

PROPOSED VIEW FROM ENCINA INTERSECTION

ABBREVIATIONS

@	AT	FIN
d	PENNY	FL
0#	POUND	FLG
AB	ANCHOR BOLT	FLR
AC	ASPHALTIC	FN
	CONCRETE	FOC
A/C	AIR CONDITIONING	
ALUM	ALUMINUM	FOF
ANOD	ANODIZED	FOM
BD	BOARD	FOP
BIDG	BUILDING	
BLKG	BLOCKING	FOS
BN	BOUNDARY	FT
	NAILING	CA
BOT	BOTTOM	GALV
CB	CATCH BASIN	CVP
CL	CAST IPON	ЦВ
		Цр
	CEILING	ПГ
CMU		HVAC
<u> </u>		
	CLEAN OUT	
COL	COLUMN	HVV(K)
CONI	CONTINUOUS	15.13.7
CSK	COUNTERSINK	INV
DF	DOUGLAS FIR	LAM
DIA	DIAMETER	LB
DN	DOWN	LT
DS	DOWNSPOUT	MAS
DWG	DRAWING	MATL
E	EAST	MAX
(E)	EXISTING	MB
EJ	EXPANSION JOINT	MECH
ELEV	ELEVATION	MEMB
EN	EDGE NAIL	MET
EQ	EQUAL	MFR
EQUIP	EQUIPMENT	MIN
FAU	FORCED AIR UNIT	MISC
FBO	FURNISHED BY	Ν
	OWNER OR	(N)
	OTHERS, TO BE	NIC
	INSTALLED BY	NO/#
	CONTRACTOR	NTS
FD	FLOOR DRAIN	OC
FE(C)	FIRE	ОН
	EXTINGUISHER	
	(& CABINET)	OPNG
FF	FINISH FLOOR	(P)
FG	FINISHED GRADE	PL
FH	FLAT HEAD	

FINISH	PLAM
FLOW LEVEL	PLAS
FLASHING	PLYWD
FLOOR	PNT
FIFLD NAILING	PR
FACE OF	PTDF
CONCRETE	
	RD
FACE OF MASONNT	RH
	RM
FACE OF STUD	
FOOT OR FEET	
GAUGE	
GALVANIZED	5
GYPSUM	SF
HOSE BIBB	SHTG
HORSE POWER	SIM
HOUR	SPEC
HEATER	SQ
HFATING/	SSTL
VENTILATION/AIR	STD
CONDITIONING	STL
	TC
	TCV
	T&C
	iau
LIGHT	тр
MASONRY	
MATERIAL	
MAXIMUM	
MACHINE BOLT	UNO
MECHANICAL	
MEMBRANE	VCT
METAL	
MANUFACTURER	VERT
MINIMUM	VGDF
MISCELLANFOUS	
NORTH	VTR
NFW	
	W
	WC
	WH
NOT TO SCALE	\\/P
ON CENTER	\/\S
OVAL HEAD OR OVER	νν <i>3</i> \λΛλ/Ε
HEAD	VVVVF
OPENING	14//
PROPOSED	VV/
PLATE OR	W/O
PROPERTY LINE	

l	PLASTIC LAMINATE
	PLASTER
/D	PLYWOOD
	PAINT
	PAIR
	PRESSURE
	TREATED
	DOUGLAS FIR
	ROOF DRAIN
	Round head
	ROOM
	ROUGH OPENING
	REDWOOD
D	SCHEDULE (D)
	South
	SQUARE FEET
3	SHEATHING
	SIMILAR
	SPECIFICATION
	SQUARE
	STAINLESS STEEL
	STANDARD
	SIEEL
	TOP OF CURB OR
	TOP OF CONCRETE
	IOP OF CAICH
	BASIN
	TOP OF PAVING
F	
	VENT THROUGH
	ROOF
	WFST
	WATER CLOSET
	WATERHEATER
	WATERPROOF
	WOOD SCREW
:	WELDED WIRE
	FABRIC
	WITH
	WITHOUT

GC

OVERNING CODES			SHEET INDEX
CALIFORNIA BUILDING CODE2013 EDITIONCALIFORNIA ELECTRICAL CODE2013 EDITIONCALIFORNIA PLUMBING CODE2013 EDITIONCALIFORNIA MECHANICAL CODE2013 EDITIONCALIFORNIA ENERGY CODE2013 EDITIONCALIFORNIA GREEN CODE2013 EDITION			G-0 COVERSHEET G-1.0 ACCESSIBILITY NOTES G-1.1 ACCESSIBILITY DETAILS A.1 SITE PLAN A.1.1 ENLARGED SITE PLAN A.2 EXISTING FLOOR PLAN, EXISTING ROOF PLAN & EXISTING ELEVATIO A.3 PROPOSED FLOOR PLAN, ROOF PLAN & ELEVATIONS A.4 TRASH ENCLOSURE PLAN & ELEVATIONS D.1 ARCHITECTURAL DETAILS D.2 ARCHITECTURAL DETAILS
ENERAL NOTES			LI-1 IRRIGATION PLAN
ALL CONSTRUCTION SHALL CONFORM TO ALL CURRENT BUILDING, ELECTRICAL, MECHANICAL AND PLUMBING CODES AND ALL OTHER STATE, COUNTY AND CITY ORDINANCES AND REGULATIONS. THE CONTRACTOR SHALL INVESTIGATE, VERIFY AND BE RESPONSIBLE FOR ALL CONDITIONS AND DIMENSIONS OF THE PROJECT AND SHALL NOTIFY THE ARCHITECT OF ANY DISCREPANCIES AND INCONSISTENCIES BETWEEN DRAWINGS, SPECIFICATIONS AND EXISTING CONDITIONS PRIOR TO SUBMITTING BID. CONTRACTOR SHALL NOTIFY THE ARCHITECT ABOUT ANY CONDITIONS REQUIRING A MODIFICATION OR CHANGE BEFORE PROCEEDING WITH THE WORK. REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR OTHER GENERAL REQUIREMENTS AND COORDINATE WITH THE ARCHITECTURAL DRAWINGS.	ENERGY CONSULTANT:		LI-2 IRRIGATION DETAILS LI-3 IRRIGATION SPECIFICATIONS LP-1 PLANTING PLAN LP-2 PLANTING DETAILS AND SPECIFICATIONS LP-3 PLANTING AND MAINTENANCE SPECIFICATIONS C-1 CIVIL ENGINEER STORM WATER MANAGEMENT & CURB IMPROVEMI SURVEY 17 TOTAL
ALL CONSTRUCTION TO PROVIDE A WATERPROOF, WEATHER TIGHT BUILDING. CONTRACTOR SHALL FLASH AND CAULK AS NECESSARY TO ACHIEVE THIS REQUIREMENT.	SURVEYOR:	CARDENAS & ASSOCIATES, SURVEYING 201 N. CALLE CESAR CHAVEZ, #100 SANTA BARBARA, CA 93103 (805) 966-3713 jcardenas@casurveying.com	
PPROVAL NOTES:	CIVIL ENGINEER:	FLOWERS & ASSOCIATES, INC. 201 N. Calle Cesar Chavez, #100	
SPRINKLERS TO BE APPROVED AND INSTALLED UNDER SEPARATE PERMIT.		SANTA BARBARA, CA 93103 (805) 966-2224	
	TRAFFIC STUDY:	ASSOCIATED TRANSPORTATION ENG. 100 N. Hope Ave., Ste 4 Santa Barbara, Ca 93110 (805) 687-4418	Stow Canyon Rd
PECIAL INSPECTIONS	LANDSCAPE ARCHITECT:	ERIN O. CARROLL LANDSCAPE ARCHITECT	wenida Ganso
OWNER OR GENERAL CONTRACTOR SHALL EMPLOY A SPECIAL INSPECTOR TO WIDE INSPECTIONS ACCORDING TO UBC SECTION 1701, FOR THE FOLLOWING TYPES WORK: ANY RETROFIT REINFORCING BARS OR HOLDOWN BOLTS INTO EXISTING SLABS OR		SANTA BARBARA, CA 93101 (805) 364-5075 email: erin@erinocarroll.com	Aberdeen Ave
FIELD WELDING FOR STRUCTURAL STEEL CONNECTIONS. STRUCTURAL MASONRY	AGENT:	HARWOOD A. WHITE 1553 KNOLL CIRCLE DR. SANTA BARBARA, CA 93103 (805) 962-5260 email: harwood@harwoodwhite.com	Cuava Ave Reamock Ave Newcaste Ave Maiva Ave Newcaste Ave Twin Lakes Colle Real Ave Ave Ave Calle Real Ave Calle Real Ave Calle Real Colle Real Co

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- 2.
- 4.
- 5.

AP

FIRE

SP THE PROV OF W

- 1.
- 3.



PROPOSED VIEW FROM FAIRVIEW SHOPPING CENTER

FUEL DEPOT

	PROJECT DATA			
	OWNER:	FAIRVIEW AUTO LUBE, LP 1550 LA VISTA RD. SANTA BARBARA, CA 93110		
	PROJECT ADDRESS:	(805) 564-7144 180 NORTH FAIRVIEW AVE GOLETA, CA		BBP
	A.P.N. Zone:	069-110-054 SC		
	OCCUPANCY: HIGH FIRE:	M NO		
	SPRINKLERED: AVG. SITE SLOPE: <u>EXISTING BUILDING COVERAGE:</u>	NO 2%		A K C H I I E C I U K E
	LOT (069-110-054): EXISTING SERVICE STATION:		12,450 SF 1,757 SF	924 anacapa st santa barbara, ca
	EXISTING PARKING:		1470	93101 805.564.6074
	BACKGROUND: PARKING WAS APPROVED WITH ORIGINAL DEVELOPMENT PLAN 069-110-054 AS WELL AS THE FA DEVELOPMENT PLAN APPROVEE SF OF COMMERCIAL AREA. PART WAS LATER ADDED IN1968 TO WERE ADDED AT A RATIO OF 1 PLAN 66-M-75 WAS APPROVED I STATION. IN THIS AMENDMENT STATION. IN THIS AMENDMENT STATION'S REQUIRED PARKING ADJACENT PARCEL, AND IS ADE THIS SUBMITTAL REQUESTS TO (069-110-054) AND SEVER CONN	I ORIGINAL DEVELOPMENT PLAN IN 1966 INCLUDED THE SERVIC IRVIEW SHOPPING CENTER ON 0 45 PARKING SPACES AT A RATH OF PARCEL 069-110-055 IS ZON THAT PARCEL AND 30 ADDITION SPACE PER 202.9 SF. AN AMEND IN 1999 TO ALLOW A CANOPY C (66-M-075 AMD01) IT DECLARES IS PROVIDED BY THE EXISTING F QUATE TO MEET THE ON-SITE P/ CREATE A DEVELOPMENT PLAN	N 66-M-75. THIS E STATION ON PARCEL PARCEL 069-110-055. T O OF 1 SPACE PER 205. VED PI. AN OFFICE BLDO NAL PARKING SPACES MENT TO DEVELOPMEN OVER THE SERVICE 5 THAT THE SERVICE PARKING LOT ON THE ARKING REQUIREMENT SPECIFIC TO THIS PARC CCEL (069-110-055).	HIS 8 C NT EL
	EXISTING DEVELOPME	<u>ENT</u>		
	EXISTING BUILDING COVERAGE		1 757 SE 100%	
	EXISTING FOOTAGE		1,/3/ SF 100%	
	GROSS FOOTAGE OF SERV. STA Existing lot coverage:	ATION/CONV. STORE (NET SAME)	: 1,619 SF	
	SERVICE STATION:		1,757 SF 14%	
	fuel canopy: Hardscape (less canopy):		8,131 SF 65%	
	LANDSCAPING: TOTAL:		862 SF 7% 12,450 SF 100%	e
	EXISTING PARKING:	8 SPACES (FUEL	PUMP POSITIONS)	Av (
	PROPOSED RE-BUILD:)T view
	AREA TABULATION OF CONVENIE	NCE STORE:	\bigwedge	PC
	GROSS FOOTAGE OF CONVEN For Reference: gross foot,	IENCE STORE (NET SAME): Age added to (E) serv. Statio	2,396 SF N: 777 SF	CA DE
	(N) TRASH ENCLOSURE:		128 SF	U EL 0 Nc oleta
	BUILDING COVERAGE OF RE-BUILT BLDG COVERAGE OF ORIGINA BLDG COVERAGE ADDED TO C TRASH ENCLOSURE AS BLDG C TOTAL BLDG COVERAGE OF RI	<u>):</u> L FOOTPRINT: DRIGINAL FOOTPRINT: COVERAGE: E-BUILD:	1,757 SF /2 732 SF 128 SF 2,617 SF	
	LOT COVERAGE:			SED ARCHING
FLEVATIONS	CONVENIENCE STORE & TRASH FUEL CANOPY: HARDSCAPE (LESS CANOPY):	† ENCLOSURE:	2,617 SF 21% 1,700 SF 14% 6,192 SF 50%	★ NO. C-20626 REN. 05/17
	TOTAL:		1,942 SF 15% 12,450 SF 100%	FILL OF CALLED
	<u>PARKING:</u>			.oounoe.
	REQUIRED PARKING: Existing parking:	2,396 8 SPACES (EUEL	6 / 200 = 12 spaces Pump positions)	
	NEW PARKING:		2 SPACES ON SITE	sheet description
APROVEMENTS			12 SPACES TOTAL	
	SCOPF OF WORK	10: /1	T SPACE	
	Fairview Auto Lube, LP proposes to de store at 180 North Fairview Avenue at expanding the structure by 777 SF.)Th proposed to remain. The project also enclosure. Landscaping would be incr	emolish the existing 1,619 SF service and to build a new 2,396 SF conven- ble existing 1,700 SF canopy and fou- would include a new 128 SF covered reased from 862 to 1,942 SF.	e station/convenience ience store, thereby ur fuel dispensers are ed trash/recycling	_
	We request four setback modifications improvements, and two would occur a	s for this project. Two are existing lease a state of the new development.	egal, non-conforming	
	1. The existing overhead canopy and therefore requires a modifica	encroaches 13'-10 ½″ into the 20 tion to remain in place.	foot front setback area	date:
contro-	2. Likewise, two existing fuel pur request a modification for this less	np islands encroach 3'-10 ½″ into 1 al, non-conforming improvement	the front setback area. W	$2 \frac{7}{2} 8-17-2016$
Cambridge Dr	3. The project proposes to place One proposed parking space enc into the north front setback. The the north front setback.	two new parking spaces within the roaches 9'-9 ½″ into the west front proposed accessible parking space	front setbacks as follows setback, and 11'-6 ½″ encroaches 17'-9 ½″ int	
to NKell	4. The project proposes to place $\frac{1}{2}$ in the front setback area	a new trash/recycling enclosure wh	nich would encroach 16 ¹	-4
Sylvan Dr- Lexington Any uceso	The setback modifications notwithstar site from 862 to 1,942 square feet. Par feet.	nding, the project proposes to increa ving on site would be reduced from	ase landscaping on the 18,131 to 6,192 square	
ts ton Ave	We propose the service station and co week.	onvenience store to be open 24 hou	ırs a day, seven days a	
	The eight fueling stations would also be	be used as parking for the convenie	nce store. In addition,	sheet no:
Armitos Ave	on site. Two employee parking spaces, one of on site. Two employee parking spaces N. Fairview Avenue. The project parce Intersection (CI) and is zoned SC.	which would be ADA Van Access would be provided on the applicate l has a General Plan Designation of	nt's adjacent parcel at 52 of Commercial	G-0

