Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	32	10.3/11.3	117	144

12-22-11
LICENSED LANDSCAPE ARCHITECT DATE

DECEMBER 22, 2011
PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT BRIAN D. FIRTH #2752 EXP. 06-13 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220
CHICO, CALIFORNIA 95928

CITY OF CHICO
CAPITAL PROJECT SERVICES
411 MAIN STREET
CHICO, CA 95927

IRRIGATION NOTES

1. THIS SYSTEM IS DESIGNED FOR A MAXIMUM DEMAND OF 40 GPM. AVERAGE STATIC PRESSURE IS 50 PSI AT THE POINT OF CONNECTION AND NO LESS THAN 5 PSI AT THE FARTHEST IRRIGATION EMITTER AND 30 PSI AT THE FARTHEST IRRIGATION SPRAY HEAD. CONTACT THE LANDSCAPE ARCHITECT IN THE EVENT THAT FIELD TESTED PRESSURE IS LESS THAN STATED, PRIOR TO CONSTRUCTION.
2. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH. ADJUST CLOCK AS REQUIRED TO ACHIEVE THIS GOAL AS REQUIRED BY THE TIME OF YEAR. SEE SHEET LS-2.10 FOR SEASONAL IRRIGATION SCHEDULE. ADJUST AS REQUIRED FOR PLANT ESTABLISHMENT PERIOD.
3. THIS DRAWING IS DIAGRAMMATIC. IRRIGATION COMPONENTS SHOWN BENEATH PAVING, EXISTING TREE TRUNKS, OR PLANTINGS IS FOR GRAPHIC CLARITY ONLY. PLACE ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS WITHIN THE ADJACENT PLANTER EXCEPT WHERE PIPES CROSS PAVING. PLACE PIPING TO PREVENT CONFLICT WITH SUBSEQUENT PLANTING. REFER TO PLANTING PLAN. IRRIGATION VALVES SHALL BE GROUPED TOGETHER PER DETAIL 7, SHEET LS-2.8 AND LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF TRAVELLED WAY TO ALLOW ACCESS.
4. CONTRACTOR TO PROVIDE COMPLETE 'AS-BUILT' DRAWINGS TO CITY AT COMPLETION OF PROJECT.
5. TRENCH ALL MAIN LINES TO A DEPTH OF 18", TRENCH ALL LATERAL LINES TO A DEPTH OF 12". TRENCH ALL MAIN OR LATERAL LINES PER UTILITY PLAN AND CAL TRANS STANDARDS' WHERE CROSSING UNDER PAVEMENT .
6. INSTALL SLEEVES WHERE SHOWN ON PLAN, PRIOR TO THE PLACEMENT OF PAVING. COORDINATE WITH PAVING CONTRACTOR.
7. ALL REMOTE CONTROL VALVES, QUICK COUPLER VALVES, AIR RELIEF VALVES, AND FLUSH VALVES SHALL BE INSTALLED IN PLANTER AND IN VALVE BOXES.
8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING 120 VOLT POWER TO IRRIGATION CONTROLLER. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION AND HOOK-UP OF POWER TO THE CONTROLLER.
9. SEE SHEET LS-2.9 FOR SYSTEM CAPACITY DOCUMENTATION. SEE SHEET LS-2.10 FOR WATER USE DOCUMENTATION.
10. ALL PROPRIETARY SPECIFICATIONS MAY BE SUBSTITUTED WITH EQUAL OR BETTER EQUIPMENT BY ANOTHER MANUFACTURER UPON APPROVAL BY PROJECT LANDSCAPE ARCHITECT.
11. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

