

WATER SERVICE INFORMATION WATER METER REF. NO.: 'A'

TYPE OF SOURCE: POTABLE

SERVICE LINE SIZE **: 2"

WATER METER SIZE **: 2"

(* PER STREET and/or WATER IMPROVEMENT PLANS)

METER ADDRESS: MAHOGANY LANE

METER STATION POINT: MAHOGANY LANE

EXISTING WATER PRESSURE: 85 - 92 PSI.

MINIMUM OPERATING PRESSURE: 63 PSI.

PEAK IRRIGATION DEMAND: 13 GPM.

FRICTION LOSS CALCULATION

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-12
HEAD / BUBBLER / EMITTER ADV	25.00
LATERAL LINE & FITTINGS	1.46
PRESSURE REGULATOR	5.00
FILTER	2.50
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	2.13
PRESSURE MAIN LINE	1.37
FLOW SENSOR	0.06
PRESSURE REDUCER	1.00
BACKFLOW PREVENTER	11.30
STRAINER / FILTER	0.10
WATER METER	0.30
SERVICE LINE	0.08
ELEVATION DIFFERENCE	9.53
CONTINGENCY	3.00
MINIMUM PSI. REQ'D. (EXISTING PSI.)	62/62
RESIDUAL PSI.	-85.00
	22.18

FRICTION LOSS CALCULATION

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-14
HEAD / BUBBLER / EMITTER ADV	25.00
LATERAL LINE & FITTINGS	1.23
PRESSURE REGULATOR	5.00
FILTER	2.50
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	2.13
PRESSURE MAIN LINE	1.36
FLOW SENSOR	0.06
PRESSURE REDUCER	1.00
BACKFLOW PREVENTER	11.30
STRAINER / FILTER	0.10
WATER METER	0.30
SERVICE LINE	0.08
ELEVATION DIFFERENCE	9.96
CONTINGENCY	3.00
MINIMUM PSI. REQ'D. (EXISTING PSI.)	63/62
RESIDUAL PSI.	-85.00
	21.98

FRICTION LOSS CALCULATION

WATER METER REF. NO.:	A
VALVE STATION NO.:	A-17
HEAD / BUBBLER / EMITTER ADV	35.00
LATERAL LINE & FITTINGS	2.13
PRESSURE REGULATOR	5.00
FILTER	2.50
MIN. RCV PRV DIFFERENTIAL	
CONTROL VALVE	2.13
PRESSURE MAIN LINE	1.36
FLOW SENSOR	0.06
PRESSURE REDUCER	1.00
BACKFLOW PREVENTER	11.30
STRAINER / FILTER	0.10
WATER METER	0.30
SERVICE LINE	0.08
ELEVATION DIFFERENCE	5.20
CONTINGENCY	2.97
MINIMUM PSI. REQ'D. (EXISTING PSI.)	62/36
RESIDUAL PSI.	-85.00
	22.64

7/29/16

7/29/16

7/29/16

IRRIGATION LEGEND

UNDERGROUND TREE BUBBLERS

RAIN BIRD	RWS-B-C-1401-P w/ RWS SOCK & PURPLE GRATE	BUBBLER **	REMARKS	5-50 PSI
SYMBOL	DESCRIPTION	TORO **	EACH SYMBOL REPRESENTS 1 TREE & 2 RWS SYSTEMS	DETAIL
▽	PRE-ASSEMBLED DEEP ROOT WATERING SYSTEM	LF40-PC	INSTALL 2 RWS SYSTEMS FOR EACH TREE SYMBOL	F-53

** IMPORTANT: THE CONTRACTOR SHALL REMOVE ALL RAIN BIRD #1401 0.25 GPM BUBBLERS IN THE DEEP ROOT WATERING SYSTEMS AND REPLACE WITH TORO #LF-40PC 4.0 GPM BUBBLERS PRIOR TO INSTALLATION.