FOR CONSTRUCTION NOT BURNEL, BRANCH & FEULE Preliminary: 1

	С.	Pictograms shall have text descriptors located directly below the pictogram field. Pictograms shall have a field beight of 6" minimum	EL	ECTRICA
	d	Characters and braille shall be in a horizontal format Braille shall	1.	The high other op
		be positioned below the corresponding text in a horizontal format, flush left or centered. If text is mulit-lined, Braille shall be placed below the entire text. Braille shall be separated 3/8" minimum and 1/2" maximum from any other tactile characters and 3/8" minimum from raised borders and decorative elements.	2.	The cent intended lighting a
6.	Char uppe uppe	racter proportions shall be selected from fonts where the width of the ercase letter "O" is 60% minimum and 110% maximum of the height of he ercase letter "I".	3.	The cent ampere
7.	Chai finisł eithe back	racters, symbols and their background shall have a non-glare n. Characters and symbols shall contrast with their background, er light characters on a dark background, or dark characters on a light ground.		inches a
8.	Chai view shall	racters and numbers on signs shall be sized according to the ing distance from which they are be be read. Minimum character height comply with Table 11B-703.5.5.	RE	STROOM
9.	Braill and	e shall be contracted (Grade 2) and shall comply with Sections 11B-703.3 11B-703.4. Braille dimensions shall comply with Table 11B-703.3.1.	1.	Elements 11B Divis
10.	Pole with inche banc place be lo the p	e supported pedestrian traffic control buttons shall be identified color coding consisting of a textured horizontal yellow band 2 es in width encircling the pole, and a 1 inch wide dark border d above and below this yellow band. Color-coding should be ed immediately above the control button. Control buttons shall becated no higher than 48 inches above the surface adjacent to bole.	2.	Accessit at a max clear floo hand-ope floor.
11.	An a each adjae not le than follo	additional sign shall also be posted in a conspicuous place at a entrance to off-street parking facilities, or immediately cent to and visible from each stall or space. The sign shall be ess than 17 inches by 22 inches in size with lettering not less 1 inch in height, which clearly and conspicuously states the wing:	3. 4.	Hot wate otherwise abrasive Example electroni
	"Una Not For Exp	authorized Vehicles Parked In Designated Accessible Spaces Displaying Distinguishing Placards Or License Plates Issued Persons With Disabilities Will Be Towed Away At Owner's bense. Towed Vehicles May Be Reclaimed At Or By Telephoning"	5.	The dian 1-1/4" to cross see minimum shall be bending lb/f. Gra or other
НА	ZARI	DS AND PROTRUDING OBJECTS	6.	Mounting specific
1.	Abru adjao dime sidev proje a po	apt changes in level, except between a walk or sidewalk and an cent street or driveway, exceeding 4 inches in a vertical ension, such as at planters or fountains located in or adjacent to walks, walks, or other pedestrian ways, shall be identified by warning curbs ecting at least 6 inches in height above the walk surface to warn the blind of tential drop off.		
S	A wa	arning curb is not required when a guard or handrail is provided with a guide		
Ζ.	rail c walk	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk.		
3.	rail c walk Obje inche more	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Acts projecting from walls with their leading edges between 27 es and 80 inches above the finished floor shall protrude no than 4 inches into the circulation path.	SIC Ca larg Se	GNS & IDI lifornia's s ger and wi ction 4.30.
2. 3. 4.	rail c walk Obje inche more Free 12 ir floor	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Acts projecting from walls with their leading edges between 27 es and 80 inches above the finished floor shall protrude no e than 4 inches into the circulation path. Standing objects mounted on posts or pylons may overhang inches maximum from 27 inches to 80 inches above the ground or finished	Ca larg Se The fac	GNS & IDE lifornia's s ger and wi ction 4.30. e Internati ilities that forth in Ti
2. 3. 4. 5.	rail c walk Obje inche more Free 12 ir floor Protr	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Acts projecting from walls with their leading edges between 27 es and 80 inches above the finished floor shall protrude no e than 4 inches into the circulation path. Standing objects mounted on posts or pylons may overhang inches maximum from 27 inches to 80 inches above the ground or finished Tuding objects shall not reduce the clear width of an accessible e or maneuvering space.	Ca larg Se The fac set	GNS & IDE lifornia's s ger and wi ction 4.30. e Internati ilities that forth in Ti The Inter on a blu Eederal 9
 3. 4. 5. 6. 	rail c walk Obje inche more Free 12 ir floor Protr route Walk spac	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Acts projecting from walls with their leading edges between 27 es and 80 inches above the finished floor shall protrude no e than 4 inches into the circulation path. Astanding objects mounted on posts or pylons may overhang inches maximum from 27 inches to 80 inches above the ground or finished actions of the clear width of an accessible e or maneuvering space. Astandis, corridors, passageways, aisles, or other circulation actions and the set of the s	Sic Ca larg Se The fac set 1.	GNS & IDE lifornia's s ger and wi ction 4.30. e Internati ilities that forth in Ti The Inter on a blu Federal S All buildi persons
 3. 4. 5. 6. 7. 	rail c walk Obje inche more Free 12 ir floor Protr route Walk spac Any minin botto	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. acts projecting from walls with their leading edges between 27 es and 80 inches above the finished floor shall protrude no a than 4 inches into the circulation path. standing objects mounted on posts or pylons may overhang inches maximum from 27 inches to 80 inches above the ground or finished ruding objects shall not reduce the clear width of an accessible a or maneuvering space. as, halls, corridors, passageways, aisles, or other circulation tes shall have 80 inches minimum clear headroom. obstruction that overhangs a pedestrian way shall be a mum of 80 inches above the walking surface as measured from the or of the obstruction.	Sic Ca larg Se The fac set 1.	GNS & IDE lifornia's s ger and wi ction 4.30. e Internati ilities that forth in Ti The Inter on a blu Federal S All buildi persons an Access the Inter signs, as paths.
 2. 3. 4. 5. 6. 7. 8. 	rail c walk Obje inche more 12 in floor Protr route Spac Any minin botto Whe but r devic	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. acts projecting from walls with their leading edges between 27 as and 80 inches above the finished floor shall protrude no a than 4 inches into the circulation path. standing objects mounted on posts or pylons may overhang inches maximum from 27 inches to 80 inches above the ground or finished ruding objects shall not reduce the clear width of an accessible a or maneuvering space. Its, halls, corridors, passageways, aisles, or other circulation ses shall have 80 inches minimum clear headroom. obstruction that overhangs a pedestrian way shall be a mum of 80 inches above the walking surface as measured from the om of the obstruction. rre a guy support is used parallel to a circulation path, including, hot limited to sidewalks, a guy brace sidewalk guy or similar be used to prevent an overhanging obstruction.	Sic Ca larg Se The fac set 1. 2. 3.	GNS & IDE lifornia's s ger and wi ction 4.30. e Internation illities that forth in Ti The Inter on a blu Federal S All building persons an Access the Inter signs, as paths. When per building of 11B-703 0utside of including adjacent located 4 the base or groun characte
 2. 3. 4. 5. 6. 7. 8. 	rail c walk Obje inche more 12 in floor Protr route Space Any minin botto Whe but r device	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Incts projecting from walls with their leading edges between 27 as and 80 inches above the finished floor shall protrude no a than 4 inches into the circulation path. Inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches maximum from 27 inches to 80 inches above the ground or finished inches aball not reduce the clear width of an accessible a or maneuvering space. Instantion of a space above the clear headroom. In the shall have 80 inches minimum clear headroom. In the obstruction that overhangs a pedestrian way shall be a mum of 80 inches above the walking surface as measured from the info of the obstruction. In the obstruction. In the obstruction. In the obstruction. In the used to prevent an overhanging obstruction.	Sic Ca larg Se The fac set 1. 2. 3.	GNS & IDE lifornia's s ger and wi ction 4.30. e Internation illities that forth in Ti The Inter on a blu Federal S All building persons an Access the Inter signs, as paths. When per building adjacent located 4 the base or groun characte
 2. 3. 4. 5. 6. 7. 8. DE 1. 	rail c walk Obje inche more Free 12 in floor Protr route Spac Any minin botto Whe but r devid	entered 2 inches minimum and 4 inches maximum above the surface of the or sidewalk. Incts projecting from walls with their leading edges between 27 as and 80 inches above the finished floor shall protrude no a than 4 inches into the circulation path. Istanding objects mounted on posts or pylons may overhang iches maximum from 27 inches to 80 inches above the ground or finished a or maneuvering space. Istanding objects shall not reduce the clear width of an accessible a or maneuvering space. Istandis, corridors, passageways, aisles, or other circulation tes shall have 80 inches minimum clear headroom. obstruction that overhangs a pedestrian way shall be a mum of 80 inches above the walking surface as measured from the om of the obstruction. Ire a guy support is used parallel to a circulation path, including, not limited to sidewalks, a guy brace sidewalk guy or similar tes shall be used to prevent an overhanging obstruction. FABLE WARNINGS AT HAZARDOUS VEHICULAR AREAS walk crosses or adjoins a vehicular way, and the walking surfaces are not rated by curbs, railings or other elements between the pedestrian areas walk crosses or adjoins a vehicular way, and the walking surfaces are not rated by curbs, railings or other elements between the predestrian areas walk crosses or adjoins a vehicular way, and the walking surfaces are not rated by curbs, railings or other elements between the predestrian areas walk crosses or adjoins a vehicular way, and the areas shall be defined by a nucus detectable warning complying with Sections 11B-705.1.1 and	Sic Ca larg Se The fact set 1. 2. 3.	GNS & IDE lifornia's s ger and wi ction 4.30. e Internati ilities that forth in Ti The Inter on a blu Federal S All buildi persons an Access the Inter signs, as paths. When per building of 11B-703 11B-703 0utside of including adjacent located 4 the base or groun- characte Interior a comply w Where p spaces, f have tex

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- nest operable part of all controls, dispensers, rec erable equipment shall be installed at an access g the clearances and reach range requirements of
- ter of the grip of the operating handle of controls to be used by the occupant of the room or area and receptacle outlets, appliances, or cooling, he ing equipment shall be 48" above the floor or wor
- nter of electrical receptacle outlets on branch circ es or less shall be installed not more than 48 inc above the floor or working platform.

- nts of accessible restrooms shall comply with CBC rision 6.
- ible urinals shall be stall-type or wall-hung with a ximum of 17" above finish floor. Urinals shall hav por space to allow a front approach and the flush perated with the controls installed no higher that 4
- ater lines and drain pipes under lavatories shall be se configured to protect against contact. There e surfaces under lavatories.
- es of accessible faucets include: lever operated, nically controlled. If self-closing valves are open for at least 10 seconds.
- meter or width of the gripping surfaces of a grab 2" if circular. Grab bars with non-circular cross ction dimension of 2" maximum and a perimeter n and 4.8" maximum. The space between the w e 1-1/2". The grab bar assembly shall be capable stresses, shear stresses, shear forces, and tens rab bars shall not rotate within their fittings. The surface adjacent to it shall be free of any sharp
- ng heights to operating controls for restroom acce cally called out in the CBC shall comply with ed in CBC Section 11B-308.

ENTIFICATION

standards for signage are more stringent and are ider than federal law, Americans with Disabilities

tional Symbol of Accessibility shall be the standa t are accessible to and usable by physically di Fitle 24 and as specifically required in this section

