ORCHARD CIRCLE

AFTER COMPLETION OF CLEARING AND DEMOLITION WORK, CONTRACTOR SHALL GRADE PROJECT SITE TO DRAIN. INTENT OF GRADING SCHEME IS TO CREATE RIDGE LINES (HIGH POINTS) AND GRADE TO EXISTING DRAIN INLETS (LOW POINTS). GRAADING SHALL SMOOTH OUT UNEVEN AREAS, CREATING A SMOOTH SLOPE SO PONDING OF WATER DOES NOT OCCUR. FINISH GRADING SHALL TRANSITION AND MATCH EXISTING GRADES JUST OUTSIDE OF DRIP LINES OF TREES.

1. ALL GRADING NECESSARY FOR THE INSTALLATION OF CONCRETE CURB AND GUTTERS POSITIONED UNDER THE DRIP LINE OF EXISTING TREES SHALL BE ACCOMPLISHED BY HAND. MACHINE GRADING WILL NOT OCCUR WITHIN THE DRIP LINE.

2. ALL GRADING OTHER THAN THAT SPECIFIED ABOVE SHALL BE ACCOMPLISHED BY MACHINE GRADING.

C3.1

PARTIAL GRADING PLAN

AFTER COMPLETION OF CLEARING AND DEMOLITION WORK, CONTRACTOR SHALL GRADE PROJECT SITE TO DRAIN. INTENT OF GRADING SCHEME IS TO CREATE RIDGE LINES (HIGH POINTS) AND GRADE TO EXISTING DRAIN INLETS (LOW POINTS). GRAADING SHALL SMOOTH OUT UNEVEN AREAS, CREATING A SMOOTH SLOPE SO PONDING OF WATER DOES NOT OCCUR. FINISH GRADING SHALL TRANSITION AND MATCH EXISTING GRADES JUST OUTSIDE OF DRIP LINES OF TREES.

1. ALL GRADING NECESSARY FOR THE INSTALLATION OF CONCRETE CURB AND GUTTERS POSITIONED UNDER THE DRIP LINE OF EXISTING TREES SHALL BE ACCOMPLISHED BY HAND. MACHINE GRADING WILL NOT OCCUR WITHIN THE DRIP LINE.

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C3.1

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ORCHARD CIRCLE

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1. ALL GRADING NECESSARY FOR THE INSTALLATION OF CONCRETE CURB AND GUTTERS POSITIONED UNDER THE DRIP LINE OF EXISTING TREES SHALL BE ACCOMPLISHED BY HAND. MACHINE GRADING WILL NOT BE ALLOWED WITHIN THE DRIP LINE.

2. CRUSHED CONCRETE USE OVER WIDTH OF POCKET MISSION TO 2 1/2" SELF-ADHESIVE FLEXIBLE CURB GAPS SHALL BEしっしowed WITH 1/4" RUBBER SPACING FOR CURB GAPS AND 1/4" SPACING FOR GUTTER GAPS.

