PROJECT DATA

CLIENT:	COSTCO WHOLESALE 999 LAKE DRIVE ISSAQUAH, WA 98027
PROJECT ADDRESS:	150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
SITE AREA:	12.88 ACRES (560,885 S.F.)
BOUNDARIES INFORMATION:	THIS PLAN HAS BEEN PREPARED BY USING MA SITE PLAN DATED 3-13-98.

BUILDING DATA:

BUILDING AREA	132,840 S.F.
TIRE CENTER	3,743 S.F.
FOOD SERVICE	867 S.F.
TOTAL BUILDING	137,450 S.F.

FUEL CANOPY

EXISTING CANOPY	5,024 S.F.
PROPOSED EXPANSION	5,652 S.F.
TOTAL CANOPY	10,676 S.F.

LOT COVERAGE

WAREHOUSE	25%
FUEL CANOPY	1%
TOTAL LOT COVERAGE	26%

PARKING DATA:

EXISTING PARKING:

# STANDARD STALLS	721 STALLS
#/HC HANDICAP STALLS	28 STALLS
TOTAL PARKING	749 STALLS

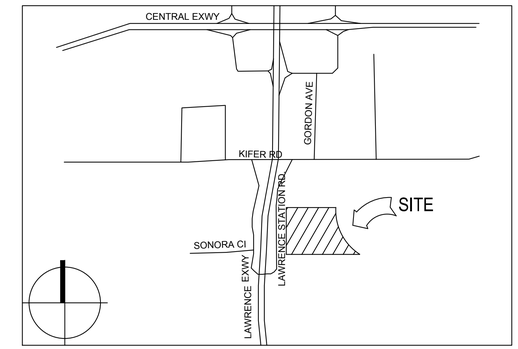
PROPOSED PARKING:

# STANDARD STALLS	712 STALLS
#/HC HANDICAP STALLS	28 STALLS
TOTAL PARKING	740 STALLS

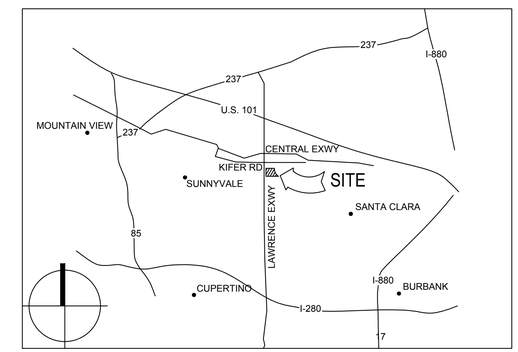
NO. OF STALLS PER 1000 S.F. OF BUILDING AREA:(137,450 S.F.)	5.07 STALLS

NOTES:
1. EXISTING CONDITIONS TO BE FIELD VERIFIED.
2. ACCESSIBLE STALLS REQUIRED: 16 STALLS.

VICINITY MAP



REGIONAL MAP



0 10' 20' 40' 80'

COSTCO WHOLESALE
SUNNYVALE, CA
#423

150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086

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94-0380-34
MAY 31, 2017

PROPOSED SITE PLAN

DD11-03

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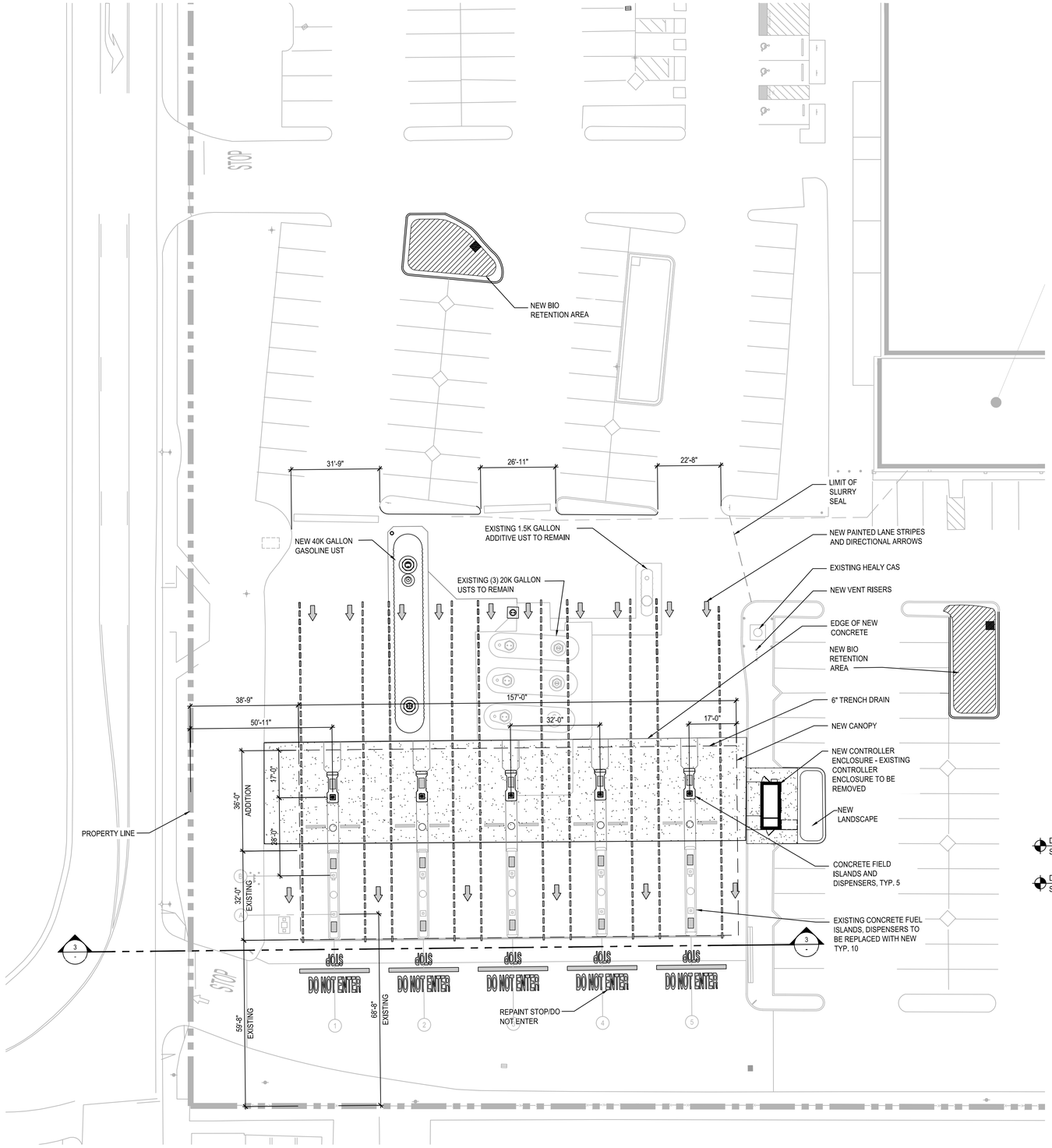
COSTCO WHOLESALE