- rnational Symbol of Accessibility shall consist of lue background. The blue shall be equal to cold Standard 595B.
- ling and facility entrances that are accessible to a with disabilities and at every major junction alon ssible Route of Travel shall be identified with a s rnational Symbol of Accessibility and with additio s required, to be visible to persons along approa
- ermanent identification is provided for rooms and g or site, raised letters shall be provided in conform 3.2 and shall be accompanied by braille in confor 3.3. Signs shall be installed on the wall adjacent of the door. Where there is no wall space on the g at double leaf doors, signs shall be placed on tl t wall, preferably on the right. Tactile characters 48" minimum above the finish floor or ground su eline of the lowest Braille cells and 60" maximun nd surface, measured from the baseline of the hi ters.
- and exterior signs identifying permanent rooms a with Sections 11B-703.1, 11B-703.2, 11B-703.3 pictograms are provided as designations of perm the pictograms shall comply with Section 11B-7 t descriptors complying with Sections 11B-703.2
- aised characters are used, they shall conform to ed characters shall comply with Section 11B-703 cated in Braille complying with Section 11B-703 lled in accordance with Section 11B-703.4.
- racter height measured vertically from the baseli /8" minimum and 2" maximum based on the height "|"

eceptacles and ssible location	FLOORS AND LEVELS Level area is defined as "a specified surface that does not have a slope in any direction exceeding 1/4 inch in one foot from the horizontal (2.083% gradient.)"	16. Where the ramp surface is not bounded by a wall, the ramp shall comply with the following requirement:a) A guide curb a minimum of 2 inches in height shall be provided at each side of the ramp.
s or switches a to control	 In building and facilities, floors of a given story shall be a common level throughout, or shall be connected by pedestrian ramps, passenger elevators, or special access lifts. 	 In existing buildings where the extension of the handrail in the direction of the ramp run would create a hazard, the extension may be turned 90 degrees to the run of the ramp.
orking platform.	 Ground and floor surfaces along accessible routes and in accessible rooms and spaces, including floors, walk, ramps, stairs, and curb ramps, shall be stable, firm, and slip-resistant. 	 Ramps more than 30" above the adjacent ground shall be provided with guards that comply with Section 1013. Such guard sha continuous from the top of the ramp to the bottom of the ramp.
ches nor less than 15	 Change in level up to 1/4 inch may be vertical and without edge treatment. 	
	 Change in level between 1/4 inch and 1/2 inch shall be beveled with a slope no steeper than 1:2. 	ENTRANCES AND EXITS
C Section	5. If carpet or carpet the is used on a ground or noor surface, it shall be securely attached; have a firm cushion, pad or packing or no cushion or pad; and have a level loop, textured loop, level cut pile, or level cut/uncut pile texture. The maximum pile height shall be 1/2 inch. Exposed edges of carpet shall be fastened to floor surfaces and have trim along the entire length of the exposed edge. Carpet edge trim shall comply with Section 11B-303.	 All entrances and exterior ground floor exit doors to buildings and facilities all be made accessible to persons with disabilities During periods of partial or restricted use of a building or facilities.
an elongated rim ave a 30" x 48" n controls shall be 44" above finish	 If gratings are located on floors, then they shall have spaces no greater than 1/2 inch wide in one direction. If gratings have elongated openings, the shall be placed so that the long dimension is perpendicular to the dominant direction of travel. 	the entrances used for primary access shall be accessible to and usab persons with disabilities.3. Recessed doormats shall be adequately anchored to prevent
e insulated or e shall be no sharp or		interference with wheelchair traffic.
, push-type, and used, the faucet shall		4. Every required exit doorway shall be capable of opening at least 90 degrees, shall have a minimum clear opening of 32 inches, and shall be of a size as to permit the installation of a door not less than 3 width and not less than 6'-8" in height.
b bar shall be sections shall have a	CONTROLS AND OPERATING MECHANISMS	
er dimension of 4" vall and the grab bar e of withstanding sile forces of up to 250	 Controls and operating mechanisms in accessible spaces, along accessible routes or as part of accessible elements are required to be accessible. 	
e grab bar and any wall o or abrasive elements.	 Clear floor space complying with Section 11B-305 that allows a forward or parallel approach by a person using a wheelchair shall be provided at controls, dispensers, receptacles, and other operable equipment. 	DOORS
essories not ith the reach ranges	3. The highest and lowest operable part of all controls, dispensers, receptacles, and other operable equipment shall be placed within one of the reach ranges specified in Section 11B-308. Electrical and communication system receptacles on walls shall be mounted no less than 15 inches above the floor.	 Door handles pulls, latches, locks and other operating devices on doors required to be accessible shall not require tight grasping, tight pinching or twisting of the wrist to operate. Manually operated b surface bolts are not permitted. The unlatching of any door or leaf sh require more than one operation.
	 Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, punching, or twisting of the wrist. The force required to activate controls shall be no greater than 5 pounds of force. 	 Latching and locking doors that are hand activated and which are in a path of travel shall be operable with a single effort by lever type hardware panic bars, push-pull activating bars, or other hardware designed to provide passage without requiring the ability to grasp opening hardware.
	5. For accessible lavatories, faucet controls and operating mechanisms shall be operable with one hand and shall not require grasping, pinching, or twisting of the wrist. The force required to active faucet controls and operating mechanisms shall be no greater than 5 lbs. Lever-operated, push-type	 Hand-activated door opening hardware shall be centered between 30" and 44" above the floor.
re significantly is Act (ADA)	and electronically controlled mechanisms are examples of acceptable designs. self-closing valves are allowed if the faucet remains open for at least 10 seconds.	 When installed, doorways shall have a minimum clear opening of 32 inches with the door open 90 degrees.
lard used to identify lisabled persons as		 For hinged doors, the opening width shall be measured with the door positioned at an angle of 90 degrees from its closed position. There shall be a lovel and close floor or lending on each side of a
of a white figure lor no. 15090 in and usable by	SPACE ALLOWANCE AND REACH RANGES	door. The level area shall have a length in the direction of door swing of at least 60" and the length opposite the direction of door swing of 48" as measured at right angles to the plane of the door in the closed position. Where the plane of the doorway is offset or located in an alcove a distance more than 8 inches measured from the plane of the doorway to the face of the wall, the door shall be provided with 60" maneuvering clearance for front approach.
ng of leading to sign displaying onal directional aching circulation nd spaces of a rmance with Section	 The minimum clear floor or ground space required to accommodate a single, stationary wheelchair and occupant is 30 inches by 48 inches. The minimum clear floor or ground space for wheelchairs may be positioned for forward or parallel approach to an object. Clear floor or ground space for wheelchairs may be a part of the knee space required under some objects. 	7. The width of the level area on the side to which the door swings shall extend 24 inches past the strike edge of the door for exterior doors and 18 inches past the srike edge for interior doors Where the plane of the doorway is offset 8 or more inches from any obstruction within 18 inches measured laterally on the latch side, the door shall be provided with maneuvering clearance for front approach.
ormance with Section t to the latch e latch side, the nearest s on signs shall be	 One full-unobstructed side of the clear floor or ground space for a wheelchair shall adjoin or overlap an accessible route or adjoin another wheelchair clear floor space. If a clear floor or grounds space is located in an 	 Provide clear space of 12" past strike edge of the door on the opposite side to which the door swings if the door is equipped with both a and closer.
urface, measured from m above the finish floor lighest line of raised	alcove or otherwise confined on all or part of three sided, additional maneuvering clearances shall be provided in accordance with Sections 11B-305.7.1 & 11B-305.7.2.	 The floor or landing shall be not more than 1/2" lower than the threshold of the doorway.
and spaces shall and 11B-703.5. nanent rooms and	 The space required for a wheelchair to make a 180-degree turn is a clear space of 60" diameter per Section 11B-304.3.1 or a T-shaped space per Section 11B-304.3.2. 	10. Maximum effort to operate exterior and interior doors shall not exceed 5 pounds, with such pull or push effort being applied at right angles to hinged doors and at the center plane of sliding or folding doors. Compensating devices or automatic door operators may be
703.6 and shall 2 and 11B-703.5. o the following: 3 2 and shall be	4. The minimum clear width required for a wheelchair to turn around an obstruction shall be 36 inches where the obstruction is 48 inches or more in length and 42 inches and 48 inches where the obstruction is less than 48 inches in length.	utilized to meet the above standards. When fire doors are required, the maximum effort to operate the door may be increased to the minimum allowable by the appropriate administrative authority, not to exceed 15 lbs/ft.
ine of the character shall ght of the uppercase	 The minimum clear width for single wheelchair passage shall be 32 inches minimum for a distance of 24 inches max., and 36 inches continuously per Section 11B-403.5 	11. When the door has a closer, then the sweep period of the closer shall be adjusted so that from an open position of 70 degrees, the door w at least 3 seconds to move to a point 3" from the latch, measured to the edge of the door.
	6. The minimum width for two wheelchairs to pass is 60 inches.	
	 If the clear floor space only allows forward approach to an object, the maximum high forward reach allowed shall be 48 inches. The minimum low forward reach is 15 inches. See Figure 11B-308.2.1 If the high forward reach is over an obstruction, reach and clearance shall be as shown in Figure 11B-308.2.2. 	
	8. If the clear floor space only allows parallel approach by a person in a wheelchair, the maximum high side reach allowed shall be 48 inches and the low side reach shall be no less than 15 inches above the floor as shown in Figure 11B-308.3.1. if the side reach is over and obstruction, the reach and clearances shall be as shown in figure 11B-308.3.2.	

	ACCESSIBLE ROUTE OF TRAVEL	
, n quard shall be	 Accessible Route of Travel is defined as "a continuous unobstructed path connecting all accessible elements and spaces in an accessible building or facility that can be negotiated by a person with a disability using a wheelchair and that is also safe for and usable by persons with other disabilities, and that is consistent with the definition of "Path of Travel". 	BBP
	At least one accessible route shall connect accessible building or facility entrances with all accessible spaces and elements.	A R C H I T E C T U R E
ind	3. When a building or portion of a building is required to be accessible or adaptable, an accessible route of travel complying with "11B/Division 4: Accessible Routes" shall be provided to all portions of the building, to accessible building entrances, and between the building and the public way.	924 anacapa st santa barbara, ca 93101 805.564.6074
es, to and usable by		
	RAMPS (EXTERIOR OR INTERIOR)	
st 90	 Any path of travel shall be considered a ramp if its slope is steeper than 1 unit vertical in 20 units of horizontal (5 percent slope). 	
d less than 3 feet in	 The maximum slope of a ramp that serves any exit way, provides access for persons with physical disabilities, or is in the accessible route of travel shall be 1 unit rise in 12 units of horizontal run (8.3 percent gradient). The least possible slope shall be used for any ramp. 	
	 The cross slope of ramp surfaces shall be no greater than 1:48. 	
on	 Pedestrian ramps shall have a minimum clear width of 48 inches, unless required to be wider by some other provision of this code. 	
operated bolts or or or leaf shall not are in ope hardware, by	 Where a pedestrian ramp is the only exit discharge path serving entrances to buildings or when it serves an occupant load of 300 or more, the ramp shall have a minimum clear width of 60 inches. 	OT Irview Ave
bility to grasp the een	Level landings shall be provided at the top and bottom of each ramp.	DEP CA
of 32 e ion.	 Top landings shall be not less than 60 inches wide and shall have a length of not less than 60 inches in the direction of ramp run. Landings at the bottom of ramps shall have a dimension in the direction of ramp run of not less than 72 inches. 	FUEL 180 Nc Goleta,
fa r por por in pr	 Doors in any position shall not reduce the minimum dimension f the landing to less than 42 inches and shall not reduce the required width by more than 3 inches when fully open. 	SED ARCHI A. BURNAL
rom be	 All ramp landings shall be level with maximum slope in any direction not to exceed 1/4" per foot (2.083 percent slope) 	★ NO. C-20626 ★ REN. 05/15
s rior re the uction shall	10. At bottom and intermediate landings, the width shall be at least the same as required for the ramp.	OF CALIFOR
d with both a latch	11. Other intermediate landings shall have a dimension in the direction of ramp run of not less than 60 inches	sheet description
	12. Handrails are required on ramps that provide access if the ramp slope exceeds 1 foot rise in 20 feet of horizontal run (5 percent gradient), except that at exterior door landings, handrails are not required on ramps less than 6 inches rise or 72 inches in length.	ACCESSIBILITY NOTES
ding y be uired, ie not er s, the door will take sured to the landing	13. Handrails shall be placed on each side of each ramp, shall be continuous the full length of the ramp, shall be 34 to 38 inches above the ramp surface to the top of the handrails, shall extend a minimum of 1 foot beyond the top and bottom of the ramp, and shall parallel the floor or ground surface. Handrails shall always be continuous and the ends of handrails shall be either rounded or returned smoothly to the floor, wall or post.	date:
J	14. The grip portion of handrails shall be not less than 1 1/4" nor more than 2" in cross sectional nominal dimension, or the shape shall provide an equivalent gripping surface, and all surfaces shall be smooth with no sharp corners. Handrails shall not rotate within their fittings.	7-13-2016 8-17-2016 9-1-2016 4-5-2017 9-29-2017
	 15. Handrail projecting from a wall shall have a space of 1 1/2" between the wall and the handrail a) Handrails may be located in a recess if the recess is a 	
	 maximum of 3" deep and extends at least 18 inches above the top of the rail. b) Any wall or other surface adjacent to handrails shall be free of sharp or abrasive elements. Edges shall have a minimum radius of 1/8 inch. 	 sheet no:

924 anacapa st santa barbara, ca 93101 805.564.6074 Ave FUEL DEPOT 180 North Fairview / Goleta, CA NSED ARCHI NO. C-20626 REN. 05/15 OF CALIF sheet description CESSIBILITY NOTES date: 1-22-2016 7-13-2016 8-17-2016 9-1-2016 4-5-2017 9-29-2017 sheet no: G-1.0



Preliminary: NOT FOR CONSTRUCTION



SITE PLAN

1/16"=1'-0"



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SITE PLAN NOTES:

THIS PLAN IS FOR ARCHITECTURAL REFERENCE. SEE CIVIL PLANS FOR SPECIFIC GRADING AND DRAINAGE INFORMATION.
 SEE SITE PLAN, SHEET A.1 FOR NOTES AND INFORMATION.

_____ ARCHITECTURE _____

924 anacapa st santa barbara, ca 93101 805.564.6074

TION

CONSTRU

FOR

NOT

Preliminary:

sheet no:

A.1.1

(E) SOUTH ELEVATION

1/8"=1'-0"

(E) WEST ELEVATION

1/8"=1'-0"

(E) EAST ELEVATION

1/8"=1'-0"

SOUTH ELEVATION

NORTH ELEVATION

1/8"=1'-0"

EAST ELEVATION

1/8"=1'-0"

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Т	
1	
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	1

1/4"=1'-0"

1/4"=1'-0"

- STANDING SEAM ROOF TO MATCH STORE.

– 4x4 T.S. FRAME

- STEEL DECK'G GATES

NORTH ELEVATION

1/4"=1'-0"

1/4"=1'-0"

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	To Determine Average System "IE" exceeds .71				
H.Z.	Туре	Sprinkler	HA	"IE"	Weighted Area
1	RTF Water Saver Turf	Subterranean Drip	288	0.85	244.8
2	Low water use plants	Drip	1,498	0.85	1273.3
3	Bark Mulch Area (no plants)	Drip	94	1	94
4	Existing Turf	Spray	386	0.71	274.06
5	Existing low water use plants	Spray	30	0.71	21.3
					0
			2296	Totals	1907.46
					0.830775261

Does ETWU Qualify?