3. GUTTERS SHALL BE INTERVALS OF 30' APART WITH BEGINNING OF GUTTERS BEING 12" FROM CURB AND ENDING 3'-6" FROM CURB TO ALLOW FOR CURB AND GUTTER INSTALLATION.
NOTE:
VERIFY LOCATION OF EXISTING VALVES IN THE FIELD PRIOR TO CONSTRUCTION.
**Irrigation Schedule**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Valve</strong></td>
<td>Battery Operated Valve, Globe Configuration, 1&quot; brass, flow rate 15 GPM, 150 mesh stainless steel screen, DC/Latching node per legend or approved equal.</td>
</tr>
<tr>
<td><strong>Filter Assembly</strong></td>
<td>Hunter NODE-100, install one per valve.</td>
</tr>
<tr>
<td><strong>Control System</strong></td>
<td>Single Station Controller, Outdoor, Battery Powered</td>
</tr>
<tr>
<td><strong>Controller</strong></td>
<td>Pressure Regulation: 25psi. Flow Range: 0.5 GPM to 60 GPM. 120 mesh stainless steel screen. Install DC-Latching node per legend or approved equal.</td>
</tr>
<tr>
<td><strong>Filter System</strong></td>
<td>Pressure Regulation: 40psi. Flow Range: 20 GPM to 60 GPM. 120 mesh stainless steel screen. Install DC-Latching node per legend or approved equal.</td>
</tr>
<tr>
<td><strong>Drip Control Zone Kit</strong></td>
<td>1-1/2&quot; ICV Globe Valve with 1&quot; HY100 Drip Control Zone Kit. 1-1/2&quot; ICV Globe Valve with 1&quot; HY100 Drip Control Zone Kit.</td>
</tr>
<tr>
<td><strong>Check Valve</strong></td>
<td>0.4GPH emitters at 18.0&quot; O.C. Dripline laterals fitted with a 1&quot; Dripline Flush Valve cap in compression fitting coupler.</td>
</tr>
<tr>
<td><strong>Dripline</strong></td>
<td>Hunter PLD-04-18 (18&quot;)</td>
</tr>
</tbody>
</table>

**Temporary Irrigation**

**Dim.**

- ORCHARD DRIVE
- NORTH
- 07/13/2017
- 07/31/2018

- 95% CD SUBMITTAL
- 100% CD SUBMITTAL
- RENEWAL DATE
- ISSUE DATE
- PROJECT NO.
- UCD PROJECT NUMBER
- SHEET NUMBER
- SHEET NAME
- PROJECT INFORMATION

**Existing Trees**

- To be irrigated by on-surface drip lines to be installed on grade as shown per detail. Stake drip lines every 6' and cover with 4" shredded mulch.

**Note:** Verify location of existing valves in the field prior to construction.
EXISTING TREES TO BE IRRIGATED. UTILIZE EXISTING OVERHEAD SPRAY HEADS AND CONNECTED TO NEW BATTERY OPERATED VALVE #c1 AT OLD VALVE LOCATION HERE. CAP ALL SPRAY HEADS OUTSIDE OF TREE CANOPY SHADED AREA, TYPICAL.

NOTE: VERIFY LOCATION OF EXISTING VALVES IN THE FIELD PRIOR TO CONSTRUCTION.

CONTRACTOR TO COUPLE DOWN FROM EXISTING 3" MAINLINE TO 2" LOCK COUPLERS WITH NEW SCHEDULE 40 MAINLINE SIZE AS REQUIRED, TYPICAL.

EXISTING 3" MAINLINE TO EXISTING 3" BRASS QUICK COUPLERS WITH NEW SCHEDULE 40 MAINLINE SIZE AS REQUIRED, TYPICAL.

EXISTING TREES TO BE IRRIGATED, UTILIZE EXISTING OVERHEAD SPRAY HEADS AND CONNECTED TO NEW BATTERY OPERATED VALVE #c2 AT OLD VALVE LOCATION HERE. CAP ALL SPRAY HEADS OUTSIDE OF TREE CANOPY SHADED AREA, TYPICAL.

EXISTING TREES TO BE IRRIGATED, UTILIZE EXISTING OVERHEAD SPRAY HEADS AND CONNECTED TO NEW BATTERY OPERATED VALVE #c3 AT OLD VALVE LOCATION HERE. CAP ALL SPRAY HEADS OUTSIDE OF TREE CANOPY SHADED AREA, TYPICAL.

EXISTING TREES TO BE IRRIGATED, UTILIZE EXISTING OVERHEAD SPRAY HEADS AND CONNECTED TO NEW BATTERY OPERATED VALVE #c4 AT OLD VALVE LOCATION HERE. CAP ALL SPRAY HEADS OUTSIDE OF TREE CANOPY SHADED AREA, TYPICAL.