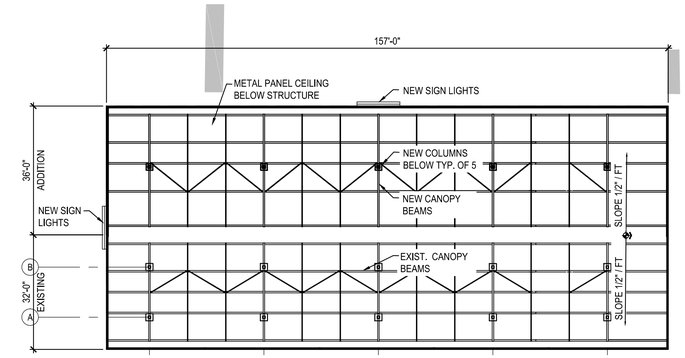
SUNNYVALE, CALIFORNIA

OVERALL SITE PLAN

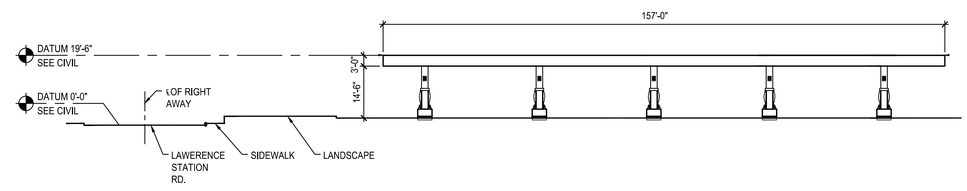
MAY 31, 2017



1 OVERALL SITE PLAN
SCALE: 1"=20'



2 PRELIMINARY ROOF PLAN
SCALE: 1"=20'



3 SITE SECTION
SCALE: 1"=20'

0 5' 10' 20' 40'

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ENLARGED SITE PLAN

DD11-03A

COSTCO WHOLESALE

ENLARGED SITE PLAN

SUNNYVALE, CALIFORNIA

MAY 31, 2017

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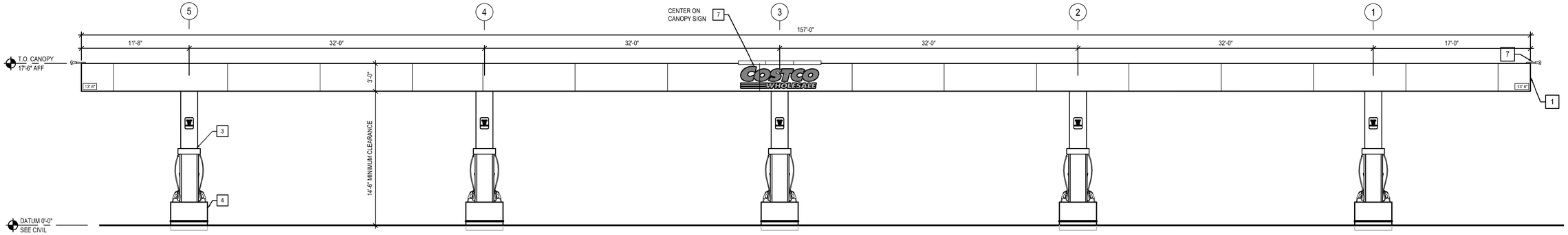
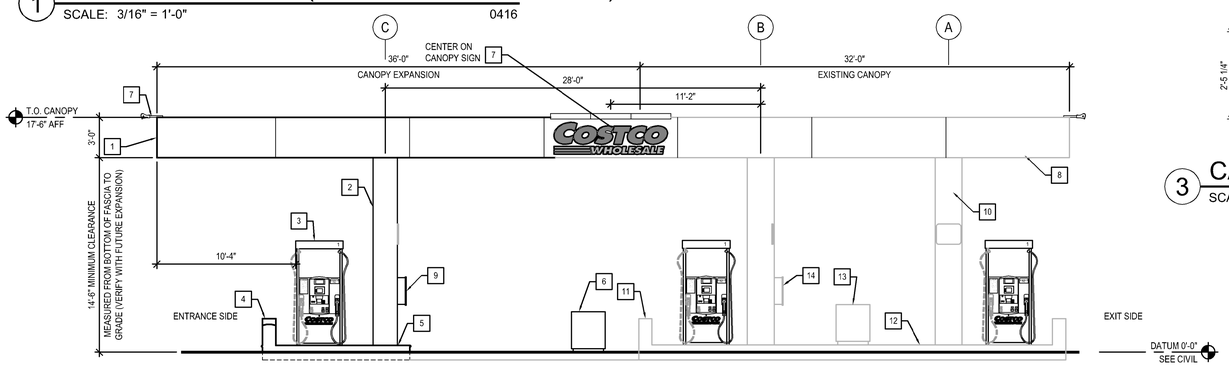


1 NORTH ELEVATION (SOUTH ELEVATION SIM.)

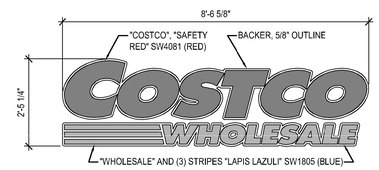
SCALE: 3/16" = 1'-0" 0416



6 EAST ELEVATION (WEST ELEVATION SIM.)

SCALE: 3/16" = 1'-0" 0416

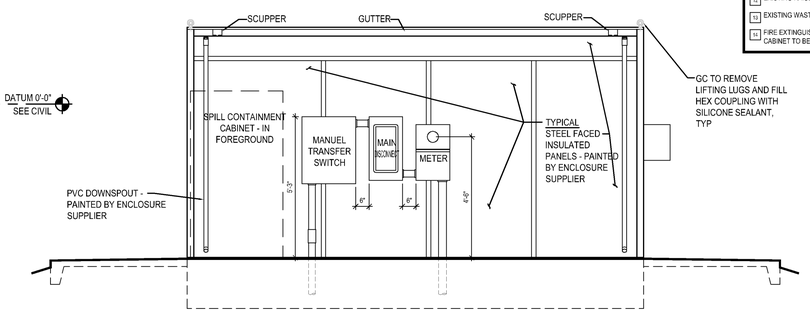
SIGNAGE AREA TABULATION (WALL SIGNS)				
QTY	SIGN	SIZE	AREA (SF) EA	TOTAL SF
2	COSTCO WHOLESALE	8'-6 5/8" X 2'-5 1/4"	20.85 SF	41.7 SF
			TOTAL SIGNAGE AREA	41.7 SF