Yes - ETWU Does Not Exceed Maximum Allowed

0-4 gpm	1/2
5-10 gpm	3/4
11-16 gpm	1"
17-26 gpm	1-1/
27-35 gpm	1-1/
36-55 gpm	2"
56-80 gpm	2-1
81-120 gpm	3"

Irrigation Equipment Legend

· · ·			
	MFR	Model	Notes
Relief Valve	Rainbird	AR valve kit .	Install in 6" round valve box at the high point of each planter. Multiple ARV's shall be required per RCV. Verify quantity.
	Spears	True Union I-2000	Match line size.
th Weather	Weathermatic	SL1600 Smartline controller with Smartline Aircard (flow version) and SLW5 Smartlink wirless weather station. Provide addtional expansion modules as require to connect all valves on site.	Exterior wall mount. Mount weather station to building eave where open to sky in non visible location.
irrigation wire	N.A.	Irrigation control wire #12UF AWG direct burial (U.L. approved).	
g) g)	Toro	u o#h h# [:] - 1.0 and 2.0 GPH	
sembly	Rainbird	XCZ-075-PRF and XCZ-100-PRB-COM	Valve size per plan.
	Dura-Pol	5/8" Polyethylene tubing.	Stake every 6'.
ve	AG Products		Install in round valve box with gravel fill.
	Lasco	Schedule 40 PVC	
	Lasco	Schedule 40 PVC mainline (1-1/4" and under), Class 315 PVC (1-1/2" and above).	
ng Valve	Rainbird	5LRC: 1" Locking rubber cover, 1 piece body.	
	AG Products	S3T "Spin-loc" tee or ell fitting for connection between PVC lateral lines and drip tubing.	
n Dripline	Hunter	Eco-Mat, 0.6 GPH emitters @ 12" O.C.	Install dripline 5" below grade.
	Rainbird	SXB-360-025 Xeri-Bubbler, fully open.	See irrigation notes for quantities.

Note: existing water meter, backflow preventer, and pressure regulator to remain in place. Landscape contractor shall test all existing irrigation equipment and report any existing irrigation equipment that needs to be replaced or repaired to

1. See irrigation legend for complete descriptions of all symbols shown on irrigation plan.

2. Point of connection is at the approximate location shown on plan.

3. Install all valves in locking plastic valve boxes in groundcover areas. Install one valve per box. Identify locations and flag on site for Landscape Architect's approval <u>BEFORE</u> excavating for installation.

4. Install irrigation system in accordance with manufacturer's specifications, irrigation details, and local codes.

5. Indicated pipe locations are schematic. Do not place pipe under paving except where absolutely necessary. Coordinate pipe installation

6. All piping installed under paving, through walls or footings must be placed inside Schedule 40 PVC sleeves of adequate size to allow free movement of the pipe in the sleeve. All pipe runs in sleeves must be straight, with no bends or angles.

7. Locate irrigation controller at approximate location shown on plan. 110-v j-box by others. Obtain Landscape Architect's approval of

8. Emitters shall be located on grade and staked a maximum of 6" (six inches) from the center of the plant, or at edge of rootball,

9. Install flush end valves at the ends of all $\frac{5}{8}$ " polyethylene drip tubing in round valve boxes with gravel fill.

10. Install irrigation lines at the following minimum depths:

schedule 40 and class 315 PVC mainline: 18" minimum cover 12" minimum cover place on grade with stakes @ 6' O.C. install 5" below finish grade per manufacturer's specifications.

place on grade **Install all rigid pipe as near to edges of planting areas, to avoid conflict with large plants.

groundcover:	1 - 1 GPH emitter per plant (flatted groundcover can be watered with microspray emitters).
0	2 - 1 GPH emitters per plant.
	2 - 2 GPH emitters per plant.
'trees:	3 - 2 GPH emitters per plant.
palm trees:	3 - Rainbird SXB-360-025 Xeri-Bubblers, fully open.

12. In the event of discrepancies in irrigation equipment count, quantities indicated by symbols on the plan prevail.

13. In vicinity of existing trees, use discretion to route lateral lines and mainline as necessary to avoid root damage. Under canopies of existing trees, excavate using hand tools, and route pipe under roots with a minimum 4" clearance. Do not cut roots larger than 2" (two inches) in diameter, unless approved by the Landscape Architect.

14. Install and adjust all heads and emitters to prevent water contact with all built elements.

15. Adjust all heads and emitters to minimize overspray onto paved areas.

16. Install check valves at the low end of all irrigation lines to prevent low head drainage.

Lateral Line Pipe Sizing Guidelines:

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DEPOT ◀ Fairview FUEL 180 North 8

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> Sheet 1 of 6

1 Finish grade, turf areas.

- Toro FCH-H with DL200 automatic flush valve with DL-75MA-9153 $\frac{3}{4}$ male adapter.
- 3 Plastic round valve box, 6" size. Heat brand "FV" onto lid.
- 4 Finish grade, shrub areas.
- 5 Drip tubing, length as required.
- 6 Drip tubing, sweep down to enter valve

Finish grade in turf areas.

relief valve.

Toro YD-500-34 air/vacuum

heat brand "ARV" onto lid.

- 7 Brick supports
- 8 Filter fabric
- 9 Pea gravel, 3" deep.
- 10 Toro barbed ell (DL-E9018).

12

QUICK COUPLER VALVE 12 Not to Scale

Filter fabric. 8 Pea gravel, 3" deep. 9 $\frac{1}{2}$ " PVC tee (SxSxT) with toro CA710 comp. adapter.

- **1** Finish grade in turf areas.
- 2 Rigid plastic round valve box with bolt down cover. Use stainless bolt, nut and washer. Heat brand "QCV" onto lid
- **3** Quick coupler key with male hose bib. Connection as shown: key must clear
- valve box. 4 Finish grade in shrub areas.
- 5 Quick coupler valve.
- 6 Stainless steel clamp.
- **7** Brick supports.
- 8 Dura pre-assembled swing joint with one piece brass MIPT nipple.
- 9 Mainline
- 10 #4 x 36" Rebar stakes, 2 required.
- 11 Filter fabric.
- **12** Pea gravel, 3" deep.

Note: Use Teflon tape on all threaded fittings, typical.

- 1 Tree rootball.
- 2 Polyethylene tubing in rows around tree, 2 required 4 - 6" below grade.
- 3 Xeribubblers or emitters spaced evenly around rootball of tree. See irrigation notes for schedule and quantities.
- 4 AGR products "SPIN-LOC" 1025 SETC flush cap SL X $\frac{3}{4}$ " MHT with plastic cap installed within a round plastic pull box.
- 5 Connection between polyethylene tubing and PVC pipe, SXT PVC ell or tee $\binom{1}{2}$ with spin loc x thread male adapter AG products model #S1/2MA-565.
- 6 Lateral line.
- YD-500-34 Air / vacuum relief valve installed with a FT-050 combination tee and a $\frac{3}{4}$ " x $\frac{1}{2}$ " reducer bushing, install air relief assembly inside a 6" planter, min. 1 air / vacuum relief valve per 500' of dripline.
- Notes: 1. All drip tubing to be 4" min. below finish grade.

2. Box to be installed as to allow for proper operation of ball valve. Install at right angle to hardscape edge, install valve off-center in box.

3. Install valve box extensions as required to achieve proper valve installation at mainline depth. 8

Not to Scale

TTER TO DRIPLINE CONNECTION Not to Scale

13

3. Backfill final 3" of mulch over the tubing after

DRIPLINE STAKING AND LAYOUT

- 1 Finish grade, turf areas.
- bolt, nut, and washer. Box to be placed at right angle to hardscape edge. Heat brand "RCV"
- 4 Pressure regulator
- 6 Remote control valve. See legend for specification.
- 8 Pea gravel, 3" deep.
- 9 Brick supports.
- 10 Lateral line to drip system.
- 11 Mainline.
- 1. Box to be installed as to allow for proper operation of ball valve. Install at right angle to hardscape edge, install valve off-center in box.
- 2. Install valve box extensions as required to achieve proper valve installation at mainline depth.

installation of the tubing.

5

WIRE CONNECTION Not to Scale

wire connection.

- 2 Plastic rectangular 'jumbo' valve box with bolt down cover, use stainless

wires shall require a larger approved

- and control station # onto LID.
- 3 Finish grade in shrub areas
- 5 Wye filter.
- 7 Non-woven filter fabric.

- Notes:

- 3. Use Teflon tape on all threaded fittings, typical.
- **DRIP VALVE ASSEMBLY** Not to Scale

6

BALL OR GATE VALVE Not to Scale

- 1 Finish grade in turf areas.
- 2 Rigid plastic rectangular valve box with bolt down cover. Use stainless bolt, nut and washer. Place box at right angle to edge of pavement. Heat brand "BV" onto lid.
- 3 Ball or gate valve.
- 4 Finish grade in shrub areas.
- 5 Pressure supply line.
- 6 PVC male adapter.
- **7** Brick supports.
- 8 Brass union.
- 9 Brass nipple.
- 10 Non-woven filter fabric

1 Finish grade.

3 Lateral line.

@ 4' 0.C.

6 Mainline.

5 Undisturbed soil.

2 Clean compacted backfill.

4 Control wire. Tape to mainline

- 11 Pea gravel, 3" deep.
- Notes: 1. Box to be installed as to allow for proper operation of ball valve. Install valve off-center in box.
- 2. Install valve box extensions as required to achieve proper valve installation at mainline depth.

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DEPOT Av North FUEL **H** 8 8

2

PIPE INSTALLATION Not to Scale

- 1 Paving.
- 2 Sand backfill compacted to the density of the existing soil.
- 3 Lateral line in Sch. 40 sleeve.
- 4 Control wires in Sch. 40 sleeve. Tape to mainline @ 4' O.C.
- 5 Undisturbed soil.
- 6 Mainline in Sch. 40 sleeve.
- Note: PVC sleeves to be 2x the diameter of the pipe or wire bundle carried.

\sim DETAIL IRRIGATION

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> 2 of 6 Sheet

PIPE / WIRE SLEEVE INSTALLATION 3 Not to Scale

LI-2

SECTION 02810

IRRIGATION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

Drawings and general provisions of Contract, including General and Supplementary Conditions and Division -1 Specification sections, apply to this section.

1.02 SCOPE OF WORK

Furnish all labor, material, equipment and services necessary to furnish and install the Irrigation System as shown on the Drawings and described herein.

A. Work Specified in this Section:

- Automatic Irrigation System including piping, fittings, sprinkler heads and accessories.
- Valves, backflow preventer, and fittings.
- Controller(s), control wire.
- Testing.
- Excavating and backfilling Irrigation System Work.
- Associated interior and exterior plumbing, and accessories to complete the system. Pipe sleeves
- Related Work Specified in other Sections:
- 1. Section 02950 Landscape Planting
- Section 02970 Landscape Maintenance
- Definition: The words Landscape Architect as used herein shall refer to the Owner's authorized representative

1.03 QUALITY ASSURANCE AND REQUIREMENTS

- A. Permits and Fees: Obtain and pay for required permits and inspections.
- Manufacturer's Directions: Manufacturer's directions and detailed drawings shall be followed in all cases where the manufacturers of the articles used in this Contract provide directions covering points not shown in the Drawings and Specifications.
- Ordinances and Regulations: All local, municipal and state laws, rules and regulations governing or relating to any portion of this Work are hereby incorporated into and made a part of these

Specifications, and their provisions shall be carried out by the Contractor. Anything contained in these Specifications shall not be construed to conflict with any of the above rules and regulations or requirements of the same. However, when these Specifications and Drawings call for or describe materials, workmanship, or construction of a better quality, higher standard, or larger size than is required by the above rules and regulations, the provisions of these Specifications and Drawings shall take precedence.

- Explanation of Drawings:
 - Due to the scale of the Drawings, it is not possible to indicate all offsets, fittings, sleeves, etc., which may be required. The Contractor shall carefully investigate the structural and finished conditions affecting all of the Work and plan the Work accordingly. furnishing such fittings, etc. as may be required to meet such conditions. Drawings are generally diagrammatic and indicative of the Work to be installed. The Work shall be installed in such a manner as to avoid conflicts between irrigation systems and planting and architectural features.
- Furnish and install all Work called for on the Drawings by notes or details whether or 2. not specifically mentioned in the Specifications.
- Do not install the Irrigation System as shown on the Drawings when it is obvious in the field that obstructions, grade differences or discrepancies in area dimensions exist that might not have been considered in design. Bring such obstructions or differences to the attention of the Landscape Architect. In the event this notification is not performed, the Contractor assumes full responsibility for any revision necessary.

1.04 SUBMITTALS

Material List:

- Furnish the articles, equipment, materials, or processes specified in the Drawings and Specifications. No substitutions will be allowed without approval as required by Division-1 "Product Substitutions" section.
- Submit complete materials list prior to performing Work. Include the manufacturer, model number and description of all materials and equipment to be used.
- Equipment or materials installed or furnished which are not specified on the Drawings may be rejected and the Contractor required to remove such materials from the site at the Contractor's expense.
- Approval of any item, alternate or substitute indicates only that the product or products apparently meet the requirements of the Drawings and Specification on the basis of the information or samples submitted.
- Manufacturer's warranties shall not relieve the Contractor of its warranty under the Contract Documents.
- B. Record Drawings
 - Provide and keep up to date and complete a record set of drawings which shall be corrected daily and show every change from the original Drawings and Specifications and the locations, sizes, and kinds of equipment. Prints for this purpose shall be kept on the site and shall be used only as a record set.
 - These Drawings shall also serve as Work progress sheets and shall be the basis for measurement and payment for Work completed. Make neat and legible annotations thereon daily as the Work proceeds, showing the Work as actually installed. These Drawings shall be available at all times for inspection.
 - Before the date of the final inspection, transfer all information from the record prints to a reproducible plan, procured from the Landscape Architect. All Work shall be neat and in ink.
 - Dimension from two (2) permanent points of reference, building corners, sidewalk, or road intersections, etc., the location of the following items:
 - a. Connection to existing water lines.
 - b. Connection to existing electrical power
 - c. Ball valves.
 - d. Routing of sprinkler pressure lines (dimension max. 100' along routing)
 - e. Sprinkler control valves.
 - Routing of control wiring.
 - g. Quick coupling or garden valves.
 - h. Other related equipment.
 - On or before the date of the final inspection, deliver the corrected and completed reproducibles to the Landscape Architect. Delivery of the reproducibles will not relieve the Contractor of the responsibility of furnishing required information that may be omitted from the prints.

C. Controller Charts:

- 1. Landscape Architect must approve Drawings before controller charts are prepared.
- Provide one controller chart for each controller supplied.
- The chart shall show the area controlled by the automatic controller and shall be the maximum size which the controller door will allow
- The chart is to be a reduced drawing of the actual system. However, in the event the controller sequence is not legible when the drawing is reduced, it shall be enlarged to a size that will be readable when reduced.