RAIN BIRD	PA-8S-PRS w/ 'ADV'	VAN	Q	H	F	30 PSI					
NOZZLE	DESCRIPTION	COLOR	RADIUS	45°/270°	GPM	90°	GPM	180°	GPM	360°	DETAIL
R13-18 SERIES	ROTARY NOZZLE	BLACK	13 - 18"	▽	0.4	▽	0.8	▽	1.6	▽	F-13
R17-24 SERIES	ROTARY NOZZLE	YELLOW	17 - 24"	▽	0.8	▽	1.5	▽	3.0	▽	F-13
R-VAN 1724	ADJ. ARC ROTARY NOZZLE	YELLOW	17 - 21"	▽	2.3						F-13

RAIN BIRD 5000 Plus series

ROTOR	MODEL NO.	RADIUS	Q	GPM	RADIUS	T	GPM	RADIUS	H	GPM	RADIUS	F	GPM	35 PSI
SHRUB	5000S+PC-SAM	18 - 24"	⊙	0.9	18 - 24"	⊙	1.2	18 - 24"	⊙	1.7	18 - 24"	⊙	3.3	F-15

RAIN BIRD 5000 Plus series

ROTOR	MODEL NO.	RADIUS	Q	GPM	RADIUS	T	GPM	RADIUS	H	GPM	RADIUS	F	GPM	35 PSI
SHRUB	5000S+PC-SAM	23 - 30"	⊙	1.2	23 - 30"	⊙	1.6	23 - 30"	⊙	2.6	23 - 30"	⊙	5.1	F-15

OVERHEAD IRRIGATION

TORO	570SR-18 w/ 'ADV'	with PRECISION SERIES NOZZLES	30 PSI																			
NOZZLE	DESCRIPTION	COLOR	RADIUS	60°	GPM	Q	GPM	T	GPM	H	GPM	T1	GPM	T2	GPM	F	GPM	DETAIL				
O-T-18 SERIES	SPRAY	GREEN	8 - 8"	⊙	0.11	⊙	0.17	⊙	0.22	⊙	0.27	⊙	0.33	⊙	0.38	⊙	0.44	⊙	0.49	F-13		
O-T-12 SERIES	SPRAY	BROWN	9 - 12"	⊙	0.17	⊙	0.23	⊙	0.34	⊙	0.43	⊙	0.51	⊙	0.58	⊙	0.65	⊙	0.71	F-13		
O-T-15 SERIES	SPRAY	BLACK	11 - 15"	⊙	0.25	⊙	0.37	⊙	0.49	⊙	0.62	⊙	0.74	⊙	0.82	⊙	0.91	⊙	1.01	F-13		
O-T-15 SERIES	SPRAY	BLACK	11 - 19"	⊙	0.38	⊙	0.58	⊙	0.77	⊙	0.96	⊙	1.16	⊙	1.20	⊙	1.54	⊙	1.78	⊙	2.31	F-13

DRIP IRRIGATION

SYMBOL	MFR.	MODEL NUMBER	COLOR	DESCRIPTION	EMITTERS	GPH.	GPM	PSI.	DETAIL
○	TORO	RGP-212-E	PURPLE	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD (FACTORY PRE-ASSEMBLED)	12" O.C.	0.33 GPH.	1.00	5 - 65	H-61
○	TORO	RGP-418-E	PURPLE	DL2000 PRESSURE COMP. DRIPLINE w/ ROOTGUARD (FACTORY PRE-ASSEMBLED)	18" O.C.	1.02 GPH.	1.13/1.100	15 - 60	H-1, H-11
○	TORO	T-FTF16		DRIPLINE ADAPTER TEE (1/2" FIPT x DRIPLINE)					H-2
○	TORO	T-FTF16		DRIPLINE ADAPTER TEE (1/2" FIPT x DRIPLINE)					H-2
○	TORO	T-FLU15		MANUAL FLUSH CAP (DRIPLINE x 3/4" MHT w/ CAP)					H-3
○	TORO	T-FLU15		MANUAL FLUSH CAP (3/4" RHT w/ SCH. 40 PVC BALL VALVE SLIP)					H-15
○	KING BROS.	WLT-S		SCH. 40 PVC BALL VALVE (SLIP)					H-3
○	TORO	T-YD-500-34		AIR VACUUM RELIEF VALVE (1/2" MIPT)					H-20
○	TORO	T-DL-MP9		POP-UP OPERATION INDICATOR					H-25/26