3 CANOPY SIGN

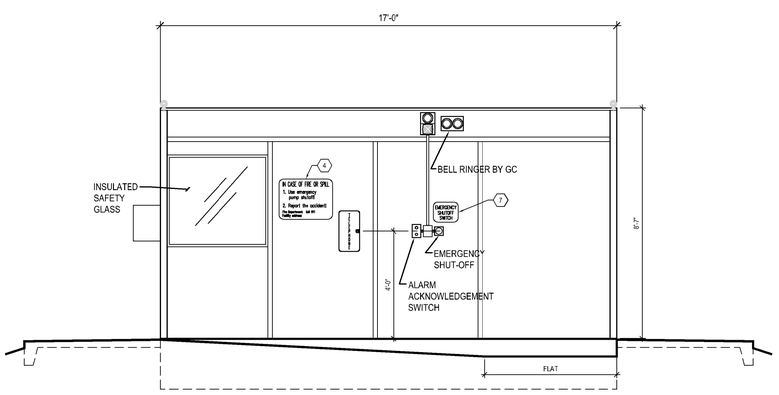
SCALE: 1/2" = 1'-0" (SUPPLIED AND INSTALLED BY CANOPY SUPPLIER)

KEY NOTES	
1	NEW PRE-FINISHED METAL FASCIA PANEL, COLOR SPRAYLAT RAL 7047 TELE GRAY 4 TO MATCH EXISTING
2	NEW STEEL TUBE COLUMN WITH PRE-FINISHED METAL COLUMN WRAP, SPRAYLAT RAL 7047 TELE GRAY 4 TO MATCH EXISTING
3	NEW MULTIPRODUCT DISPENSER 43"W X 94"H X 29"D
4	NEW CONCRETE-FILLED METAL FORMED GUARD AT ENDS OF ISLANDS - TOP OF GUARD AT 30" ABOVE TRAFFIC SURFACE - PAINT SIDES ONLY WITH GLOSS BLUE, TO MATCH EXISTING
5	NEW RAISED CONCRETE ISLAND WITH METAL EDGE FORM - PAINT SIDES ONLY WITH GLOSS BLACK
6	NEW WASTE RECEPTOR, BOLT DOWN, CENTER OF EACH ISLAND
7	NEW CANOPY FASCIA LIGHT FIXTURE, "WIDE FASCIA" FIXTURE TO MATCH EXISTING
8	EXISTING PRE-FINISHED METAL FASCIA PANEL, COLOR SPRAYLAT RAL 7047 TELE GRAY 4
9	NEW FIRE EXTINGUISHER AND CABINETS MOUNTED ON ENTRANCE SIDE OF COLUMNS - FIRE EXTINGUISHER CABINET TO BE: BROOKS MODEL # MARK II, RED CABINET WITH CLEAR COVER (OR EQUAL) TO MATCH EXISTING
10	EXISTING STEEL TUBE COLUMN WITH PRE-FINISHED METAL COLUMN WRAP, SPRAYLAT RAL 7047 TELE GRAY 4
11	EXISTING CONCRETE-FILLED METAL FORMED GUARD AT ENDS OF ISLANDS - TOP OF GUARD AT 30" ABOVE TRAFFIC SURFACE - SIDES PAINTED GLOSS BLUE
12	EXISTING RAISED CONCRETE ISLAND WITH METAL EDGE FORM - SIDES PAINTED GLOSS BLACK
13	EXISTING WASTE RECEPTOR
14	FIRE EXTINGUISHER AND CABINETS MOUNTED ON ENTRANCE SIDE OF COLUMNS - FIRE EXTINGUISHER CABINET TO BE: BROOKS MODEL # MARK II, RED CABINET WITH CLEAR COVER (OR EQUAL)



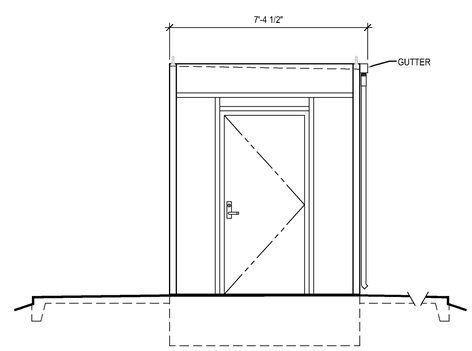
13 KIOSK SIDE FACING AWAY FROM CANOPY

SCALE: 3/8" = 1'-0" 0117



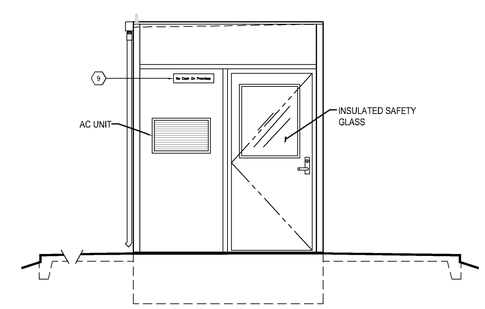
16 KIOSK SIDE FACING CANOPY

SCALE: 3/8" = 1'-0" 0117



18 STORAGE ENTRY

SCALE: 3/8" = 1'-0" 0117



19 ENCLOSURE ENTRY

SCALE: 3/8" = 1'-0" 0117

COSTCO WHOLESALE

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FEBRUARY 1, 2017

CONCEPT ELEVATIONS

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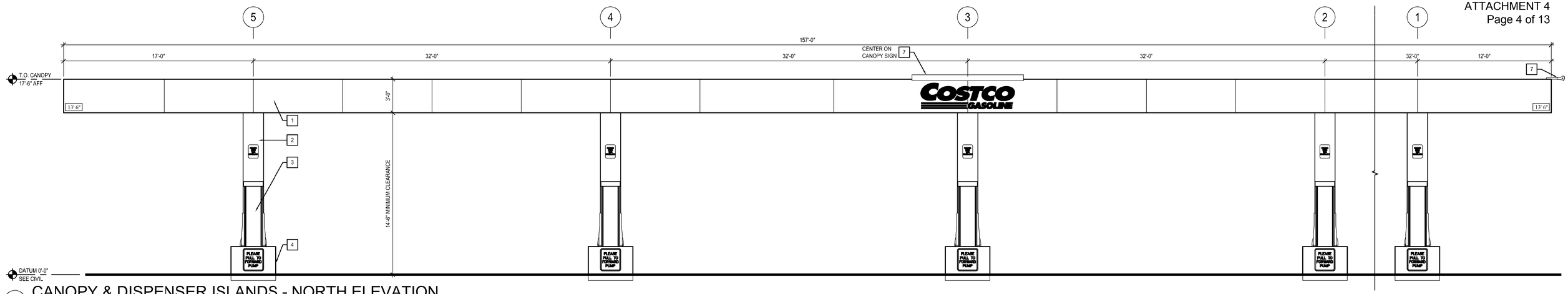
COSTCO WHOLESALE

CONCEPT ELEVATIONS

SUNNYVALE, CALIFORNIA

FEBRUARY 2, 2017



1 CANOPY & DISPENSER ISLANDS - NORTH ELEVATION

SCALE: 1/4" = 1'-0"

6 CANOPY & DISPENSER ISLANDS - WEST ELEVATION

SCALE: 1/4" = 1'-0"