- The chart shall be on a stable (non-fading) paper, and a different color shall be used to 5. indicate the area of coverage for each station.
- When completed and approved, laminate the chart between two pieces of of plastic. These charts shall be completed and approved prior to final inspection of the Irrigation 7.
- Operation and Maintenance Manuals:
- Prepare and deliver to the Landscape Architect within ten calendar days prior to 1. completion of construction, two binders containing the following information:
 - Index sheet stating Contractor's address and telephone number, list of equipment with name and addresses of local manufacturer's representative.
 - Catalog and parts sheets on every material and equipment installed under this
 - c. Guarantee statement
- d. Complete operating and maintenance instruction on all major equipment.
- In addition to the above-mentioned maintenance manuals, provide the Owner's maintenance personnel with instructions for major equipment and show evidence in writing to the Landscape Architect at the conclusion of the Project that this service has been rendered.

Equipment to be Furnished:

- Supply as a part of this Contract the following tools:
- a. Two (2) keys for each automatic controller.
- One (1) quick coupler key and matching hose swivel for every five (5) or fraction thereof of each type of quick coupling valve installed.
- Turn over the above-mentioned equipment to the Owner at the conclusion of the oject. Evidence that the Owner has received material must be shown to the Landscape Architect before final project review.

1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

Handling of PVC pipe and fittings: Exercise care in handling, and storing of PVC pipe and fittings. Transport all PVC so as not to subject it to undue bending or concentrated external load at any point. Any section of pipe that has been dented or damaged will be discarded and, if installed, shall be replaced with new piping.

1.06 SUBSTITUTIONS

Comply with Division -1 "Product Substitutions " Section.

- 1.07 GUARANTEE
- The guarantee for the irrigation system shall be made in accordance with the following form. The General conditions and Supplementary conditions of these specifications shall be filed with Owner or his representative prior to acceptance of the irrigation system.
- A copy of the guarantee form shall be included in the operations and maintenance manual. The guarantee form shall be re-typed onto the Contractor's letterhead and contain the following
- information: GUARANTEE FOR IRRIGATION SYSTEM

We hereby guarantee that the irrigation system we furnished and installed is free from defects in materials and workmanship, and work has been completed in accordance with the drawings and specifications, ordinary wear and tear and unusual abuse or neglect excepted. We agree to repair or replace any defects in material or workmanship which may develop during the period of one year from the date of acceptance and also to repair or replace any damage resulting from the repairing or replacing of such defects at no additional cost to the Owner. We shall make such repairs or replacements within a reasonable time, as determined by the Owner, after receipt of written notification. In the event of our failure to make such repairs or replacement within a reasonable time after receipt of written notice from the Owner, we authorize the Owner to proceed to have said repairs or replacements made at our expense and we will pay the costs and charges therefore upon demand.

PROJECT: CONTRACTOR:

ADDRESS: PHONE NUMBER:

- DATE OF ACCEPTANCE:

PART 2 - PRODUCTS

2.01 MATERIALS

General: Use only new materials of brands and types noted on Drawings, specified herein, or Α. approved equals.

B. PVC Pressure Main Line Pipe and Fittings:

- Pressure main line piping shall be Dura (or approved equal) PVC Schedule 40 pipe. Pipe shall be made from NSF approved Type I, Grade I PVC compound conforming to ASTM resin specification 1785. All pipe must meet requirements as set forth in Federal Specification PS-21-70.
- PVC solvent-weld fittings shall be Schedule 40, 1-2, II-I NSF approved conforming to ASTM test procedure D2466.
- Solvent cement and primer for solvent-weld and fittings shall be of type and installation methods prescribed by the manufacturer.
- All PVC pipe must bear the following markings:
- a. Manufacturer's name
- b. Nominal pipe size
- c. Schedule or class
- d. Pressure rating in P.S.I.
- e. NSF (National Sanitation Foundation) approval
- f. Date of extrusion.
- All fittings shall bear the manufacturer's name or trademark, material designation, size, applicable I.P.S. schedule and NSF seal of approval.
- C. PVC Non-Pressure Lateral Line Piping:

D.

- Non-pressure buried lateral line piping shall be Dura (or approved equal) PVC Schedule 0 PVC pipe with solvent-weld joints.
- Pipe shall be made from NSF approved, Type I, Grade II PVC compound conforming to ASTM resin specification D1784. All pipe must meet requirements set forth in Federal Specification PS-22-70 with an appropriate standard dimension ratio.
- Except as noted in paragraphs 1 and 2 of Article 2.01B, all requirements for nonpressure lateral line pipe and fittings shall be the same as for solvent-weld pressure main line pipe and fittings as set forth in Article 2.01B of this Section.

Copper Pipe and Fittings: Type "L" copper pipe with wrought copper fittings.

F. Quick coupling valves: size and type as indicated on Drawings.

Backflow Preventer: existing to remain in place

Pressure Regulator: existing to remain in place.

I. Water Meter: existing to remain in place.

J. Control Wiring:

PVC Pipe Sleeves: All piping installed under paving, through walls or footings shall be placed

inside Schedule 40 PVC pipe sleeves of adequate size to allow free movement of the pipe in the

	 Make connections between the automatic controller(s) and the electric control valves with direct copper wire AWG-U.F. 600 volt. Common wires shall always be white in color. Install in accordance with valve manufacturer's specifications and wire chart. In no case shall wire size be less than #14. Provide permanent tag identifying valve number on each control wire within controller cabinet.
	 Wiring shall occupy the same trench and shall be installed along the same route as pressure supply or lateral lines wherever possible.
	3. Where more than one (1) wire is placed in a trench, tape the wiring together at intervals of ten (10) feet.
	4. Provide an expansion curl within three (3) feet of each wire connection. Expansion curl shall be of sufficient length at splice connection at each electric control, so that in case of repair, the bonnet may be brought to the surface without disconnecting the control wires. Lay the control wires loosely in trench without stress or stretching of control wire connectors.
	 Make all splices with Scotch-Lok #3576 Connector Sealing Packs, Rainbird Snap-Tite wire connector, or approved equal. Use one splice per connector sealing pack.
	 Field splices between the automatic controller and electrical control valves will not be allowed without prior approval of the Landscape Architect.
К.	Automatic Controller:
	1. Automatic controller shall be the type indicated on the Drawings.
	2. Final location of automatic controller shall be approved by Owner.
	3. Unless otherwise noted on the Drawings, the 120-volt electrical power to the automatic controller location shall be furnished by others. The final electrical hook-up shall be the responsibility of the Irrigation Installer.
L.	Electrical Control Valves:
	1. All electric control valves shall be of the size and type shown on the Drawings.
	2. All electric control valves shall have a manual flow adjustment.
	3. Provide and install one control valve box for each electric control valve.
М.	Control Valve Boxes:
	 Use 10" x 10-1/4" round box for all gate valves, Carson Industries #910-12B with green bolt-down cover or approved equal. Extension sleeve, where required, shall match box.
	 Use 9-1/2" x 16" x 11" rectangular box for all electrical control valves, Carson Industries 1419-12B with green-bolt down cover or approved equal.
N.	Drip Irrigation Equipment:
	1. Drip Emitters: size and type as indicated on Drawings.
	2. Pressure Regulator: size and type as indicated on the Drawings.

- 3. Y-Filter: size and type as indicated on Drawings.
- 4. Wire tubing and hose stakes and plastic tubing stakes as necessary to locate emitters.
- Polyethylene tubing and micro-tubing:
 - a. Hardie Dura Pol 1/2",3/4" Polyethylene hose or approved equal.
 - b. Hardie Dura Pol 1/4" Distribution tubing or approved equal.
- 6. Flush End Valve: size and type as indicated on Drawings.

PART 3 - EXECUTION

- 3.01 INSPECTION
- A. Site Conditions
 - All scaled dimensions are approximate. The Contractor shall check and verify all size dimensions and report any discrepancies to the Landscape Architect prior to proceeding with Work in this Section.
 - Exercise extreme care in excavating and Working near existing utilities. Contractor shall be responsible for damages to utilities which are caused by the Contractor's operations or neglect. Check existing utilities Drawings for existing utility location
 - 3. Coordinate installation of irrigation materials including pipe, so they do not interfere with utilities or other construction or cause difficulty in planting trees, shrubs and groundcovers.
 - 4. Carefully check grades before starting Work on the Irrigation System.

3.02 PREPARATION

- A. Physical Layout:
 - Prior to installation, stake out all pressure supply lines, routing and location of sprinkler
- Pipe layout must be approved by Landscape Architect prior to installation.
- Water Supply В.
 - 1. Connect the irrigation system to water supply point of connection indicated.
 - Make connections at approximate locations shown. Contractor is responsible for minor changes caused by actual site conditions.

C. Electrical Supply:

- Make electrical connections for automatic controller to electrical points of connection
 - as indicated. Make connections at approximate locations as shown. Contractor is responsible for minor changes caused by actual site conditions.

3.03 INSTALLATION

A. Trenching:

- Dig trenches straight and support pipe continuously on bottom of trench. Lay pipe to an even grade. Trenching excavation shall follow layout indicated on Drawings and as
- Provide for a minimum of eighteen (18) inches cover for all pressure supply lines.
- Provide for a minimum of twelve (12) inches cover for all non-pressure lines.
- Provide for a minimum of six (6) inches cover for all drip irrigation lines unless otherwise specified in the Drawings.
- 5. Provide for a minimum of eighteen (18) inches cover for all control wiring.

B. Backfilling:

- 1. Do not backfill trenches until all required tests are performed. Carefully backfill trenches with the excavated materials approved for backfilling, consisting of earth, loam, sandy clay, sand, or other approved materials, free from large clods of earth or stones. Mechanically compact backfill in landscaped areas to a dry density equal to adjacent undisturbed soil in planting area. Backfill will conform to adjacent grades without dips, sunken areas, humps or other surface irregularities.
- Place a fine granular material backfill to a depth of 6" immediately above all lines. No foreign matter larger than one-half (1/2) inch in size will be permitted in the initial
- Flooding of trenches will be permitted only with the approval of the Landscape 3. Architect
- If settlement occurs and subsequent adjustments in pipe, valves, sprinkler heads, lawn or planting, or other construction are necessary, make all required adjustments without cost to the Owner.

Trenching and Backfill Under Paving:

Backfill trenches located under areas where paving will be installed with six 6" below the pipe and three inches (3") above the pipe) and compact 95% compaction, using manual or mechanical tamping devices. Compact trenches for piping to equal the compaction of the existing adjacent undisturbed soil and leave in a firm unyielding grade. Set in place, cap and pressure test, all piping under paving prior to the paving Work.

2. Piping under existing walks is generally done by jacking, boring or hydraulic driving, but where any cutting or breaking of sidewalks and/or concrete is necessary, it shall be done and replaced by the Contractor as a part of the Contract cost. Obtain permission from Landscape Architect to cut or break pavement. No hydraulic driving will be permitted under concrete paving.

Provide for a minimum cover of eighteen inches (18") between the top of the pipe and the bottom of the aggregate base for all pressure and on-pressure piping installed under asphaltic concrete paving. Assemblies

Routing of irrigation lines as indicated on the Drawings is diagrammatic. Install lines (and various assemblies) in such a manner as to conform with the details.

- Install no multiple assemblies in plastic lines. Provide each assembly with its own
- Install all assemblies specified herein in accordance with respective details. In absence of detail Drawings or Specifications pertaining to specific items required to complete the Work, perform such Work in accordance with best standard practice with prior approval of the Landscape Architect.
- Clean all PVC pipe and fittings before installation. Installation and solvent welding 4. methods shall be as recommended by the pipe and fitting manufacturer. On PVC to metal connections, work the metal connections first. Use teflon tape, or
- approved equal, on all threaded PVC, and on all threaded PVC to metal joints. Where threaded PVC connections are required, use threaded PVC adapters into which the pipe may be welded. Do not install male metal to female PVC connections.
- Line Clearance: All lines shall have a minimum clearance of six inches (6") from each other and om lines of other trades. Parallel lines shall not be installed directly over one another. Automatic Controller: Install per manufacturer's instructions. Connect remote control valves to

controller in numerical sequence as shown on the Drawings.

- G. Line Voltage Wiring for Automatic Controller:
- 120-volt stub-out to controller locations will be provided by electrical installer. 2. Provide the 120-volt power connection to the automatic controller.

D.

All electrical Work must conform to local codes, ordinances and union authorities having jurisdiction

H. Remote Control Valves:

- Install where shown on Drawings and details. When grouped together, allow at least twelve (12) inches between valves. Install each remote control valve in a separate valve box. Label each controller and station number at the valve with a 2-1/4" x 2-3/4" polyurethane I.D. tag attached to the control wire of the valve.
- 2. Install drip emitters only after flushing of the system has been accomplished to the satisfaction of the Landscape Architect. I. Drip Emitters:
 - Bring drip emitters to the soil surface with transfer tubing attached with a barb fitting to buried polyethylene tubing. Surface mount and stake emitters with transfer tubing stake. If emitters are located below the soil surface, install a bug cap at the end of each transfer tubing line. Locate emitters equally spaced around the plant at the edge of the rootball or as shown in the detail Drawings.

3.04 TEMPORARY REPAIRS

The Owner reserves the right to make temporary repairs as necessary to keep the irrigation system equipment in operating condition. The exercise of this right by the Owner shall not relieve the Contractor of responsibility under the Contract Documents.

3.05 EXISTING TREES AND SHRUBS

Where it is necessary to excavate adjacent to existing trees and shrubs, use all possible care to avoid , tree roots and shrubs. Excavate by hand only in areas where two inch (2") and larger ro occur. Tunnel under all roots two inches (2") and larger in diameter. Wrap roots in heavy burlap to prevent scarring or excessive drying. Where a ditching machine is run close to trees having roots smaller than two inches (2") in diameter, hand trim the wall of the trench adjacent to the tree, making clean cuts through. Paint roots one inch (1") and larger in diameter with two (2) coats of tree paint. Close trenches adjacent to tree within twenty-four (24) hours, and where this is not possible, shade the side of the trench adjacent to the tree with burlap or canvas.

3.06 FIELD QUALITY CONTROL

- A. Adjustment of the System:
 - 1. If it is determined that adjustments in the irrigation equipment will provide proper and more effective coverage, make adjustments prior to planting. Adjustments may also include changes in emitter sizes as required.