LOW VOLUME SURFACE IRRIGATION

SYMBOL	MFR.	MODEL NUMBER	COLOR	DESCRIPTION	REMARKS	GPH.	GPM	PSI.	DETAIL
○	SALCO	SLV-PS15-CV-1	PURPLE	PRO-SPEC EMITTER w/ CHECK VALVE (NON-POTABLE)	1/2" FIPT	1.00	0.02	5 - 65	H-61
○	SALCO	SLV-PS15-CV-1	PURPLE	PRO-SPEC EMITTER w/ CHECK VALVE (NON-POTABLE)	1/2" FIPT	1.00 x 2 emitters	0.03	5 - 65	H-61
○	SALCO	SLV-PS15-CV-2	PURPLE	PRO-SPEC EMITTER w/ CHECK VALVE (NON-POTABLE)	1/2" FIPT	2.00	0.03	5 - 65	H-61
○	SALCO	SLV-PC-AR-650	PURPLE	PVC FLEX HOSE w/ RECYCLED WATER WARNINGS	3/8" IPS. INSTALL ON-GRADE BELOW MAIL CH.				H-61
○	SALCO	SLV-436-073R	PURPLE	PVC MALE ADAPTER (1/2" MIPT x 3/8" IPS HOSE)	PVC SOLVENT WELD TO FLEX HOSE USING STD. METHODS				H-61
○	SALCO	SLV-075-140-900	PURPLE	PVC-COATED GALVANIZED TUBING STAKE	INSTALL AT A MAX. OF 3'-0" O.C. ALONG PVC FLEX HOSE				H-61
○	(ANY)	(3/4" HOSE - THREAD CAP)		MANUAL FLUSH CAP (3/4" RHT)	INSTALL AT THE END OF EACH TUBING RUN				H-83

DISTRIBUTION & CONTROL EQUIPMENT

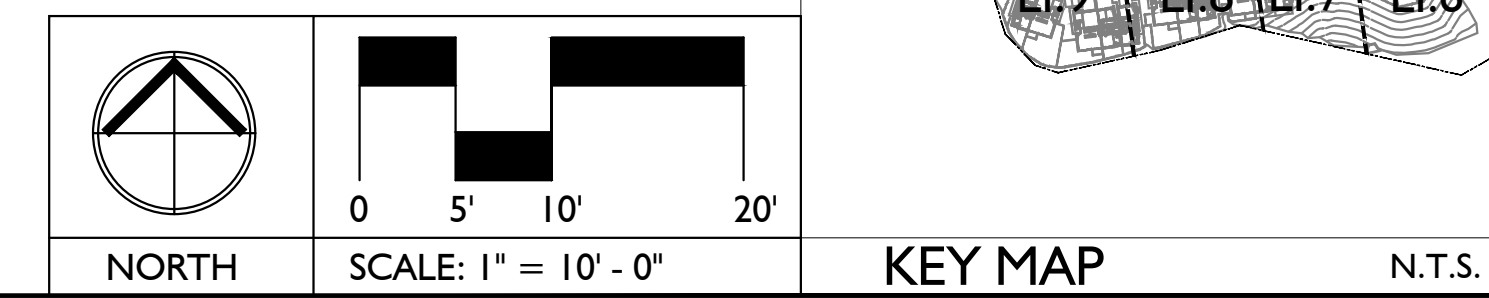
SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
△	HUNTER	IC-3000-MI	1-CORE CONTROLLER w/ METAL CABINET	36 STA. w/ 5/16" x 80" HOLES, WALL MOUNT	B-3
○	(no symbol)		WIRELESS SOLAR-SYNC SENSOR	INSTALL ONE FOR EACH CONTROLLER PER MFR.	B-21
○	STRONG BOX	SRSE	SOLAR SYNC COVER	INSTALL ONE FOR EACH SOLAR-SYNC	B-21
○	CREATIVE SENSOR TECHNOLOGY	FS-T10-000	FLOW SENSOR IN SCH. 40 PVC TEE (SLIP x SLIP)	INSTALL IN SEPARATE 12"x18" VALVE BOX; MAIN LINE SHALL BE 1" DIA. FOR 10' UPSTREAM & 6" DOWNSTREAM OF TEE	A-21, C-43