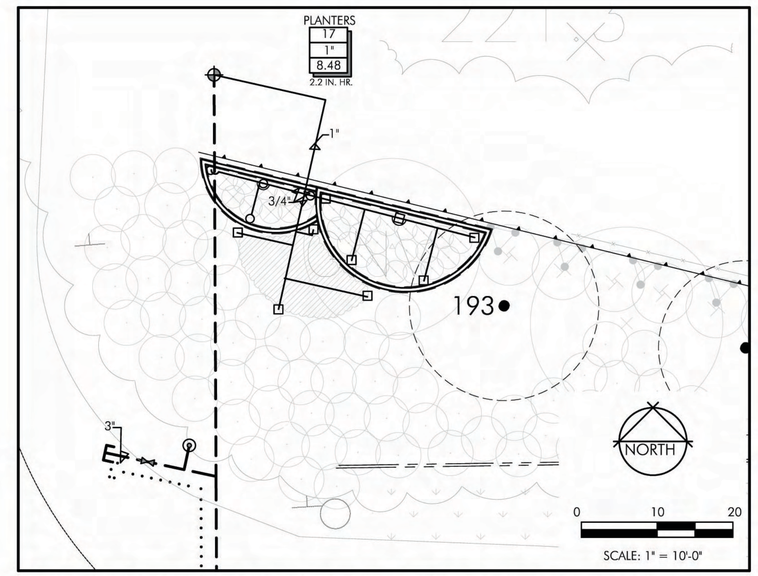
IRRIGATION LEGEND

SYM.	MFG'R	DESCRIPTION	MODEL	REMARKS	DETAILS
⊗		WATER POINT OF CONNECTION		CONNECT TO EXISTING WATER METER DOWNSTREAM OF METER. VERIFY EXACT LOCATION IN FIELD. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS. PRE-BID WALK-THROUGH WILL INCLUDE REVIEW AND DETERMINATION AS TO FINAL COURSE OF ACTION AT THIS LOCATION.	--
BFP	WILKINS	BACKFLOW PREVENTER ASSEMBLY	975 XL	REMOVE EXISTING BACKFLOW PREVENTER ASSEMBLY, ENCLOSURE AND PAD. VERIFY CONDITIONS IN FIELD. RETURN BACKFLOW PREVENTER AND ENCLOSURE TO THE CITY OF CHICO. INSTALL NEW 2" SIZE BACKFLOW PREVENTER PER DETAIL. PROVIDE AND INSTALL ENCLOSURE AND INSULATED BLANKET. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS. PRE-BID WALK-THROUGH WILL INCLUDE REVIEW AND DETERMINATION AS TO FINAL COURSE OF ACTION AT THIS LOCATION.	1/ LS-2.8
	STRONG BOX		SBBC-45AL		
C	JOHN DEERE GREEN TECH	CONTROLLER	CA1-RM5-36/ RFRZE/ LPP/ EMP18/ PED-1.8SS/ FAN-OPT/ 20RMD1/ FSF-2008	REMOVE EXISTING CONTROLLER AND ENCLOSURE AND RETURN TO CITY OF CHICO. REMOVE AND DISPOSE OF OFF SITE THE EXISTING CONCRETE PAD. RETAIN AND PROTECT ELECTRICAL POINT OF CONNECTION.NEW CONTROLLER: 48 STATIONS (15 USED) 2-WIRE DECODER CONTROLLER WITH TDI TWO WIRE DECODER INTERFACE; INSTALL IN STAINLESS STEEL TOP ENTRY ENCLOSURE WITH PRO-MAX REMOTE. INSTALL COMMUNICATION WIRE FROM CONTROLLER TO PHONE MODEM POINT OF CONNECTION (LOCATED ON THE WEST SIDE OF FOREST, APPROXIMATELY 200 FEET NORTH OF HIGHWAY 32 ON FOREST. VERIFY EXACT LOCATION IN FIELD) USING CAT 5 WIRE IN 2" CONDUIT. CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE CITY OF CHICO TO INVOLVE CITY OF CHICO IT DEPARTMENT TO OBTAIN A TELECOMMUNICATION POINT OF CONNECTION AND FOR THE CONNECTION OF THE CONTROLLERS TO THE INTERNET. CONTACT EARL KEENE, INFORMATION SYSTEMS ANALYST: 896-8400. INSTALL 2-WIRE CABLE TO DECODER LOCATIONS USING TW-CAB-14 CABLE INSTALLED IN 2" CONDUIT. INSTALL 2-WIRE DECODERS AT REMOTE CONTROL VALVE LOCATIONS. INSTALL ONE DECODER WITH EACH REMOTE CONTROL VALVE. INSTALL 2-WIRE EARTH GROUND AT LOCATIONS SHOWN, NOT TO EXCEED 600' INTERVALS. INSTALL 2-WIRE COMPONENTS PER MANUFACTURER'S SPECIFICATIONS. PROVIDE ONE (1) PROMAX HAND HELD TRANSMITTER TO OWNER AT END OF MAINTENANCE PERIOD. CONTACT JOHN DEERE GREEN TECH: 800-427-0779 FOR TECHNICAL ASSISTANCE AND CONTROLLER CERTIFICATION. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE PRE-CONSTRUCTION MEETING WITH MANUFACTURER TO REVIEW 2-WIRE INSTALLATION REQUIREMENTS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS. PRE-BID WALK-THROUGH WILL INCLUDE REVIEW AND DETERMINATION AS TO FINAL COURSE OF ACTION AT THIS LOCATION.	2/ LS-2.8 AND 6/ LS-2.9