B. Testing of Irrigation System:

- Request the presence of the Landscape Architect in writing at least forty-eight (48)
- hours in advance of testing. E-mail or fax notification is acceptable.
- Test all pressure lines under hydrostatic pressure of 150 pounds per square inch and prove watertight. NOTE: Testing of pressure mainlines shall occur prior to installation of electrical control
- Test all piping under paved areas under hydrostatic pressure of 150 pounds per square inch and prove watertight prior to paving.
- Sustain pressure in lines for not less than two (2) hours. If leaks develop, replace joints and repeat test until entire system is proven watertight.
- Make all hydrostatic tests only in the presence of the Landscape Architect or other dulyauthorized representative of the Owner. Do not backfill trenches until it has been duly inspected, tested, and approved.
- 6. Furnish force pump and all other necessary test equipment.
- 7. When the irrigation system is completed, perform a coverage test in the presence of the Landscape Architect to determine if the water coverage for planting areas is complete and adequate. Furnish all materials and perform all Work required to correct any inadequacies of coverage due to deviations from Drawings, or after bringing this to the attention of the Landscape Architect. This test shall be accomplished before any
- 8. Upon completion of each phase of Work, test and adjust the entire system to meet site

groundcover is planted.

requirements.

3.07 MAINTENANCE

The entire irrigation system, with the exception of drip tubing and emitters, must be under full automatic operation prior to any planting.

3.08 CLEAN-UP

Clean-up as each portion of Work progresses. Remove refuse and excess dirt from the site, sweep all walks and paving clean, and repair any damage done to the Work of others to original conditions.

3.09 FINAL OBSERVATION PRIOR TO ACCEPTANCE

- Operate each system in its entirety for the Landscape Architect at time of final observation. Rework any items deemed not acceptable by the Landscape Architect to the complete satisfaction of the Landscape Architect.
- Show evidence to the Landscape Architect that the Owner has received all accessories, charts, record drawings, and equipment as required before final observation can occur.
- 3.10 OBSERVATION SCHEDULE
 - Notify the Landscape Architect in advance for the following observation meetings, according to Α. the time indicated:

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- 1. Pressure supply line installation and testing: 48 hours
- Automatic controller installation and wire installation: 48 hours
- Lateral line and emitter installation: 48 hours
- 4. Coverage test: 48 hours
- 5. Final inspection: 7 days.

When observations have been conducted by other than the Landscape Architect, show evidence in writing of when and by whom these observations were made.

No site observations will commence without record drawings. In the event that the Contractor calls for a site visit without record drawings, without completing previously noted corrections, or without preparing the system for said visit, he shall be responsible for reimbursing the Owner for the Landscape Architect's time for the site visit at his current billing rates per hour portal to portal (plus transportation costs) for inconvenience. No further site visits will be scheduled until this charge has been paid and received.

END OF SECTION

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Botanical Name	Common Name	Quant.	Size	Notes
Erythrina crista-galli	Cockspur Coral Tree	1	24'' Box	Multi-trunk
Syagrus romanzoffianum	Queen Palm	1	10' Trunk Height	-
Syagrus romanzoffianum	Queen Palm	2	6' Trunk height	-
Syagrus romanzoffianum	Queen Palm	2 8' Trunk Height		-
bs and Groundcove	rs			
Botanical Name	Common Name	Quant.	Size	Notes
Bignonia capreolata	Orange Cross Vine	2	15 Gal	Train to adjacent structure per detail
Cordyline fruticosa 'Soledad Purple'	Soledad Purple Ti Plant	10	5 Gal	-
Cycas revoluta	Sago Palm	5	15 Gal	-
Dietes 'John's Runner'	Dwarf Fortnight Lily	20	1 Gal	-
Distictis 'Rivers'	Royal Trumpet Vine	2	15 Gal	Train to adjacent structure per detail
Lomandra longifolia 'Breeze'	Dwarf Mat Rush	23	1 Gal	-
Phormium 'Wildwood'	Black New Zealand Flax	3	15 Gal	Alternate plants (if not available): Cordyline 'Renegade' or Phormium 'Black Adder'.
Pittosporum tenuifolium 'Golf Ball'	Kohuhu	12	5 Gal	-
Polygala fruticosa 'Petite	Swoot Dog Shruh	ß	5 Cal	

Shrubs, Groundcovers and Perennials (Hatched Areas)

Sweet Pea Shrub

Botanical Name	Common Name	SF	Size	Notes	Quant
Carex tumulicola	Berkeley Sedge	415 SF	1 Gal	Plant @ 24'' O.C.	107
Convolvulus sabiatius	Ground Morning Glory	162 SF	1 Gal	Plant @ 24'' O.C.	41
_ Dianella tasmanica 'Tasred'	Tasred Flax Lily	339 SF	1 Gal	Plant @ 30'' O.C.	54
‡ `o ku7`o		288 SF	Sod	Available at Valley Sod Farm, phone: (818) 892-7258. Order 5% extra for repair and replacement.	N.A.

5 Gal

6

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DEPOT Fairview FUEL North Η 8

Planting Notes:

Butterfly

1. All plants are identified by typical symbols. Plant quantities are approximate and provided for the contractor's convenience. In the event of discrepancies in plant count, quantities indicated by plant symbols on the plan prevail.

Take two representative soil samples from the project site and source of any imported topsoil. Locations of soil samples must be approved by the Landscape Architect. Send soil samples to Wallace Soil Testing Laboratory 310-615-0116 or an approved equal for testing of suitability for ornamental planting as specified on the drawings. Request from soils lab that only organic amendments and fertilizers are included in the recommendations. Make adjustments to the rate and analysis of fertilizer & amendments as recommended to provide a suitable backfill mix for planting. Notify the Landscape Architect of any potential problems which may result due to harmful substances found in the soil. Failure to act as specified may result in contractor assuming financial responsibility for any damage to plants.

3. Contractor is responsible for finish grades and for fine grading required for surface drainage and uniformity to the satisfaction of the Landscape Architect. Advise Landscape Architect of drainage problems and make recommendations for solution.

4. Grades and flow lines must be maintained during irrigation and planting operations. Contractor may not alter established grade and flow lines without the knowledge and permission of the Landscape Architect.

5. The Landscape Architect reserves the right to review all plant material at the nursery prior to delivery to job site. In lieu of nursery review the Landscape Architect may request photos and/or specifications of plant material to be provided prior to delivery.

6. Landscape Architect reserves the right to refuse plants delivered to site that are substandard. Replacement plants are to be supplied by contractor at no additional cost to owner.

7. Plant materials and installation to meet highest quality industry standard. Locate and secure all specified plants within two weeks of award of contract and show proof of to Landscape Architect in writing that plants have been secured. Notify Landscape Architect immediately of any plant sourcing difficulty.

8. Include in the contract price a sufficient amount to allow for supply and installation of additional plants to be used at the direction of the Landscape Architect. Include 5 - 15 gallon, 10 - 5 gallon, 20 - 1 gallon. Provide the unit price for such plants in the bid and credit the owner for each plant not installed.

9. Contractor shall maintain all installed plants (on a weekly basis) for a period of 90 days from date of completion of installation. Failure eradicate weeds and maintain areas may result in an extension of the maintenance period. Guaranty plant material 5 gallon or smaller for a period of 90 days from date of final review. Replace dead plants and plants not in vigorous condition, without cost to owner, as determined by Landscape Architect at the end of warranty period. Guaranty 15 gallon plants and larger, for 1 year from date of final review. Trees called out as "transplanted" shall be included in the warranty period.

10. Notify Landscape Architect of intended planting schedule a minimum of two weeks prior to planting.

11. Set out all plant materials as shown on plan. Final locations must be approved by the Landscape Architect prior to planting.

12. Plant crown to be 2" above adjacent grade for 15 gallon and larger plants; 1" above adjacent grade or plants smaller than 15 gallon.

13. Install all plants per details.

14. Stake trees according to industry standards per details. Review with Landscape Architect prior to work.

15. Contact Landscape Architect for decision regarding proposed plant substitutions 4 weeks prior to installation.

16. All plants delivered to the site must have legible identification tags.

17. Plant groundcovers adjacent to shrubs and/ or trees 1.5 times the distance of their specified spacing away from the stems of the adjacent shrubs and trees. Groundcovers adjacent to curbs and pavement shall be spaced at specified spacing away from paved areas.

18. Completely eradicate all bermuda, kikuyu grass, ivy, and other weed growth or other visible or alleged invasive weeds from areas within project limits prior to installing planting.

19. Provide and install bark mulch over all shrub and groundcover areas. Use ES-2 mulch sourced from Agromin: (800) 247-6646. Spread mulch evenly over all shrub and groundcover areas to a depth of 3" (three inches). Keep mulch away from plant stems. Submit mulch samples to Landscape Architect for approval prior to purchase and delivery.

20. Preserve and protect all existing trees unless otherwise noted.

21. Palm trees installed in limited planting spaces that require staking for stability may be supported by a 1" diameter galvanized pipe equal in height to the trunk height of the palm to the base of the first frond. Drive the pipe 48" deep below finish grade and/or 12" into subgrade.

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SECTION 02950

LANDSCAPE PLANTING

PART 1 - GENERAL

1.01 GENERAL CONDITIONS Drawings and general provisions of Contract, including General and Supplementary Conditions and Division -1 Specification sections, apply to this section.

1.02 SCOPE OF WORK

- Furnish all labor, materials and equipment necessary to provide and install all trees, plants and groundcovers as shown on the Drawings. The Contractor's work shall include:
 Prepare soil for planting and furnish all soil amendments.
 - Furnish and install all plant materials per the planting plan.
 - 3. Prune plants as required.
 - 4. Stake, tie and guy plant materials as specified
 - 5. Dispose of trash, debris and surplus material.
 - 6. Maintain the planting until such time as the project has been accepted.
 - Guarantee plant material smaller than 15 gallon for a period of 90 days to commence at final acceptance of project. Guarantee plant material 15 gallon or larger for a period of one year to commence at final acceptance of project.
- Related Work Specified in Other Sections
- Section 02810 Irrigation System
 Section 02950 Landscape Planting.
- Definition: The words Landscape Architect as used herein refer to the Owner's authorized representative.

1.03 QUALITY ASSURANCE

- A. Source Quality Control
 - Submit documentation to Landscape Architect within fifteen (15) days after award of Contract that all plant material is secured for the project. Contractor is responsible for all material listed on the plant list. Any and all substitutions due to unavailability must be requested in writing prior to confirmation of ordering.
 - 2. Plants are subject to approval of Landscape Architect at place of growth or upon delivery for conformity to Specifications. Such approval will not impair the right of review and rejection during progress of the work. Submit written request for review of plants at place of growth to Landscape Architect. State the place of growth and quantity

of plants to be reviewed. Landscape Architect reserves the right to refuse review at place of growth.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Delivery
 - Deliver fertilizer to site in original unopened containers bearing manufacturer's guarantied chemical analysis, name, trademark, and conformance to State Law.
 Furnish Landscape Architect with copies of receipts for all amendments Specified in
 - Purnish Landscape Architect with copies of receipts for all amendments specified in Section 2.01 - Materials.
 Deliver all plants with legible identification labels. Use durable waterproof labels with
 - water-resistant ink which will remain legible.
 Protect plant material during delivery to prevent damage to root ball, desiccation of leaves, or any other defect.
 - Notify the Landscape Architect seven (7) days in advance of delivery of all plant materials and submit an itemized list of the plants in each delivery.
- B. Storage:
 - 1. Store plant material in shade and protect from weather.
 - 2. Maintain and protect plant material in a healthy, vigorous condition at all times.
- C. Handling:

Exercise care in handling, loading, unloading and storing of plant materials. Plant
materials that have been damaged in any way will be refused, and must be removed
from the site. If installed, such plants will be replaced with undamaged materials at the
Contractor's expense.

1.05 JOB CONDITIONS A. Site Conditions

- Verify the locations of underground utilities prior to excavation. Repair damage to any such utilities resulting from the Contractor's work at Contractor's expense.
- 2. Investigate the site for any subsurface drainage or unusual soil conditions which might prove detrimental to the success of the design. Should any such condition exist, notify the Landscape Architect and submit a proposal for corrective measures and their cost. Should the contractor fail to provide such notification, he will be held solely responsible for any corrections deemed necessary by the Owner and the Landscape Architect should damage occur.
- B. Field Conditions:
- 1. The planting plan is diagrammatic. Scaled dimensions are approximate. Prior to proceeding with installation work, verify all dimensions with field conditions and notify

the Landscape Architect of any deviation on the plan. Landscape Architect is the final authority in interpretation of the plan and in accommodation of unforeseen field conditions.

PART 2 - PRODUCTS 2.01 MATERIALS

- A. The following soil amendments and fertilizers are to be used for bid price basis.
- B. All materials shall be of standard, approved and first-grade quality and in prime condition when installed and accepted. Deliver any commercially processed or packaged material to
- the site in the original unopened container bearing the manufacturer's guaranteed analysis.
 Supply the Landscape Architect with samples of all supplied materials accompanied by analytical data from an approved laboratory source illustrating compliance or bearing the manufacturer's guarantied analysis.
 Organic Amendment: "Organic Compost" from All Around Irrigation (805-684-3115), Valley
- Compost (805) 965-6617 or Foothill Soil (661) 254 0867.
 Compost derived from processed organic materials consisting of chipped, shredded, or ground recycled wood products, green waste, and bio-solids mixed and composted
- according to US EPA, 40 CFR, part 503.
 0.56% to 0.84% N based on dry weight.
- 3. Particle Size:
- 95% 100% passing 6.35 mm standard sieve 80% - 100% passing 2.33 mm standard sieve
- Salinity: The saturation extract conductivity shall not exceed 3.0 milliohms/centimeter at 25 degrees centigrade as determined by saturation extract method.
- 5. Iron content: Minimum 0.08% dilute acid soluble Fe on dry weight basis.
- Organic Content: Minimum 92% based on dry weight and determined by ash method.
 Dark brown to black in color, not malodorus or steaming. Temperature should not
- exceed 95° Fahrenheit.
- 8. Shall contain no paint, petroleum products, herbicides, fungicides, or other chemical residues that would be harmful to plant or animal life. Inert contaminants such as glass, plastic, wood, metal dirt, or rocks shall not exceed 0.1 %
- 9. pH: 6.5-7.5
- D. Soil Amendments and Conditioners: Contractor to obtain soil analysis after rough grading has been completed. Submit soil analysis to Landscape Architect for approval. Landscape Architect to approve Soil Amendment and Fertilizer Plan prior to implementation. Many soils in Southern California tend to be alkaline. Add organic matter to bring soil pH to 6.5 - 7.0.
- Soil sulfur: If insufficient sulfur is found in the soil, increase amount of compost used as a soil amendment. Soils commonly low in sulfur are sandy soils that have been leached

of nutrients. Balance leaching with the addition of organic matter. If soil sulfur is found to be extremely deficient, use E. B. Stone Soil Sulfur to help maintain green leaves and aid in nitrogen absorption of plants.