EXISTING TREES TO BE IRRIGATED, UTILIZE EXISTING OVERHEAD SPRAY HEADS AND CONNECTED TO NEW BATTERY OPERATED VALVE #c5 AT OLD VALVE LOCATION HERE. CAP ALL SPRAY HEADS OUTSIDE OF TREE CANOPY SHADED AREA, TYPICAL.
存在树木需被灌溉。现有树木将被灌溉，如下所示。每棵树的冠幅内将安装滴灌管，每8英尺安装一条，覆盖4英寸的碎砍。用作缓冲的覆盖物。

灌溉系统包括以下组件：
- PVC Class 200 SDR 21软管，适用于1-1/4"和2"的配管。
- 1"和1/2"快接阀门，采用耐腐蚀材料制成。
- 铜制闭式控制阀，采用不锈钢弹簧，带有锁紧的热塑橡胶盖。
- 猛禽NODE-100单站控制器，安装于户外，电池供电。
- 猛禽ICV-G和ICZ-151-40滴灌控制套件，采用In-Line压力补偿景观滴灌软管，带有集成的过滤系统。
- 猛禽PCZ-101-25和PCZ-101-25滴灌控制阀。1"PGV球阀，带有1"HY100过滤器。
- 猛禽ARV050和RDV050滴灌控制阀。1"PGV球阀采用1"HY100过滤器。
- 雨鸟44-LRC和RDV050滴灌控制阀。1"PGV球阀采用1"HY100过滤器。

请注意，所有配管尺寸均应与主配管直径一致。所有配管尺寸为3/4"。根据图例所需在每个阀上安装DC-Latching节点。

雇主应根据图例或等效产品安装洒水控制系统。所有配管均应安装在地面，间距为18.0"，支架位于洒水软管的两侧，防止水锤或堵塞。

灌溉计划包括以下内容：
- PVC Class 200 SDR 21软管，适用于1-1/4"和2"的配管。
- 1"和1/2"快接阀门，采用耐腐蚀材料制成。
- 铜制闭式控制阀，采用不锈钢弹簧，带有锁紧的热塑橡胶盖。
- 猛禽NODE-100单站控制器，安装于户外，电池供电。
- 猛禽ICV-G和ICZ-151-40滴灌控制套件，采用In-Line压力补偿景观滴灌软管，带有集成的过滤系统。
- 猛禽PCZ-101-25和PCZ-101-25滴灌控制阀。1"PGV球阀，带有1"HY100过滤器。
- 雨鸟44-LRC和RDV050滴灌控制阀。1"PGV球阀采用1"HY100过滤器。
- 雨鸟ARV050和RDV050滴灌控制阀。1"PGV球阀采用1"HY100过滤器。

雇主应根据图例或等效产品安装洒水控制系统。所有配管尺寸均应与主配管直径一致。所有配管尺寸为3/4"。根据图例所需在每个阀上安装DC-Latching节点。所有配管均应安装在地面，间距为18.0"，支架位于洒水软管的两侧，防止水锤或堵塞。
**IRRIGATION SYSTEM**

**SUBSURFACE IRRIGATION NOTES**

1. **For all existing tree canopy areas noted on plan to have rainbird sps on subsurface irrigation**, contractor shall position manufacturers specifications and details, and these notes shall be followed. Contractor shall verify existing valve locations shown on plans. Any revisions necessary shall be noted. Contractor shall remove all existing valves which are not being used and dispose of off site or return to owner.

2. **The plan is diagrammatic and does not show exact location of rainbird sps on subsurface irrigation. The plan shows the general locations of the underground systems. For specific details, consult manufacturers or submit punch list.**

3. **All subsurface irrigation products and specifications are available through the rainbird corporation.**

4. **All subsurface irrigation products and specifications are available through the rainbird corporation.**

5. **All rainbird sps on subsurface irrigation shall be set at 1" above finished grade in soil areas.**

6. **Contractor must verify the existing water pressure shown on the drawings and the actual pressure measured at the point of connection.**

7. **In the event pressure differences are not reported prior to starting the construction, the contractor shall assume full responsibility for any additional necessary.**