KEY NOTES

1	PRE-FINISHED METAL FASCIA PANEL, COLOR SPRAYLAT RAL 7047 TELE GRAY 4
2	STEEL TUBE COLUMN WITH PRE-FINISHED METAL COLUMN WRAP, SPRAYLAT RAL 7047 TELE GRAY 4
3	MULTIPRODUCT DISPENSER 43"W X 94"H X 29"D
4	CONCRETE-FILLED METAL FORMED GUARD AT ENDS OF ISLANDS - TOP OF GUARD AT 30" ABOVE TRAFFIC SURFACE - PAINT SIDES ONLY WITH GLOSS BLUE
5	RAISED CONCRETE ISLAND WITH METAL EDGE FORM - PAINT SIDES ONLY WITH GLOSS BLACK
6	WASTE RECEPTOR, BOLT DOWN, CENTER OF EACH ISLAND
7	CANOPY FASCIA LIGHT FIXTURE, "WIDE FASCIA" FIXTURE
8	FIRE EXTINGUISHER AND CABINETS MOUNTED ON ENTRANCE SIDE OF COLUMNS - FIRE EXTINGUISHER CABINET TO BE: BROOKS MODEL # MARK II, RED CABINET WITH CLEAR COVER (OR EQUAL)
9	VIDEO CAMERA - VERIFY LOCATION WITH OWNER CONSTRUCTION PROJECT MANAGER. GC SHALL RUN CONDUIT AND INSTALL J-BOX FOR MOUNTING CAMERAS
10	CAULK PERIMETER OF DISPENSER BASE WITH TYPE NS SEALANT, TYPICAL
11	ELECTRICAL ACCESS PANELS
12	WARNING SIGNS PER CFC 2305.6

12 CANOPY SIGN

SCALE: 1/2" = 1'-0" (SUPPLIED AND INSTALLED BY MBS) 0314

COSTCO WHOLESALE EXISTING FUEL ELEVATIONS

SUNNYVALE, CALIFORNIA

FEBRUARY 2, 2017

COSTCO WHOLESALE

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#423

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EXISTING FUEL ELEVATIONS

EX32

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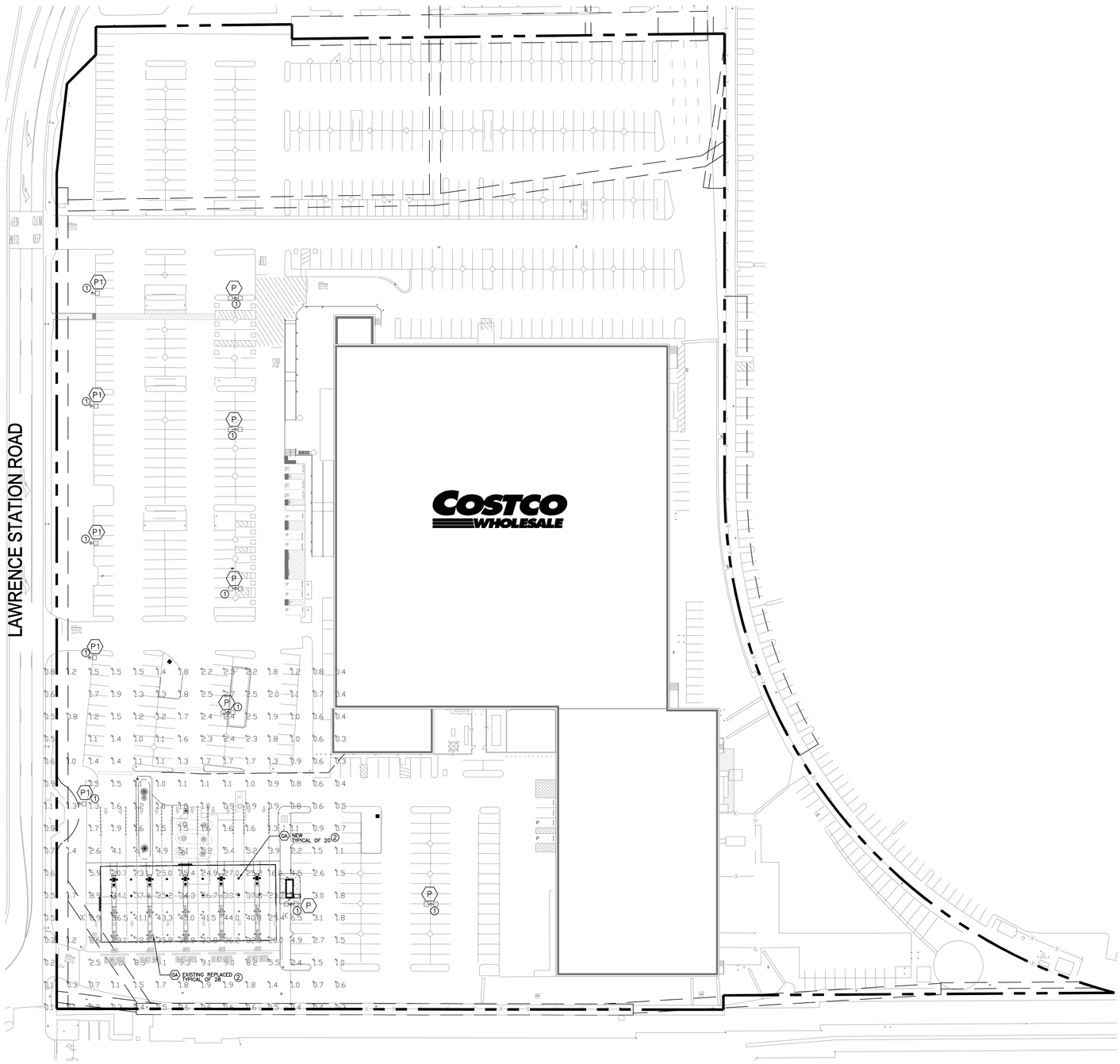
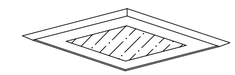


SITE PLAN
SCALE: 40' = 1'-0"

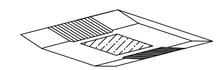
FIXTURE DESCRIPTION.	
GA	FUEL CANOPY AREA LIGHT, 155W LED, FLAT LENS
G	FUEL CANOPY AREA LIGHT, 96W LED, FLAT LENS

PLAN NOTES:

1. EXISTING POLE TO REMAIN.
2. THE CANOPY LIGHTING HAS TO BE SURFACE MOUNT FIXTURE. VERIFY DETAIL, FIXTURE SCHEDULE WITH GAS STATION CONSULTANT.



FUEL FACILITY – LED (GA)
NO SCALE



FUEL FACILITY – LED (G)
NO SCALE

ELECTRICAL SITE PLAN, LIGHTING FIXTURE SCHEDULE, DETAILS, AND NOTES.