- Iron sulfate: 20% Iron (expressed as metallic iron), derived from ferric and ferrous sulfate, 10% sulfur (expressed as elemental).
- 3. Calcium Carbonate: 95% lime as derived from oyster shells.
- 4. Gypsum: Agricultural grade product containing 92% minimum calcium sulfate.
- 5. Zinc: Agricultural grade zinc sulfate (36% elemental zinc).
- Gro-Power Plus (bacteria included) with 1.00% soil penetrant and consisting of the following percents by weight: 5-nitrogen, 3-phosphoric acid, 1-potash, 70-humus, 15humic acids.
- 7. GroLife mycorrhizal transplant inoculant .
- 8. Bradford's Horticultural vinegar.
- Corn gluten based pre-emergent weed killer, such as "Safe-n-Simple Pre emergent Weed Killer".
- PLANT MATERIAL

2.02

- Plant material shall conform to the California State Department of Agriculture's regulation for nursery inspections, rules and rating. All plants shall have a normal habit of growth and shall be sound, healthy, vigorous and free of insect infestations, plant diseases, sunscalds, fresh abrasions of the bark, excessive abrasions, or other objectionable disfigurements. Trees shall have sturdy trunks, shall have well hardened and vigorous, fibrous root systems which are not root- or pot-bound. In case the sample plants are found to be defective, the Landscape Architect reserves the right to reject the entire lot or lots of plants represented by the defective samples. The Landscape Architect is the sole judge of acceptability. Any defective plants unsuitable for planting will be considered as samples provided at the expense of the Contractor.
- The sizes of the plants will correspond with that normally expected for species and variety of commercially available nursery stock or as specified on Drawings. The minimum acceptable size of all plants measured before pruning with the branches in normal position, shall conform to the measurements, if any, specified on the Drawings in the list of plants to be furnished. Plants larger in size than Specified may be used with the approval of the Landscape Architect, but the use of larger plants will make no change in the Contract price.
- . All plants not conforming to the requirements herein Specified shall be considered defective. Such plants, whether in place or not, shall be marked as rejected and immediately removed from the site of work and replaced with new plants at the Contractor's expense. The plants shall be of the species, variety, size and condition Specified herein or as shown on the Drawings. Under no condition will there be any substitutions of plants or sizes listed on the accompanying plans, except with the expressed consent of the Landscape Architect.
- D. Pruning: At no time shall trees or plant materials be pruned, trimmed or topped prior to delivery. Any alteration of their shape shall be conducted only with the approval and when in the presence of the Landscape Architect.
- E. Plant material shall be true to botanical and common name and variety as Specified in the latest edition of "Annotated Checklist of Woody Ornamental Plants in California, Oregon and Washington", published by the University of California School of Agriculture.
- F. Nursery Grown and Collected Stock:
- Grown under climatic conditions similar to those in locality of project.
 Container-grown stock in vigorous, healthy condition, not root-bound or with root
- system hardened off.3. Use only flatted or liner stock plant material which is well established in removable
- containers or formed homogeneous soil sections.
- Substitute plant material will not be permitted unless specifically approved in writing by the Landscape Architect.
- Backfill Mix:Backfill all planting holes (except for palms) with the following:
- 1. Organic amendment/ Compost: 20% by volume.
- 2. GroLife mycorrhizal transplant inoculant in backfill mix at the following rates:

Rate of application in ounces per plant

¼ cup, dust rootball

42", 48" box

60" box

- 3. Backfill field-grown palms with washed plaster sand tamped firm. Over-excavate hole as
- required to stabilize palms.
- Guying and Staking Materials: Install per plant list.
 Tree stakes: as specified on plan and details.
- 6. Ties: as specified on plan and details.
- Tree Guying Systems: as specified on plan and details.
- 8. Water: Furnished by Owner; transport as required
- 9. Mulch: as specified on plan and details.

PART 3 - EXECUTION

3.01 INSPECTION

- A. Obtain certification that final grades to within .10' have been established prior to commencing planting operations. Provide for inclusion of all amendments, settling, etc. Contractor shall be responsible for shaping all planting areas as indicated on plans or as directed by the Landscape Architect.
- Inspect trees, shrubs and liner stock for injury, insect infestation and trees and shrubs for improper pruning.
- . Do not begin planting until deficiencies are corrected or plants replaced.

3.02 GRADING AND SOIL PREPARATION

- A. After approximate finished grades have been established, soil shall be conditioned and fertilized in the following manner. Materials shall, at the following rates, be uniformly spread and cultivated thoroughly by means of mechanical tiller into top 6" of soil per 1,000 square feet:
 - Application Rates: 150 lbs. Gro-Power Plus
 - 3 cubic yards Organic Composi
- ** Additional amendments may be necessary pending the results of a soil analysis. Before starting soil preparation, submit results to Landscape Architect for approval and/or changes.
- At the time of planting, the upper four (4) inches of all areas to be planted shall be free of stones, stumps, or other deleterious matter 1" in diameter or larger, and shall be free from all wire, plaster or similar objects or construction debris that would hinder to planting or
- maintenance. Final Grades:

D. Weed Control:

Grading Plan.

C.

4. Surface drainage shall be away from all building foundations.

Planting Specifications Continue on Next Sheet

5. Eliminate erosion scars prior to commencing maintenance period.

Minor modifications to grade may be required to establish the final grade.
 Finish grading shall insure proper drainage of the site as depicted on the Civil Engineer's

3. All areas shall be graded so that the final grades will be 2" below adjacent paved areas,

sidewalks, valve boxes, headers, clean-outs, drains, manholes, etc., or as indicated on

WIRE MESH VINE SUPPORT ON EXISTING VAPOR BURNER Not to Scale

Install wire mesh entire height of vapor burner (+/- 40 Square feet of wire mesh).

> 4"x4" steel mesh field welded to existing vapor burner frame: McNichols square woven opening wire mesh, 4" Square Opg. Lock Crimp. Center steel mesh on frame. Grind all welds smooth. Paint wire mesh to match vapor burner frame.

4 VINE ATTACHMENT Not to Scale

SECTION

- 12 Gauge copper wire secured to eye bolt.
 2 Stainless steel eye bolt in ¹/₂" expansion
- 3 Clear plastic nursery tape.
- 4 Building wall or column.

5 Tie vines onto wire supports with plastic tape.

- Notes: 1. For vine attachment to wood posts, use galvanized eye screws and loosely tie vines to eye screws with clear plastic nursery tape.
 - 2. Landscape Architect will determine wire pattern for vine and espalier attachment in field

3. Allow 50 linear feet of 12 gauge galvanized wire and 10 eyebolts for each vine installation.

- 1 Edge of paving, walk, wall, etc.
- 2 10" Minimum deep tilled planting bed over scarified subgrade.
- 3 Groundcover.
- 4 Install 2" thick mulch layer prior to planting groundcover.
- 5 Finish grade.
- 6 Amended soil
- 7 Unamended subgrade
- Note: Locate plants spaced equal distance (D) from each other as shown. D = as shown on planting plan.

Pinnate Palms

5

GROUNDCOVER PLANTING Not to Scale

Palmate Palms

soil in boxed palms).

tree prior to delivery.

1 Finish grade for field dug palms (or top of

Notes:

1. Trunk height is measured from finish grade to just above second to lowest frond.

2. No green fronds shall be removed from palm

T

6

TRUNK HEIGHT DEFINITION Not to Scale

- 1 Rootball: set on firm soil at bottom of pit.
- 2 Mulch over basin per specifications.
- 3 Backfill: see specifications.
- 4 6" High temporary berm.
- 5 6" Diameter by 18" deep augured holes backfilled with amended soil. Roughen sides of holes to prevent glazing.

15 gal trees: 3 holes at outer edge of rootball.

24" box & 36" box trees: one hole at each corner and one in the center.

Larger than 36" box trees: one hole at each corner, one each side, and one in the center (9 total).

- 6 Set rootball with crown 1" above finish grade.
- Undisturbed soil. If necessary, compact subsoil and form pedestal to prevent settling.
- 4" Diameter perforated PVC pipe with removable plastic cap:
 (2) per tree for trees 24" box and smaller.
 (4) per tree for trees 36" box to 60" box.
 (6) per tree for trees larger than 60" box.

1 Two nylon reinforced ties: 1" Wide figure

equal. Adjust to allow for tree

2 Attach to stake with galvanized roofing

minimum into undisturbed subgrade

 $3 \quad 2\frac{1}{2}$ " Diameter lodgepole. Drive 18"

1. Refer to planting detail for hole

2. Modify installation as required

3. See planting notes for information

regarding palm staking.

for trees in public right of way.

movement.

outside rootball.

size, backfill, etc.

8 "Super Tie I" tree ties or approved

erin o carroll landscape architect 105 West De La Guerra Street Unit J Santa Barbara CA 93101 805.364.5075 www.erinocarroll.com

FUEL DEPOT 80 North Fairview Ave. 8 '#° · · ·

TREE PLANTING W/ DRAIN PIPES Not to Scale

TREE STAKING Not to Scale

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Date/ Issue 2015.11.23 DRB Submittal

Sheet 5 of 6

LP-2

Planting Specifications Continued from Previous Sheet

- After soil preparation and establishment of final grades prior to any planting, the contractor shall irrigate thoroughly for a period of time, two to three weeks or until the weed seeds have germinated. When there is sufficient weed seed germination, the contractor shall apply Bradford's horticultural vinegar with Yucca extract (available from mail order suppliers such as The Pest Depot), according to the directions.
- Clear and remove dead weeds least %" below the surface of the soil over the entire area to be planted.
- Maintain site weed-free utilizing mechanical and organic weed control treatment (Accepted weed control products products are ones that bear the Organic label) until final acceptance by Owner. If weed seeds persist, use organic pre-emergent with Corn Gluten as the active ingredient.
- Imported Topsoil (if needed): Fertile, friable, natural topsoil of character and texture similar to the project site soil; without admixture of subsoil material, obtained from a well-drained arable site, reasonably free from clay, lumps, coarse sands, stones, plants, roots, sticks, and other foreign materials, with an acidity range of between pH 5.8 and 8.2. The sodium absorption ratio (SAR) shall not exceed 3 and the electrical conductivity (Ece) of the saturation extract of this soil shall not exceed 3.0 milliohms per centimeter at 25 degrees centigrade. The boron content shall be no greater than 1 part per million as measured on the saturation extract. In order to insure conformance, samples of the imported soil shall be submitted to an approved laboratory for analysis prior to, and following, backfilling.
- F. Installation of Imported Topsoil: Provide and install imported topsoil mix in all raised planters to a finish grade of 2" below the top of the planter. Allow for settling. Refer to drawings for depth of planters.
- G. Disposal of Excess Soil: Dispose of any unacceptable or excess soil at an offsite location approved by Owner.
- 3.03 PLANTING INSTALLATION:
- A. General:
 - Plant when weather and soil conditions are suitable and in accordance with locally accepted practice.
- Place only as many plants as can be installed and watered on that same day.
 Layout of Major Plantings: Landscape Architect must approve layout of all containerized plants in their containers before any plant pits are dug. If any underground construction or utility lines are encountered in the excavation of planting areas, other locations for planting may be selected by the Landscape Architect. It is the Contractor's responsibility to confirm the location and depth of all underground utilities and obstructions. Refer to Engineer's plans.
- C. Planting of Trees and Shrubs:
 - Excavation for planting shall include the stripping and of all acceptable topsoil encountered within the areas to be excavated for trenches, tree holes, plant pits, and planting beds.
 - All excavated holes shall have vertical sides with roughened surfaces and shall be of a size that is twice the diameter and equal to the depth of the root ball for all trees and shrubs. Install plant with top of rootball 1" above adjacent grade.
 - Protect all planting areas from excessive compaction when delivering plants or other material onto the planting site.
 - Remove excess soil generated from the planting holes and not used as backfill or in establishing the final grades.
 - Can Removal: after removing plant, superficially cut edge roots with knife on three (3) sides and bottom, and gently pull roots outward from the rootball.
 - 6. Box Removal:
 - 1. Remove bottoms of plant boxes before planting.
 - Remove sides of box without damage to root ball after positioning plant and partly backfilling.
 - 3. Center plant in pit or trench.
 - 4. Face plants with fullest growth into prevailing wind.
 - Set plant plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
 - After the plant has been placed, add backfill to the hole to cover approximately one-half (1/2) of the height of the root ball. Water to thoroughly saturate the root ball and adjacent soil.
 - 7. Raise all plants which settle deeper than the surrounding grade to the correct level.
 - 8. Fill the remainder of the hole with backfill mix and tamp firm.
 - 9. After backfilling, construct an earthen basin around each plant. Each basin shall be of a depth sufficient to hold at least two (2) inches of water. The basins shall be constructed of amended backfill materials. Remove basin in all turf areas after initial watering. Add Organic Worm Casting in liquid form at the rate recommended by the manufacturer to each 1 gallon of water and water plants at the following rates:
 - 1 quart per each plant from flats 1 gallon per 1 gallon plant
 - 3 gallons per 5 gallon plant 5 gallons per 15 gallon plant
 - 10 gallons per 24" box 20 gallons per 30" box
 - 30 gallons per 36" box Add 20 gallons for each incremental size increase for boxes over 36"
- D. Pruning: Limit pruning to the minimum necessary to remove injured twigs and branches, and the shape the plant material as directed by the Landscape Architect. Pruning may not be done prior to delivery of plants.
- Staking and Guying: Stake trees if directed to do so by the Landscape Architect or as depicted in the detail Drawings. Complete staking of all trees immediately after planting. Install all stakes plumb and as indicated in details. Allow for staking of all trees, providing unit price, and credit Owner for all trees not staked.
- F. Planting of Groundcovers:
 - Leave flat-grown plants in those flats until transplanting. Keep the flat's soil moist so that it will not fall apart when lifting the plants.
 - Plant groundcover in straight rows and evenly spaced, unless otherwise noted, and at intervals called out in the Drawings. Use triangular spacing unless otherwise noted on the Drawings.
 - 3. Gently water plants after planting until each hole is soaked to its full depth.
 - 4. Exercise care at all times to protect the plants after planting. Repair any damage to plants immediately.

3.04 CLEAN-UP

E.