	RAIN MASTER	2-WIRE DECODER	TWD-1		
	RAIN MASTER	2-WIRE EARTH GROUND	TW-LA-1		
	RAIN MASTER	2-WIRE DECODER CABLE	TW-CAB-14		
		2-WIRE SPLICE	TW-SPLICE-14		
FSA	JOHN DEERE GREEN TECH	FLOW SENSING ASSEMBLY/ OPEN MASTER VALVE 2"	FSF-2008	INSTALL IN CARSON 1419 VALVE BOX AS PER MANUFACTURER'S SPECIFICATIONS	3/ LS-2.8
PB	"	PULL BOX	--	INSTALL IN GRAY CARSON 1419 (OR APPROVED EQUAL) VALVE BOX.	5/ LS-2.9
⚡	RAIN MASTER	LIGHTNING ARRESTOR	TW-LA-1	INSTALL AT LOCATIONS DEPICTED ON PLANS (NOT MORE THAN 600' MAXIMUM DISTANCE). CONTRACTOR TO PROVIDE AND INSTALL 8' L X ¾" DIA., COPPER CLAD GROUND ROD PER MANUFACTURER'S SPECIFICATIONS AT EACH LOCATION.	6/ L-2.9
⊕	RAINBIRD	REMOTE CONTROL VALVE (SPRAY)	PEB	SIZE AS SHOWN. INSTALL VALVE AND DECODER WITHIN VALVE BOX, PER DETAIL. PROVIDE AND INSTALL GROUNDING FOR TWO-WIRE DECODERS PER MANUFACTURER'S SPECIFICATIONS (1 FOR EVERY 600 FEET).	2/ LS-10 & 7/ LS-2.8
	RAINMASTER	2 WIRE DECODERS	TW-D-1		
⊕ Y		REMOTE CONTROL VALVE (DRIP)			
	RAINBIRD	FOR FLOWS OVER 20 GPM: MEDIUM FLOW COMMERCIAL CONTROL ZONE KIT WITH BASKET FILTER	XCZ-150-COM	INSTALL PER MANUFACTURER'S SPECIFICATIONS. SIZE PER FLOW (SEE DESCRIPTION COLUMN). INSTALL VALVE AND DECODER WITHIN VALVE BOX, PER DETAIL. PROVIDE AND INSTALL GROUNDING FOR TWO-WIRE DECODERS PER MANUFACTURER'S SPECIFICATIONS (1 FOR EVERY 600 FEET).	4 & 7/ LS-2.8
	RAINBIRD	FOR FLOWS 5-20 GPM: MEDIUM FLOW COMMERCIAL CONTROL ZONE KIT WITH BASKET FILTER	XCZ-100-B-COM		
	RAINBIRD	FOR FLOWS LESS THAN 5 GPM: MEDIUM FLOW COMMERCIAL CONTROL ZONE KIT WITH BASKET FILTER	XCZ-075-PRF-BF		
⋈	NIBCO	ISOLATION VALVE	TI-7	SIZE PER PIPE. INSTALL WITHIN VALVE BOX, PER DETAIL.	5 & 7/ LS-2.8
◎	RAINBIRD	QUICK COUPLER VALVE	44-LRC	INSTALL WITHIN VALVE BOX PER DETAIL.	6 & 7/ LS-2.8
— —		PRESSURE MAINLINE		PVC SCHEDULE 40	3 & 4/ LS-2.9
——		NON-PRESSURE LATERAL PIPE		PVC SCHEDULE 40. SEE PVC SCHEDULE 40 PIPE SIZE CHART, THIS SHEET.	3 & 4/ LS-2.9
• • • •		CONDUIT		GRAY PVC SCH. 40	3 & 4/ LS-2.9
— · —		SLEEVING		PVC SCHEDULE 40. PER PLANS BY MARK THOMAS COMPANY	3 & 4/ LS-2.9
		SCH. 40 PVC LATERAL SWING PIPE EMITTER (SEE LEGEND, BELOW)	SPX-FLEX 100	½" IPS PVC FLEX HOSE. LOW DENSITY POLYETHYLENE MATERIAL. TUBING SHALL HAVE A WALL THICKNESS OF 0.098".49" INSIDE DIAMETER	1 & 2/ LS-2.9