SYMBOL	MFR.	MODEL NUMBER	DESCRIPTION	REMARKS	DETAIL
ADV	HUNTER	HC-F-M	U.V.R. ADJ. ANTI-DRAIN VALVE (FIPT x MIPT)	LINE SIZE TO 3/4" - 3/4 PSI (4-32 FT. OF HEAD); 150 PSI MAX.	F-13
△	FEBCO	825PA-BV	REDUCED PRESSURE BACKFLOW PREVENTER	1-1/2"	C-20
△	FEBCO	825A	BRONZE 1/2" STRAINER (THREADED)	1-1/2" w/ 20 MESH STAINLESS STEEL SCREEN	C-20
△	STRONG BOX	888C-22	"SMOOTH TOUCH" BACKFLOW PREVENTER ENCLOSURE	20" L. 22" H. 14" W. (INSIDE DIMENSIONS)	C-31
△	GRISWOLD	2230E (normally closed, epoxy coated)	PRESSURE REDUCING MASTER VALVE (10-125 PSI.)	1-1/2". SIZE AND SETTINGS NOTED	A-21, C-40
△	GRISWOLD	2-2AA	WATER PRESSURE GAUGE KIT	REMOVE SCRADER VALVE & REPLACE w/ KIT	
△	WBCO	T-580	BRONZE BALL VALVE (THREADED)	LINE SIZE: TO 3" MAX.	D-1
△	KING BROS.	KSC-S	SCH. 40 PVC SWING CHECK VALVE (SLIP x SLIP)	LINE SIZE: INSTALL IN 10" DIA. VALVE BOX	
△	KING BROS.	BPC-S	SCH. 40 PVC SPRING CHECK VALVE (SLIP x SLIP)	LINE SIZE TO 2" MAX. USE 2" ON 2-1/2" LINES	
△	RAIN BIRD	PE8-R	ELECTRIC CONTROL VALVE	INSTALL IN 10" DIA. VALVE BOX	A-21, E-10
△	RAIN BIRD	PE8-R	2 or 4 GPM. TREE BUBBLER ZONE CONTROL VALVE	SIZES NOTED. w/ FLOW CONTROL. FOR RECYCLED WATER	A-21, E-10
△	TORO	T-ALP075150-L	DISC Y-FILTER	1" w/ FLOW CONTROL. FOR RECYCLED WATER	A-21, E-12
△	RAIN BIRD	T-ALP075150-L	DRIP ZONE CONTROL VALVE w/ FILTER & REGULATOR	1" w/ FLOW CONTROL. FOR RECYCLED WATER	A-21, E-13
△	TORO	T-ALP075150-L	DISC Y-FILTER	3/4" x 150 MESH. 0 - 25 GPM.	
△	RAIN BIRD	PE8-R	PRESSURE REGULATOR	25 PSI. @ 0.1 - 0.8 GPM. 3/4" FIPT	
△	TORO	T-ALP010150-L	DISC Y-FILTER	1" w/ FLOW CONTROL. FOR RECYCLED WATER	A-21, E-13
△	RAIN BIRD	PE8-R	PRESSURE REGULATOR	25 PSI. @ 2 - 20 GPM. 3/4" FIPT	
△	SENWINGER	PMR-MF-25	QUICK-COUPLING VALVE w/ PURPLE RUBBER COVER	FOR RECYCLED WATER. 3/4" LOCKING COVER	D-10
△	RAIN BIRD	33 DNP w/ PURPLE COVER	QUICK-COUPLING VALVE w/ PURPLE RUBBER COVER	FOR RECYCLED WATER. 3/4" LOCKING COVER	D-10