PROJECT NO:17-049

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ARCHITECT REFERENCE NO:94-0350-34

ISSUE DATE: JANUARY 2017

REVISION DATE:

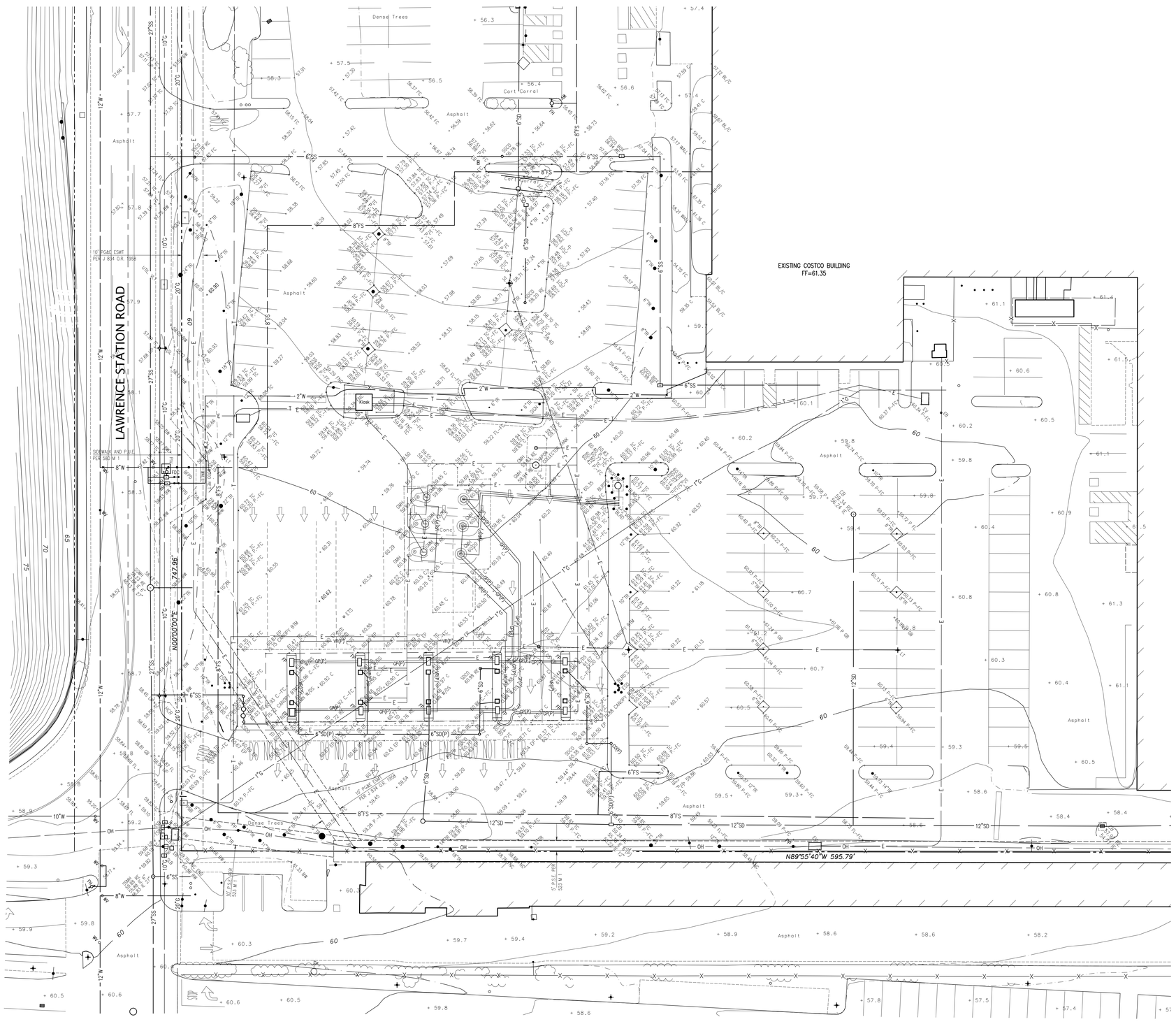
DRAWN: LFO

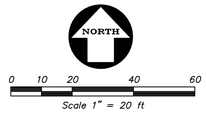
CHECKED: ANT/JGM

T.E., Inc.
830 N. RIVERSIDE DRIVE
SUITE #200
RENTON, WA 98057
PHONE: 425-970-3753
FAX: 425-970-3756

FUEL FACILITY EXPANSION
WAREHOUSE #423
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086

SE-1





LEGEND

	BUILDING LINE	ESMT	EASEMENT
	CENTERLINE	ESO	EMERGENCY SHUT OFF
	CONCRETE/BLOCK/RETAINING WALL	ETS	ELECTROLYSIS TEST STATION
	CONCRETE CURB	EV	ELECTRICAL VAULT
	CONCRETE CURB & GUTTER	FC	FACE OF CURB
60	CONTOUR LINE	FDC	FIRE DEPARTMENT CONNECTION
60	OBSCURED CONTOUR LINE	FF	FINISH FLOOR
	DRIVEWAY	FH	FIRE HYDRANT
T	EDGE OF PAVEMENT	FL	FLOW LINE
E	ELECTRIC LINE	FNC	FENCE
X	FENCE LINE	FP	FUEL PUMP
FO	FIBER OPTICS LINE	FW	FACE OF WALL
G	FIRE SERVICE & VALVE	GB	GRADE BREAK
G GM	GAS LINE-VALVE & METER	GMH	GAS MANHOLE
	GUARD RAIL	GP(P)	GATE POST
VR(P)	VAPOR RECOVERY LINE	GRN	GROUND
GP(P)	GAS PRODUCT LINE	GV	GAS VALVE
JT	JOINT TRENCH	HCR	HANDICAP RAMP
	LOT LINE	IE	INVERT ELEVATION
	MONUMENT/MONUMENT LINE	JP	JOINT POWER POLE
OH	OVERHEAD POWER LINE	LIP	LIP OF GUTTER
	PROPERTY LINE	LT	LIGHT
SS	SANITARY SEWER-MANHOLE & CLEANOUT	N	NORTH
	SIDEWALK	O.R.	OFFICIAL RECORD
+60.00	SPOT ELEVATION	OH	OVERHEAD
SD	STORM DRAIN-MANHOLE & CATCH BASIN	P-FC	PAVEMENT AT FACE OF CURB
T	TELEPHONE LINE	P.	PAVEMENT
W	WATER LINE & VALVE	(P)	PER PLAN
	BACKFLOW PREVENTION DEVICE	P.S.E.	PUBLIC SERVICE EASEMENT
	ELECTROLIER	P.U.E.	PUBLIC UTILITY EASEMENT
	FIRE DEPARTMENT CONNECTION	PBB	PACIFIC BELL BOX
	FIRE HYDRANT	PG&E	PACIFIC GAS & ELECTRIC
	FLAG POLE	PGEV	PACIFIC GAS & ELECTRIC VAULT
E	GUY ANCHOR	PIV	POST INDICATOR VALVE
	GAS METER	POC	POINT OF CONNECTION
	POST INDICATOR VALVE	PP	POWER POLE
	POWER POLE/JOINT POLE	RE	RIM ELEVATION
	TRANSFORMER	RET	CURB RETURN
	TRAFFIC SIGNAL POLE	S	SOUTH
	TRAFFIC SIGN	SDCO	STORM DRAIN CLEANOUT
12"	TREE	SL	STREET LIGHT
	UTILITY BOX	SLB	STREET LIGHT BOX
	WATER VALVE	SSCO	SANITARY SEWER CLEAN OUT
	ANGLE POINT	SSMH	SANITARY SEWER MANHOLE
BEG	BEGIN	TB	TELEPHONE BOX
BFPD	BACK FLOW PREVENTION DEVICE	TC	TOP OF CURB
BL	BUILDING LINE	TC-P	TOP OF CURB AT PAVEMENT
BL/C	BUILDING AT CONCRETE	TD	TRENCH DRAIN
BLRD/BOL	BOLLARD	TSB	TRAFFIC SIGNAL BOX
BTM	BOTTOM	TW	TOP OF WALL
BW	BACK OF WALK	VLT	VAULT
C.	CONCRETE	VR(P)	VAPOR RECOVERY
CB	CATCH BASIN	W	WEST
CLMN	COLUMN	W/DS	WITH DOWNSPOUT
CO	CLEANOUT	WM	WATER METER
E	EAST	WV	WATER VALVE
EB	ELECTRIC BOX		
EP	EDGE OF PAVEMENT		