8. **Contractor shall provide owner with an accurate as-built set of drawings of the new irrigation system upon final acceptance of the work. As-built drawings shall be delineated as a PDF file to be supplied by the landscape architect.**

9. **Prior to final inspection of the irrigation system, contractors shall coordinate with the local fire department to obtain a permit. The contractor shall verify the existing water pressure shown on the drawings and the actual pressure measured at the point of connection.**

10. **In the event pressure differences are not reported prior to starting the construction, the contractor shall assume full responsibility for any additional necessary.**

11. **Contractor shall observe caution around the existing oak trees. The following criteria shall be met during construction:**

12. **A. During construction, no storage of materials, parking of cars, job shacks, etc. shall be placed beneath the sprinkler of the trees.**

13. **B. No mechanical trenching for irrigation shall be done within the root zone area of the existing oak trees. Any trenching necessary within this area shall be done with hand tools. If the root larger than 1" are encountered, they shall be avoided.**

14. **C. For Arborist if use, shall be paid for by the owner, and is not included in this contract.**

15. **Remove all existing valves which are not being used and dispose of off site or return to owner.**

16. **Remove overflow spray heads, cut, and cap off all lateral which are not being used, that the heads downstream are not affected by cutoffs. Contractor shall verify existing valve locations shown on plan in the field to the installation of new valves.**

17. **Valves, red psi valve on dark 3/4" to 1/2" pipe, with not over 10% wood, free of salt, foreign materials such as clods, coarse objects, sticks, weed or wood chips, and other debris considered undesirable. The psi shall not exceed 0.5. Submit samples to landscape architect for approval prior to purchase and delivery. Contractor and supplier shall provide data valve meets local fire department standards. Valves shall be submitted to landscape architect. The valve shall not be non-repairable. All existing tree canopy areas to receive a four inch 45 layer of mulch.**

18. **Top Dress. All existing tree canopy areas shall receive a four inch (4) inch of red fire walk on ground material, matched indicated area to be installed.**
**Project Information:**

- **UCD Project Number:** 2506220

**Numerical Data:****

<table>
<thead>
<tr>
<th>Nominal Flow (GPH)</th>
<th>12&quot; Spacing</th>
<th>18&quot; Spacing</th>
<th>24&quot; Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-7-17</td>
<td>95% CD SUBMITTAL</td>
<td>100% CD SUBMITTAL</td>
<td></td>
</tr>
<tr>
<td>7-13-17</td>
<td>100% CD SUBMITTAL</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:**

1. PLACE TIE-DOWN STAKES EVERY THREE FEET IN SAND, FOUR FEET IN LOAM, AND FIVE FEET IN CLAY.
2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.
3. INSET A 4-6" DRIP MANIFOLD BURIAL DEPTH

**Section:**

- **XFS ON-SURFACE DRIPLINE CONNECTION**

**Details:**

- **EASY FIT COMPRESSION TEE:** RAIN BIRD MDDFTEE
- **ON-SURFACE DRIPLINE:** RAIN BIRD XF SERIES DRIPLINE
- **POTABLE:** XFCV DRIPLINE
- **INLINE DRIP EMITTER OUTLET**
- **TIE DOWN STAKE:** RAIN BIRD TDS-050 WITH BEND (TYPICAL)
- **MULCH FINISH GRADE**

**XFS SUB-SURFACE DRIPLINE CENTER FEED LAYOUT**

**Notes:**

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**Section:**

- **XFS ON-SURFACE DRIPLINE FLUSH POINT**

- **XFS ON-SURFACE OPERATION INDICATOR**

**Section:**

- **XFS SUB-SURFACE DRIPLINE IRREGULAR SHAPED LAYOUT**

**Notes:**

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2. AT FITTINGS WHERE THERE IS A CHANGE OF DIRECTION SUCH AS TEES OR ELBOWS, USE TIE-DOWN STAKES ON EACH LEG OF THE CHANGE OF DIRECTION.

**Section:**

- **XFS ON-SURFACE DRIPLINE CONNECTION**