SYMBOL	MFR.	MODEL NUMBER	COLOR	DESCRIPTION	REMARKS	DETAIL
---	(APPROVED)	SCH. 40 PVC	(PURPLE)	PRESSURE MAIN LINE (RECYCLED WATER SOURCE)	FOR UNDERGROUND INSTALLATION	A-1
---	(APPROVED)	CL 315 PVC	(PURPLE)	1-1/2" DIAMETER AND SMALLER	SIZES NOTED	
---	(APPROVED)	PVC	(EXISTING)	PRESSURE MAIN LINE (BY OTHERS)	2" PER CITY OF SIMI VALLEY DWG. NO. 1015-0379	
---	(APPROVED)	CL 200 PVC	(PURPLE)	NON-PRESSURE LATERAL LINE (RECYCLED SOURCE)	FOR UNDERGROUND INSTALLATION; SIZES NOTED (3/4" MIN.)	A-1
---	(APPROVED)	CL 200 PVC	(PURPLE)	NON-PRESSURE LATERAL LINE (RECYCLED SOURCE)	FOR TREE BUBBLER ZONES; 3/4" UNLESS NOTED OTHERWISE	A-1
---	(APPROVED)	SCH. 40 UVR-PVC ("BROWNLINE")		NON-PRESSURE LATERAL LINE PIPING	FOR ON-GRADE INSTALLATION; SIZES NOTED (3/4" MIN.)	A-10
---	(APPROVED)	SCH. 40 PVC	(WHITE)	MAIN LINE, LATERAL LINE, & CONTROL WIRE SLEEVE	DIAMETER AS NOTED IN THE SLEEVE SYMBOL ON THE PLAN	A-3, A-20
---	(APPROVED)	SCH. 40 PVC	(WHITE)	LATERAL LINE SLEEVE	SIZE: TWO TIMES THE SIZE OF THE LINE BEING SLEEVED	A-3
---	(APPROVED)	SCH. 40 PVC	(WHITE)	MAIN LINE SLEEVE	DIAMETER AS NOTED IN THE SLEEVE SYMBOL ON THE PLAN	A-3
---	(APPROVED)	SCH. 40 PVC	(WHITE)	LOW VOLTAGE CONTROL WIRE SLEEVE	DIAMETER AS NOTED IN THE SLEEVE SYMBOL ON THE PLAN	A-3, A-20
---	(APPROVED)	SCH. 40 PVC	(GRAY)	LOW VOLTAGE CONTROL WIRE CONDUIT	1-1/2"	A-3, A-20
---	ARMOR	18112	(BLACK)	10" ROUND PLASTIC ACCESS BOX w/ LID	LID IS BLACK w/ "ELECTRICAL" MOLDED ON TOP	A-20, A-21

SYMBOL	DESCRIPTION	REMARKS
○	WATER METER	2" POTABLE WATER METER (BY OTHERS)
○	POINT OF CONNECTION (P.O.C.) FOR IRRIGATION SYSTEM	(WATER METERS ARE INSTALLED UNDER SEPARATE CONTRACT PER THE STREET and/or WATER IMPROVEMENT PLANS)
○	POINT OF CONNECTION (P.O.C.) FOR IRRIGATION SYSTEM	CONNECT TO CUSTOMER SERVICE SHUT-OFF VALVE (INSTALLED BY OTHERS) ON OUTLET OF WATER METER. METER LOCATIONS ARE APPROXIMATE -- IRRIGATION CONTRACTOR SHALL VERIFY IN THE FIELD.
○	POINT OF CONNECTION (P.O.C.) FOR IRRIGATION SYSTEM	CONNECT TO PVC MAIN LINE (INSTALLED BY OTHERS). P.O.C. LOCATIONS ARE APPROXIMATE -- IRRIGATION CONTRACTOR SHALL VERIFY IN THE FIELD.
○	SCHEDULE 40 PVC CAP	CAP PIPE FOR FUTURE USE. MARK LOCATION ON SITE. NOTE LOCATION ON RECORD DRAWINGS USING MEASUREMENTS FROM FIXED OBJECTS.
○	INDICATES CONTROL VALVE SIZE	
○	INDICATES CONTROLLER STATION NUMBER	
○	INDICATES FLOW IN GALLONS PER MINUTE	

FOR IRRIGATION NOTES, SEE SHEET LI.5



Issued For:

08.01.16 1st City Submittal

Revisions:

△	-	-
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MJS
LANDSCAPE ARCHITECTURE

507 30th St.
Newport Beach, CA 92663

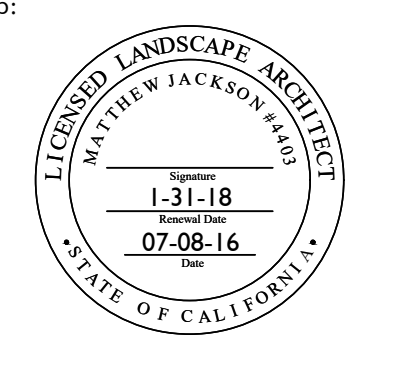
949.675.9964

mjs-la.com

PROJECT:
WOOD RANCH TOWNHOMES

TR. NO. 5943
SIMI VALLEY, CA

CLIENT:
BENCHMARK COMMUNITIES
27200 TOURNEY RD
SUITE 410
VALENCIA, CA 91355
PH: 661.414.1424



Job No.: -

Drawn By: WRD

Checked By: MS

Plan Date: AUGUST 1, 2016

Scale: 1" = 10'-0"

Title:
IRRIGATION PLAN

Sheet No.:
LI.1

Plan Status:
1ST SUBMITTAL

BENCHMARK - WOOD RANCH - LANDSCAPE ARCHITECTURE