NOTES

1. THIS PLOT WAS PREPARED FROM INFORMATION FURNISHED IN A PRELIMINARY TITLE REPORT, PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY, DATED FEBRUARY 3, 2014, NUMBER NCS-370392-WA1, UPDATED FEBRUARY 10, 2014, NO LIABILITY IS ASSUMED FOR MATTERS OF RECORD NOT STATED IN SAID PRELIMINARY TITLE REPORT THAT MAY AFFECT THE TITLE LINES, OR EXCEPTIONS, OR EASEMENTS OF THE PROPERTY.
2. ALL DISTANCES AND ELEVATIONS SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF.
3. THE TYPES, LOCATIONS, SIZES AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS TOPOGRAPHIC SURVEY WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. (A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES). HOWEVER, THE ENGINEER CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES WHICH MAY BE ENCOUNTERED, BUT WHICH ARE NOT SHOWN ON THESE DRAWINGS.
4. BENCHMARK:BENCHMARK FOR COSTCO IS KIER & WRIGHT CONTROL NAIL #414 ELEVATION= 59.85'. THIS ELEVATION DOES NOT MATCH THE CITY OF SUNNYVALE BENCHMARK BY 2.20 FEET. THE ELEVATION DATUM IS 57.65' WHICH IS 2.20 FEET LOWER THAN THE COSTCO DATUM.
5. THE AERIAL MAPPING WAS PREPARED USING COMPUTER ASSISTED, PHOTOGRAMMETRIC METHODS BY PHOTO SCIENCE INC., IN EMERYVILLE CALIFORNIA. JOB NUMBER: 8502-109. IN AREAS OF DENSE VEGETATION, ACCURACY OF CONTOURS MAY DEVIATE FROM ACCEPTED ACCURACY STANDARDS. DATE OF PHOTOGRAPHY 07-20-12, ORIGINAL COMPILED MAP SCALE 1"=40', CONTOUR INTERVAL 1 FOOT. THE GRID IS BASED ON A LOCAL, ASSUMED COORDINATE SYSTEM. CONTROL SURVEY PERFORMED BY KIER & WRIGHT, LIVERMORE, CA.

EASEMENTS WITHIN LIMIT OF SURVEY

AN EASEMENT FOR PUBLIC UTILITIES, IN FAVOR OF CITY OF SUNNYVALE, RECORDED ON SEPTEMBER 22, 1966, IN BOOK 7512, PAGE 686, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

AN EASEMENT FOR SINGLE LINE OF POLES AND APPURTENANCES TO, IN FAVOR OF CITY OF SUNNYVALE, RECORDED ON JUNE 21, 1967, IN BOOK 7758 AT PAGE 283, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

AN EASEMENT FOR PUBLIC SERVICE AND INCIDENTAL PURPOSES, FILED ON DECEMBER 22, 1983, IN BOOK 523 OF MAPS, AT PAGE 1, SANTA CLARA COUNTY RECORDS. AFFECTS THE SOUTHERLY PORTION OF PROPERTY AND THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

AN EASEMENT UTILITIES AND INCIDENTAL PURPOSES, IN FAVOR OF PACIFIC GAS AND ELECTRIC COMPANY, RECORDED ON SEPTEMBER 5, 1986, IN BOOK J834 AT PAGE 1958, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

AN EASEMENT FOR SIDEWALK, PUBLIC UTILITY AND INCIDENTAL PURPOSES IN FAVOR OF CITY OF SUNNYVALE, FILED ON OCTOBER 30, 1987, IN BOOK 580 OF MAPS, AT PAGE 1, SANTA CLARA COUNTY RECORDS. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED 'EASEMENT AGREEMENT', RECORDED ON APRIL 18, 1989, IN BOOK K917 PAGE 12122, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON, BUT LIES OUTSIDE OF THE SUBJECT PROPERTY.

AN EASEMENT FOR PRIVATE INGRESS AND EGRESS AND INCIDENTAL PURPOSES, IN FAVOR OF CITY OF SUNNYVALE, FILED ON JUNE 28, 1995, IN BOOK 666 OF MAPS, AT PAGE 45, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH HAS BEEN PLOTTED HEREON.

EASEMENTS DESCRIBED IN THE COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS, FOR RECIPROCAL INGRESS AND EGRESS, RECORDED ON JUNE 29, 1995, IN BOOK N900 AT PAGE 1414, OFFICIAL RECORDS SANTA CLARA COUNTY. DOCUMENTS DECLARING MODIFICATIONS THEREOF WAS RECORDED SEPTEMBER 29, 1995, IN BOOK P024, PAGE 1299, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH IS NOT PLOTTABLE.

TERMS, PROVISIONS, AND EASEMENT(S) CONTAINED IN THAT DOCUMENT ENTITLED 'COVENANT FOR EASEMENT', RECORDED JUNE 29, 1998, IN BOOK N900, PAGE 1431, OFFICIAL RECORDS SANTA CLARA COUNTY. THE LOCATION OF WHICH IS NOT PLOTTABLE.