- A. After all planting operations have been completed, remove all trash, excess soil, empty plant containers, and rubbish from the property. Repair all scars, ruts or other marks in the ground caused by this work and leave the ground in a neat and orderly condition throughout the site. Pick up all trash resulting from this work no less frequently than each Friday before leaving the site, once a week, and/or the last working day of each week. Remove all trash from the site.
- B. Leave the site area broom-clean and wash down all paved areas within the Contract area, leaving the premises in a clean condition. Leave all walks in a clean and safe condition.
- 3.05 OBSERVATION SCHEDULE
- Notify the Landscape Architect in advance for the following site visits, according to the time indicated:
- 1. Plant material review: 48 hours
- 2. Plant layout review: 48 hours
- 3. Pre-maintenance: 7 days
- 4. Mid- maintenance: 7 days
- 5. Final walk-through: 7 days.
- When observations are conducted by someone other than the Landscape Architect, show evidence in writing of when and by whom these reviews were made.

END OF SECTION

scheduled until this charge has been paid and received.

e sodium I of the t 25 degrees measured on rted soil shall be ckfilling.

SECTION 02970

LANDSCAPE MAINTENANCE

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

1.02 SCOPE OF WORK

Drawings and general provisions of Contract, including General and Supplementary Conditions and Divisio Specification sections, apply to this section.

- A. Work Specified in the Section: Furnish all labor, material, equipment and services require maintain the landscape in an attractive condition as specified herein for a <u>period of ninet</u> <u>days</u>.
- B. Related Work Specified in other Sections:
- 1. Section 02810 Irrigation System
- 2. Section 02950 Landscape Planting.
- 3. Section 02970 Landscape Maintenance
- C. Definition: The words Landscape Architect as used herein shall refer to the Owner's auth
- 1.03 QUALITY ASSURANCE
- Work force: Contractor's representative shall be experienced in landscape maintenance and shall have reconsister training in ornamental horticulture and shall be fluent in English.

1.04 MAINTENANCE PERIOD

- A. Continuously maintain all areas involved in this Contract during the progress of the Work during the maintenance period until final acceptance of the Work by the Owner's authorit resentative.
- B. Improper maintenance or poor condition of any planting at the termination of the schedu maintenance period may cause postponement of the final completion date of the Contra Maintenance shall be continued by the Contractor until all Work is acceptable.
- C. In order to carry out the plant establishment Work, the Contractor shall furnish sufficient adequate to perform the Work during the plant maintenance period.
- D. Criteria for Start of Maintenance: Maintenance period shall not start until all elements of struction, planting, and irrigation for the entire Project are Substantially Complete. Project not be segmented into maintenance phases unless specifically authorized in writing by Or authorized representative.
- E. Request an inspection to begin the plant maintenance period after all planting and relate has been completed in accordance with the Contract Documents. The project will not be
- ered complete for the maintenance period to begin unless all plants have been installed of mulch and any other surface protection in place. If such criteria are met to the satisfaction Landscape Architect, a field notification will be issued to the Contractor to establish the e beginning date of the period.
- F. Any day when the Contractor fails to adequately maintain plantings, replace unsuitable p do weed control or other Work, as determined necessary by the Landscape Architect, wil credited as one of the plant maintenance Working days.
- G. The Contractor's maintenance period will be extended if the provisions required within t ings and Specifications are not fulfilled.

1.05 GUARANTEE AND REPLACEMENT

- A. Guarantee all plant material installed under the Contract against any and all poor, inadequ inferior materials and/or Workmanship for a period of one (1) year. Replace at Contractor pense any plant found to be dead or in poor condition due to faulty materials or Workman as determined by the Landscape Architect.
- B. Replace immediately any materials found to be dead, missing or in poor condition during maintenance period. The Landscape Architect is the sole judge of the condition of mater place material within ten (10) days of written notification by the Landscape Architect.
- C. The commencement of all Guarantees shall be noted in the Certificate of Substantial Com which shall be signed by the Owner, Contractor and Landscape Architect.

1.06 INSPECTIONS

- A. Request normal progress inspection from the Landscape Architect at least seven (7) days vance of anticipated inspection. Inspections are as follows:
- 1. Commencement of maintenance (Pre-maintenance).
- 2. At forty five (45) day mid point of maintenance period.
- Completion of maintenance period Final Walk-through: no more than ten (10) or prior to end of maintenance period.
- B. All conditions noted in Landscape Planting (Section 02950) apply herein.
- 1.07 FINAL ACCEPTANCE OF THE PROJECT
 - A. Prior to the date of the Final Walk-through, acquire from the Landscape Architect approv producible prints and record information from the job record set all changes made to all ings during construction, label said prints "Record Drawings", and deliver to the Landscap
- tect and as required to any Local Agency. B. All turn-over items noted in other Specific
- B. All turn-over items noted in other Specification sections shall be delivered prior to Final V through.
- PART 2 MATERIALS
- 2.01 MATERIALS
 - A. All materials used must either conform to Landscape Planting Specifications in other sec otherwise be acceptable to the Owner. Give the Owner monthly record of all herbicides cides and disease control chemicals used.
 - Tree/Shrub/Groundcover Fertilizer: per planting specifications.

PART 3 - EXECUTION

- 3.01 MAINTENANCE
- Perform maintenance according to the following standards:
- A. Keep all areas free of debris and weeded and cultivated at intervals of not more than ten days. Include watering, edging, trimming, fertilization, spraying and pest control.
- B. Maintain adequate protection of the area. Repair damaged areas at the Contractor's exp
- 3.02 TREE AND SHRUB CARE
 - A. Watering: Maintain a large enough water basin around each plant so that enough water of applied to establish moisture through the major root zone.
- B. Pruning: 1. Trees:
 - Prune trees to select and develop permanent scaffold branches that are in diameter than the trunk or branch to which they are attached which vertical spacing of from 18" to 48" and radial orientation so as not to ov one another; to eliminate diseased or damaged growth; to eliminate na shaped branch forks that lack strength; to reduce toppling and wind da thinning out crowns; to maintain a natural appearance; to balance crow
 - b. Under no circumstances will stripping of lower branches ("raising-up") of trees be permitted. Lower branches shall be retained in a "tipped back pinched condition with as much foliage as possible to promote caliper t growth (tapered trunk). Lower branches may be cut flush with the trun after the tree is able to stand erect without staking or other support. Si
 - growth may be removed if deemed appropriate by the Landscape Architect. Thin and shape evergreen trees when necessary to prevent wind and storm damage. Prune deciduous trees during the dormant season. Prune damaged trees or those that constitute health or safety hazards at any time of the year
- as required to eliminate these conditions. 2. Shrubs:
 - The objectives of shrub pruning are the same as for trees. Do not clip into balled or boxed forms unless required by the design and directed by the Landscape Architect.

			b. Make all pruning cuts to lateral branches or buds or flush with the trunk.
			c. Staking and Guying: Remove stakes and guys as soon as they are no longer needed. Inspect stakes and guys to prevent girdling of trunks or branches and to prevent rubbing that causes bark wounds. Replace all broken stakes and ties with specified materials.
on-1		C.	Weed Control: Keep basins and areas between plants free of weeds. Use Corn gluten based pre emergent weed killer, such as "Safe–n-Simple Pre emergent Weed Killer".
		Б. Е.	Fertilization:
red to <u>ety (90)</u>			 Apply fertilizer once each month during the maintenance period at the following rate per 1,000 square feet of planting area. Gro-Power Plus at 20 lbs per 1,000 square feet
			 Avoid applying fertilizer to the root ball and base of main stem. Spread evenly under plant to drip line.
			3. After application, water thoroughly.
		F.	Replacement of Plants:
horized	2.02	GROUNI	ceptable to Owner's authorized representative at Contractor's expense.
	5.05	A.	Weed Control: Control weeds, with chemical systemic spray or by mechanical means, so as to
ceived		В.	cause minimal damage to planted materials. Watering: Water enough that moisture penetrates throughout root zone and only as frequently
k and		C.	as necessary to maintain healthy growth. Fertilization: Fertilize as Specified under 3.02-Tree and Shrub Care.
rized rep-		D.	Remove trash weekly.
duled act.		E.	Edge groundcover to keep in bounds and trim top growth as necessary to achieve an overall even appearance.
nt labor	3.04	F.	Replace dead and missing plants at Contractor's expense.
of con-	5.04	A.	Set and program automatic controllers for seasonal water requirements. Give Owner's author-
ect will Owner's			ized representative keys to controllers and written instructions on how to turn off system in case of emergency.
ed Work e consid-		В.	Contractor is responsible for the complete operation and maintenance of the irrigation system except as noted herein (See 1.05 - Guarantee and Replacement).
l with ion of the effective		C.	Repair/correct all damages/malfunctions to irrigation system at Contractor's expense. Make repairs within one (1) watering period.
plants or		D.	Check weekly all systems for proper operation, to include the following tasks:
ill not be			 Check and clean filters once every month.
the Draw-			3. Check drip emitters once every week for proper operation.
			 Clear weed growth from around emitter areas. Check exposed tubing for leaks and kinking.
equate or or's ex-			 Check pressure regulator for correct pressure setting (PSI).
, unit,			 Check controller program for correct operation. Adjust automatic controller program (four times per year) to accommodate seasonal water requirements. Give owner keys
g the rrial. Re-			to controller and written instruction on how to turn off system in case of emergency.
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erin o carroll landscape architect 105 West De La Guerra Street Unit J Santa Barbara CA 93101 805.364.5075 www.erinocarroll.com

FUEL DEPOT 180 North Fairview Ave 8 ^{·#°} · · ·

> PLANTING AND MAINTENANCE SPECIFICATIONS

Date/ Issue 2015.11.23 DRB Submittal

Sheet 6 of 6

LP-3

<u>PRELIMINARY CONSTRUCTION NOTES:</u>

- (NUMBERED ITEM BELOW CORRESPONDS TO NUMBER WITHIN HEXAGON ON DRAWING)
- 1 SAWCUT AND REMOVE EXISTING PAVEMENT, CONCRETE APPURTENANCES AND PLANTERS.
- 2 DEMOLISH AND REMOVE EXISTING BUILDING, PAVEMENT, CONCRETE WALKS AND CURBS WHERE SHOWN ON PLAN.
- 3 CONSTRUCT NEW BUILDING, PLANTERS, SIDEWALKS AND CURB IMPROVEMENTS. MATCH EXISTING SURFACE ELEVATIONS.
- 4 ROUTE PROPOSED ROOF GUTTERS / DOWNSPOUTS TO PROPOSED ADJACENT PLANTERS TO EAST.
- 5 PROPOSED NEW A.C. PAVEMENT.

STORMWATER MANAGEMENT:

TOTAL AREA TO BE DISTURBED: 5,820 S.F. DISTURBED AREA TO BE UTILIZED FOR PLANTERS: 1,500 S.F. TOTAL PROPOSED NET IMPERVIOUS SURFACE AREA: 4,320 S.F.

4,230 S.F. < 5,000: S.F. **PROJECT IS TIER 1.**

ESTIMATED EARTHWORK QUANTITIES:

EXCAVATION: 175 CUBIC YARDS

EMBANKMENT: 25 CUBIC YARDS

NOTE: SHRINKAGE, CONSOLIDATION AND SUBSIDENCE FACTORS AND LOSSES DUE TO CLEARING AND DEMOLITION OPERATIONS ARE NOT INCLUDED. ESTIMATED EARTHWORK QUANTITIES ARE BASED ON THE APPROXIMATE DIFFERENCE BETWEEN EXISTING GRADES AND PROPOSED FINISH GRADES OR PAVEMENT SUBGRADES, AS INDICATED ON THE PLANS, AND SHOULD VARY ACCORDING TO THESE FACTORS AND LOSSES.

CONTRACTOR SHALL ACCEPT OR CONFIRM EXISTING TOPOGRAPHIC INFORMATION, SHALL REVIEW THE SITE AND THE GEOTECHNICAL REPORT(S) AND MAKE HIS OWN INTERPRETATIONS AND CONCLUSIONS WITH RESPECT THERETO, AND SHALL PERFORM AN INDEPENDENT EARTHWORK ESTIMATE ON WHICH TO BASE HIS BID. ONCE GRADING IS STARTED, THE TOPOGRAPHIC INFORMATION HAS BEEN ACCEPTED BY CONTRACTOR.

PRELIMINARY SITE IMPROVEMENT PLAN

180 N. FAIRVIEW ROAD

CITY OF GOLETA, CALIFORNIA

JULY 31, 2015 REVISED NOVEMBER 23, 2015

FLOWERS & ASSOCIATES, INC.

CIVIL ENGINEERS 201 N. Calle Cesar Chavez, Suite 100 Santa Barbara, CA 93103 Telephone (805) 966-2224 PRELIMINARY

NOT FOR CONSTRUCTION

No. 18324 Exp.6-30-17

W.O. 13115

DATE:

GRAPHIC SCALE 1 inch = 20 ft.LEGEND CONC CONCRETE DBL DOUBLE CWL CROSS WALK LIGHT HB HOSE BIB ICV IRREGATION CONTROL VALVE MBD METAL BOLLARD MH MANHOLE MW MONITORING WELL SDMH STORM DRAIN MANHOLE TL TRAFFIC LIGHT TS TRAFFIC SIGNAL BOX FF FINISH FLOOR FS FINISH SURFACE NOTES:

(1) THE BOUNDARY SHOWN HEREON IS FOR INFORMATIONAL PURPOSES ONLY. IT IS BASED ON MINIMAL MONUMENTATION RECOVERY AND RECORD DATA EITHER PROVIDED OR RECORDED. IT IS NOT INTENDED TO CONSTITUTE A BOUNDARY OF SURVEY.

(2) HORIZONTAL COORDINATE BASIS IS NAD 83 PER COR STATION "COPR" NGS ID DL 7686.

(3) VERTICAL DATUM IS NAVD 88 PER SAN JOSE CREEK PROJECT CONTROL PER McGEE STATION No. 14. ELEVATION = 22.41 FEET WITH CHECKS INTO STATION 2016 PER RECORD OF SURVEY BOOK 170, PAGE 47 AND HPGN D 05-AS PER RECORD OF SURVEY BOOK 173, PAGE 10.

(4) (R) = PARCEL MAP BOOK 1, PAGE 86 ROTATED COUNTERCLOCKWISE (01°01'59").

tion		By		Date		
	Drawn By:CB			Checked By:JC		
C	Scale: As Shown					
AND YING, INC. ANTA BARBARA, CA 93103	Date: 07-31-2013					
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