction from the controller for troubleshooting or future additions.
- 2. Lateral pipes must be buried at a minimum depth of 14 inches 3. Drip Laterals must be buried at a minimum depth of 6" in turf areas.

H. All disturbed areas shall be fine graded and finished as noted on the Plans.

standards specified within the ALCC Specifications Handbook, latest edition.

- 4. Place all drip tubing and inline emitter tubing under mulch. Stake per manufacturer's recommendation.
- 5. Sleeves shall be sized as specified and buried at least 6" below paving. Sleeves must extend 6" to 8" beyond the edge of concrete or asphalt. Contractor is responsible for verifying all sleeve locations prior to construction and installing any missing sleeves as necessary. 6. Concrete shall be stamped with "S" above each end of each sleeve.
- 7. Wiring and piping shall be routed through separate sleeves. Pipes shall be sleeved separately to facilitate maintenance.
- 8. Contractor to install #14 UF irrigation wire between controller and electric valves. Two spare wires to be provided to all valves.

- Proper Irrigation system operation also requires appropriate landscape maintenance including but not limited to landscape weeding, mowing, seeding, fertilization, wood mulch, and rock cover replacement, pruning, and plant material replacement (including annual beds). All maintenance should be in accordance with standards specified in the <u>ALCC Specifications Handbook</u>, latest edition. K. Owner should contact the Landscape Maintenance Contractor, Landscape Construction Contractor, or Landscape Architect regarding any questions

I. The Property Owner and any future Owners are responsible for the proper landscape and irrigation maintenance of this site and any rights-of-way

between the curb and property lines of the site. Maintenance of this site includes, but is not limited to: irrigation inspections and adjustments, seasonal

irrigation maintenance and verification that all landscape areas are not over-watered or under-watered. All maintenance should be in accordance with

irrigation system shut down and start up, irrigation leak repair, irrigation head replacement, rain sensor adjustment, irrigation controller adjustments, drip

relation to the landscape or irrigation maintenance of this site.

Disclaimer. Due to varying weather conditions, operation and maintenance techniques, Tapis Associates, Inc. shall not be held responsible for the quality, quantity or survival of any and all landscape plantings. Schedules provided are based on general guidelines for the plant stock. Run times must be adjusted for plant establishment, seasonality, zone exposures and current weather conditions. Under no conditions will Tapis Associates, Inc. control or be responsible for construction techniques, methods, schedules, means, procedures or site safety

during the construction process. Tapis Associates, Inc is not responsible for the errors or omissions of any other party, nor for any other party's failure to complete their work or services in accordance with the design specifications and documents.