PREPARED BY OR UNDER THE SUPERVISION OF RICHARD JAMES HICKENBOTTOM, P.L.S. 8654 LICENSE EXPIRES: 12-31-15 DATE

NO.	BY	REVISION
△		
△		
△		
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KIER & WRIGHT
CIVIL ENGINEERS & SURVEYORS, INC.
2850 Collier Canyon Road
Livermore, California 94551
Phone (925) 245-8788
Fax (925) 245-8796

PARTIAL TOPOGRAPHIC SURVEY
OF THE
SUNNYVALE COSTCO PROJECT
FOR
COSTCO WHOLESALE CORPORATION

SUNNYVALE, CALIFORNIA

DATE	DEC., 2014
SCALE	1" = 20'
SURVEYOR	RJH
DRAFTER	REG
JOB NO.	A12584-3
SHEET	C1
OF	1 SHEETS

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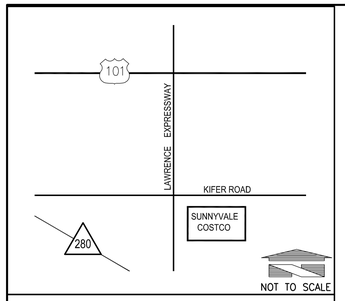
PRELIMINARY LANDSCAPE AND IRRIGATION PLAN
COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
COSTCO FACILITY #423

I HAVE COMPLIED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN

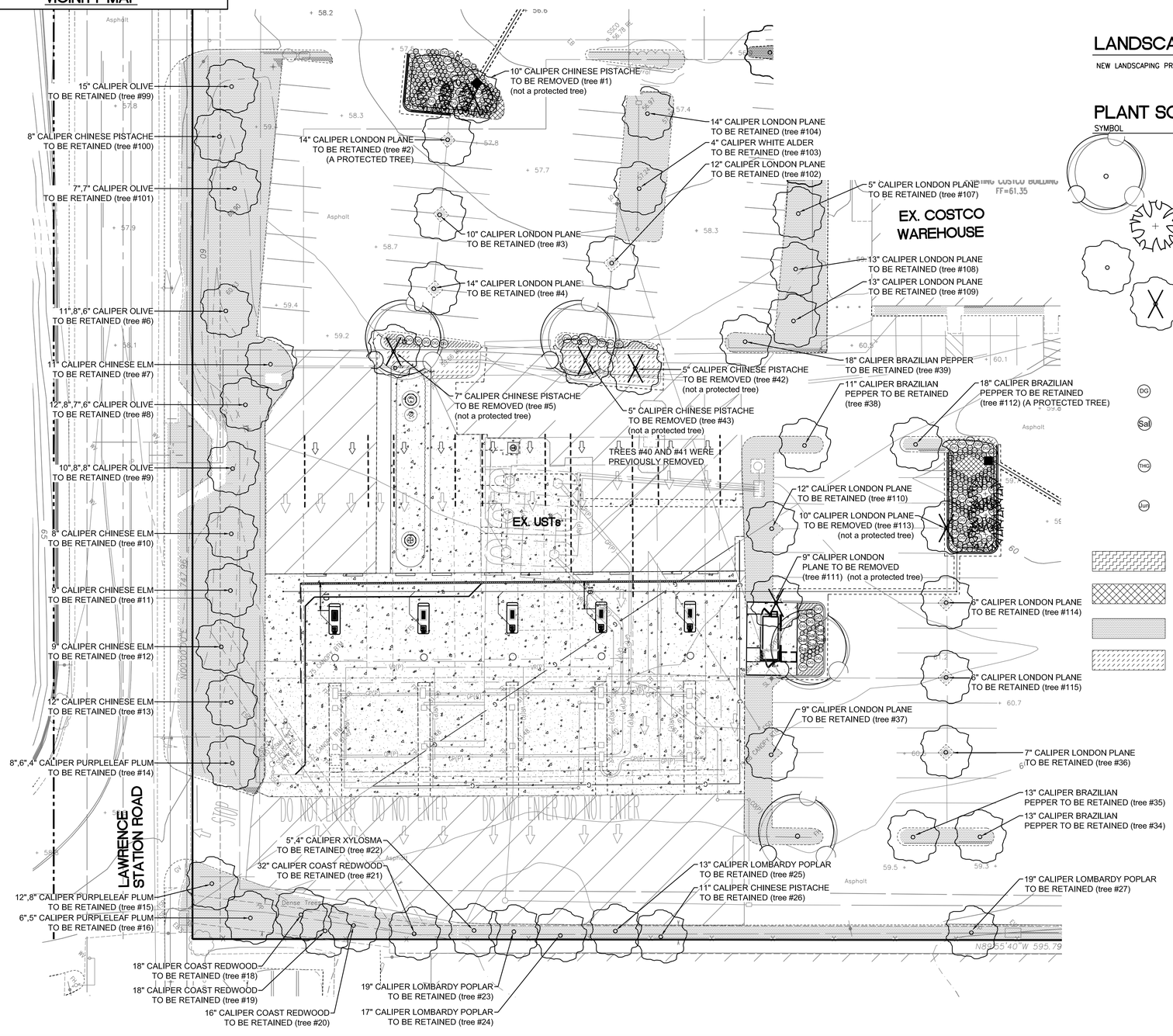
Signature

1"=20'

0 10 20 40



VICINITY MAP



TREE REPLACEMENT

OF THE TOTAL OF 7 TREES PROPOSED TO BE REMOVED, 0 ARE CONSIDERED PROTECTED:

LANDSCAPE CALCULATIONS

NEW LANDSCAPING PROPOSED: 1,184 SQUARE FEET

PLANT SCHEDULE

SYMBOL	BOTANICAL/COMMON NAMES	SIZE CONDITION	SPACING	QUANTITY	WUCOLS IV IRRIGATION CLASSIFICATION	REMARKS
					ZONE 2	
	TREES:					
	PISTACHE CHINENSIS / CHINESE PISTACHE	24" BOX	AS SHOWN	4	LOW	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN, BRANCHED AT 6'
	WASHINGTONIA FILIFERA / CALIFORNIA FAN PALM	15-GALLON	AS SHOWN	6	MEDIUM	STAKE & GUY ONE GROWING SEASON; NURSERY GROWN, NATIVE
	EXISTING TREE TO BE RETAINED. PROTECT DURING CONSTRUCTION*					
	EXISTING TREE TO BE REMOVED* *SEE DETAILED INFORMATION IN THE JANUARY 19, 2017 HORT SCIENCE ARBORIST REPORT					
	SHRUBS:					
DG	MUHLENBERGIA RIGENS / DEER GRASS	5 GALLON	AS SHOWN	64	LOW	FULL & BUSHY; NATIVE
Sal	SALVIA MICROPHYLLA 'BERZERKELEY' / SALVIA	1 GALLON	AS SHOWN	6	LOW	FULL & BUSHY; SHEAR ONLY AS NECESSARY TO MAINTAIN FULLNESS AND AFTER FLOWERS BLOOM
THC	DESCHAMPSIA CAESPITOSA 'NORTHERN LIGHTS' / TUFTED HAIR GRASS	1 GALLON	AS SHOWN	225	LOW	FULL & BUSHY
Jun	JUNCUS PATENS / CALIFORNIA GREY SEDGE	1 GALLON	AS SHOWN	98	MEDIUM	FULL & BUSHY; NATIVE
	GROUNDCOVERS:					
	DYMONDIA MARGARETAE / DYMONDIA	1 GALLON	18" O.C.	AS REQ'D	LOW	HOLD BACK 16" FROM BORDERS, TREES, AND SHRUBS
	MIMULUS CARDINALIS / SCARLET MONKEY FLOWER	1 GALLON	18" O.C.	AS REQ'D	LOW	HOLD BACK 16" FROM BORDERS, TREES, AND SHRUBS; NATIVE
	EXISTING LANDSCAPING TO REMAIN					
	EXISTING LANDSCAPING TO BE REMOVED					