1 — VALVE #/CONTROLLER STATION
1" — VALVE SIZE (WHERE APPLICABLE-USE FLOW PRECEDENT FOR DRIP VALVES)
8.48 — FLOW IN GALLONS PER MINUTE
2.2 — PRECIPITATION RATE

SPRINKLER LEGEND

SYMBOL	MFG'R	DESCRIPTION	MODEL	FLOW (GPM)	DETAIL
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, SHRUBS- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 4 GPH PER SHRUB BUBBLER ASSEMBLY (2 EMITTERS PER SHRUB)	1/ LS-2.8
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, VINES- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 4 GPH PER VINE BUBBLER ASSEMBLY (2 EMITTERS PER VINE)	1/ LS-2.8
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, TREES- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 8 GPH PER TREE BUBBLER ASSEMBLY (4 EMITTERS PER TREE)	2/ LS-2.8
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-8 (Q, T, H, TT, TQ, F)	.26, .35, .52, 1.05	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-10(Q, T, H, TT, TQ, F)	.39, .53, .79, 1.58	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-12 (Q, T, H, TT, TQ, F)	.65, .87, 1.3, 2.6	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-15S (EST/ SST)	.61, 1.21	1/ LS-10



CORNER ENLARGEMENT: FIR STREET AND HIGHWAY 32 WEST

HIGHWAY 32-PHASE 1
LANDSCAPE IRRIGATION PLAN
SHEET LS-2.0

STATE OF CALIFORNIA — DEPARTMENT OF TRANSPORTATION
Caltrans
CONSULTANT FUNCTIONAL SUPERVISOR: BRIAN FIRTH
CALCULATED-DESIGNED BY: B. FIRTH/ JBB
CHECKED BY: B. FIRTH
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => $DATE
TIME PLOTTED => $TIME

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	But	32	10.3/11.3	118	144

LICENSED LANDSCAPE ARCHITECT 12-22-11 DATE

DECEMBER 22, 2011
PLANS APPROVAL DATE

REGISTERED LANDSCAPE ARCHITECT BRIAN D. FIRTH #2752 SIGNATURE EXP. 06-13 DATE STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

BRIAN FIRTH LANDSCAPE ARCHITECT, INC.
627 BROADWAY, SUITE 220
CHICO, CALIFORNIA 95928

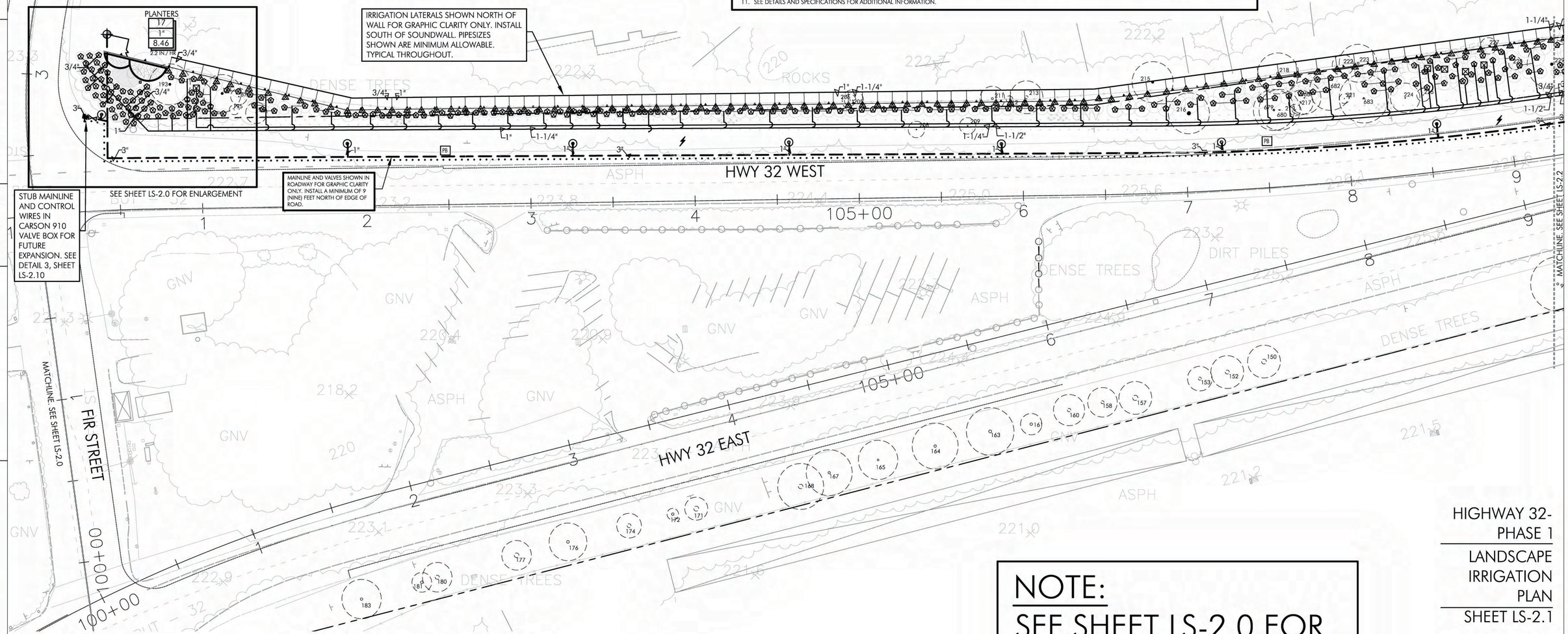
CITY OF CHICO
CAPITAL PROJECT SERVICES
411 MAIN STREET
CHICO, CA 95927

SPRINKLER LEGEND

SYMBOL	MFG'R	DESCRIPTION	MODEL	FLOW (GPM)	DETAIL
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, SHRUBS- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 4 GPH PER SHRUB BUBBLER ASSEMBLY (2 EMITTERS PER SHRUB)	1/ LS-2.8
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, VINES- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 4 GPH PER VINE BUBBLER ASSEMBLY (2 EMITTERS PER VINE)	1/ LS-2.8
	SALCO/ RAINBIRD	EMITTER/ SWINGPIPE, TREES- (SALCO PRO-SPEC EMITTERS WITH RAINBIRD SPX SERIES SWING PIPE AND SB SERIES FITTINGS)	SALCO PRO-SPEC EMITTER: SLV-PST-2 SWING PIPE: SPX-100 FITTINGS: SBE-050/ SBA-050/ SB-TEE (AS REQUIRED)	2 GPH PER EMITTER/ 8 GPH PER TREE BUBBLER ASSEMBLY (4 EMITTERS PER TREE)	2/ LS-2.8
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-8 (Q, T, H, TT, TQ, F)	.26, .35, .52, 1.05	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-10(Q, T, H, TT, TQ, F)	.39, .53, .79, 1.58	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-12 (Q, T,, H, TT, TQ, F)	.65, .87, 1.3, 2.6	1/ LS-10
	RAINBIRD	IRRIGATION HEAD	1812-SAM-PRS-15S (EST/ SST)	.61, 1.21	1/ LS-10

IRRIGATION NOTES

1. THIS SYSTEM IS DESIGNED FOR A MAXIMUM DEMAND OF 40 GPM. AVERAGE STATIC PRESSURE IS 50 PSI AT THE POINT OF CONNECTION AND NO LESS THAN 5 PSI AT THE FARTHEST IRRIGATION EMITTER AND 30 PSI AT THE FARTHEST IRRIGATION SPRAY HEAD. CONTACT THE LANDSCAPE ARCHITECT IN THE EVENT THAT FIELD TESTED PRESSURE IS LESS THAN STATED, PRIOR TO CONSTRUCTION.
2. THE INTENT OF THIS IRRIGATION SYSTEM IS TO PROVIDE THE MINIMUM AMOUNT OF WATER REQUIRED TO SUSTAIN GOOD PLANT HEALTH. ADJUST CLOCK AS REQUIRED TO ACHIEVE THIS GOAL AS REQUIRED BY THE TIME OF YEAR. SEE SHEET LS-2.10 FOR SEASONAL IRRIGATION SCHEDULE. ADJUST AS REQUIRED FOR PLANT ESTABLISHMENT PERIOD.
3. THIS DRAWING IS DIAGRAMMATIC. IRRIGATION COMPONENTS SHOWN BENEATH PAVING, EXISTING TREE TRUNKS, OR PLANTINGS IS FOR GRAPHIC CLARITY ONLY. PLACE ALL PIPING, VALVES, AND OTHER IRRIGATION COMPONENTS WITHIN THE ADJACENT PLANTER EXCEPT WHERE PIPES CROSS PAVING. PLACE PIPING TO PREVENT CONFLICT WITH SUBSEQUENT PLANTING. REFER TO PLANTING PLAN. IRRIGATION VALVES SHALL BE GROUPED TOGETHER PER DETAIL 7, SHEET LS-2.8 AND LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF TRAVELLED WAY TO ALLOW ACCESS.
4. CONTRACTOR TO PROVIDE COMPLETE 'AS-BUILT' DRAWINGS TO CITY AT COMPLETION OF PROJECT.
5. TRENCH ALL MAIN LINES TO A DEPTH OF 18", TRENCH ALL LATERAL LINES TO A DEPTH OF 12". TRENCH ALL MAIN OR LATERAL LINES PER UTILITY PLAN AND CAL TRANS STANDARDS' WHERE CROSSING UNDER PAVEMENT .
6. INSTALL SLEEVES WHERE SHOWN ON PLAN, PRIOR TO THE PLACEMENT OF PAVING. COORDINATE WITH PAVING CONTRACTOR.
7. ALL REMOTE CONTROL VALVES, QUICK COUPLER VALVES, AIR RELIEF VALVES, AND FLUSH VALVES SHALL BE INSTALLED IN PLANTER AND IN VALVE BOXES.
8. CONTRACTOR IS RESPONSIBLE FOR PROVIDING 120 VOLT POWER TO IRRIGATION CONTROLLER. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION AND HOOK-UP OF POWER TO THE CONTROLLER.
9. SEE SHEET LS-2.9 FOR SYSTEM CAPACITY DOCUMENTATION. SEE SHEET LS-2.10 FOR WATER USE DOCUMENTATION.
10. ALL PROPRIETARY SPECIFICATIONS MAY BE SUBSTITUTED WITH EQUAL OR BETTER EQUIPMENT BY ANOTHER MANUFACTURER UPON APPROVAL BY PROJECT LANDSCAPE ARCHITECT.
11. SEE DETAILS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.



NOTE:
SEE SHEET LS-2.0 FOR IRRIGATION LEGEND

HIGHWAY 32-PHASE 1

LANDSCAPE IRRIGATION PLAN

SHEET LS-2.1

NORTH

0 30 60
SCALE: 1" = 30'-0"

STATE OF CALIFORNIA – DEPARTMENT OF TRANSPORTATION
Caltrans

CONSULTANT FUNCTIONAL SUPERVISOR: BRIAN FIRTH
CALCULATED-DESIGNED BY: B. FIRTH/ JBB
CHECKED BY: B. FIRTH
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => $DATE
TIME PLOTTED => $TIME