No.	Date	By	Ckd.	Appr.	Revision
1	2/10/17	JMV	JMV	JMV	LAND USE SUBMITTAL

Title: PRELIMINARY LANDSCAPE AND IRRIGATION PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For: COSTCO GASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

LICENSED LANDSCAPE ARCHITECT
JEFFREY VARLEY 3175
Signature
8-31-2017
Renewal Date
2-10-2017
Date
STATE OF CALIFORNIA

Scale: Horizontal 1"=20' Vertical N/A

Designed TR
Drawn BLS
Checked JMV
Approved CMT
Date 8/19/16

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KENT, WA 98032
(425)251-6222
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Job Number 6217

Sheet L-1 of 4

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PRELIMINARY LANDSCAPE AND IRRIGATION PLAN
COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
COSTCO FACILITY #423

LANDSCAPE PLANTING NOTES AND MATERIALS

SCOPE OF WORK

FURNISH ALL MATERIALS, LABOR, EQUIPMENT AND RELATED ITEMS NECESSARY TO ACCOMPLISH THE TREATMENT AND PREPARATION OF SOIL, FINISH GRADING, PLACEMENT OF SPECIFIED PLANT MATERIALS, FERTILIZER, STAKING, MULCH, CLEAN-UP, DEBRIS REMOVAL, AND 90-DAY MAINTENANCE.

QUALIFICATIONS:
LANDSCAPE CONTRACTOR TO BE SKILLED AND KNOWLEDGEABLE IN THE FIELD OF WORK. CONTRACTOR TO BE LICENSED TO PERFORM THE WORK SPECIFIED WITHIN THE PRESIDING JURISDICTION.

JOB CONDITIONS:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW THE SITE AND REPORT ANY DISCREPANCIES TO THE OWNER OR THE OWNER'S REPRESENTATIVES. ALL PLANT MATERIAL AND FINISH GRADES ARE SUBJECT TO APPROVAL BY THE OWNER.

PROTECTION:
DO NOT PLANT UNTIL OTHER CONSTRUCTION OPERATIONS WHICH CONFLICT HAVE BEEN COMPLETED. AN IRRIGATION SYSTEM IS TO BE INSTALLED. DO NOT PLANT UNTIL THE SYSTEM HAS BEEN TESTED AND APPROVED. HANDLE PLANTS WITH CARE – DO NOT DAMAGE OR BREAK ROOT SYSTEM, BARK, OR BRANCHES. REPAIR AND/OR REPLACE ITEMS DAMAGED AS A RESULT OF WORK, OR WORK NOT IN COMPLIANCE WITH PLANS AND SPECIFICATIONS, AS DIRECTED BY OWNER AT NO ADDITIONAL COST.

GUARANTEE:
GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE OF THE JOB BY OWNER.

90-DAY MAINTENANCE:
CONTRACTOR TO PROVIDE OWNER WITH A SCOPE OF WORK AT TIME OF INITIAL PROJECT BID TO PROVIDE LANDSCAPE AND IRRIGATION MAINTENANCE FOR 90 DAYS FOLLOWING COMPLETION OF PROJECT (ACCEPTANCE) OF FACILITY BY OWNER. WORK TO INCLUDE MAINTENANCE AS DESCRIBED BELOW, IN PLANTING AND IRRIGATION MAINTENANCE.

MATERIALS:

PLANT MATERIALS:
PLANT MATERIALS TO BE GRADE NO. 1, SIZED IN ACCORDANCE WITH (AAN) AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1-1996). PRUNE PLANTS RECEIVED FROM THE NURSERY ONLY UPON AUTHORIZATION BY THE LANDSCAPE ARCHITECT.

A) SPECIFIED PLANT CANOPY SIZE OR CALIPER IS THE MINIMUM ACCEPTABLE CONTAINER OR BALL SIZE ESTABLISHES MINIMUM PLANT CONDITION TO BE PROVIDED.
B) QUALITY:
PLANT MATERIAL TO COMPLY WITH STATE AND FEDERAL LAWS FOR DISEASE INSPECTION, PLANTS TO BE FULLY LIVE, VIGOROUS, WELL FORMED, WITH WELL DEVELOPED FIBROUS ROOT SYSTEMS. ROOT BALLS OF PLANTS TO BE SOLID AND FIRMLY HELD TOGETHER, SECURELY CONTAINED AND PROTECTED FROM INJURY AND DESICCATION.
PLANTS DETERMINED BY LANDSCAPE ARCHITECT TO HAVE BEEN DAMAGED; HAVE DEFORMITIES OF STEM, BRANCHES, OR ROOTS; LACK SYMMETRY, HAVE MULTIPLE LEADERS OR "Y" CROTCHES LESS THAN 30 DEGREES IN TREES, OR DO NOT MEET SIZE OR ANSI STANDARDS WILL BE REJECTED.
PLANT MATERIAL TO BE FROM A SINGLE NURSERY SOURCE FOR EACH SPECIFIED SPECIES/HYBRID. NURSERY SOURCES TO BE THOSE LOCATED IN THE SAME REGION AS THE JOB SITE.
C) SUBSTITUTION:
NO SUBSTITUTION OF PLANT MATERIAL, SPECIES OR VARIETY, WILL BE PERMITTED UNLESS WRITTEN EVIDENCE IS SUBMITTED TO THE OWNER FROM TWO QUALIFIED PLANT BROKERAGE OFFICES. SUBSTITUTIONS WHICH ARE PERMITTED TO BE IN WRITING FROM THE OWNER AND LANDSCAPE ARCHITECT. THE SPECIFIED SIZE, SPECIES AND NEAREST VARIETY, AS APPROVED, TO BE FURNISHED.

SOIL PREPARATION:
ARE SPECIFIC TO THIS SITE. THE FOLLOWING: TOPSOIL, AMENDMENT, AND BACKFILL ARE REQUIREMENTS FOR ALL LANDSCAPE AREAS.

A) COMPOST AMENDMENT OF EXISTING SOILS.
COMPOST WILL BE AMENDED AT A MINIMUM OF 4 CUBIC YARDS PER 1,000 SQUARE FEET. CULTIVATE TO A DEPTH OF 6 INCHES.

LANDSCAPE PLANTING NOTES AND MATERIALS CONT'D

B) SOIL PREPARATION
REMOVE FROM SITE ALL WEEDS AND DEBRIS WITHIN THE PROPOSED LANDSCAPE AREAS. VERIFY SUB-GRADES AT -5 INCHES BELOW FINISH ELEVATION IN ALL SHRUB AND GROUNDCOVER AREAS. DO NOT WORK SOIL WHEN MOISTURE CONTENT IS SO GREAT THAT EXCESS COMPACTION WILL OCCUR NOR WHEN IT IS SO DRY THAT DUST WILL FORM IN THE AIR OR THAT CLODS WILL NOT BREAK READILY. APPLY WATER IF NECESSARY TO PROVIDE IDEAL MOISTURE CONTENT FOR FILLING AND FOR PLANTING AS SPECIFIED. THOROUGHLY SCARIFY AND RIP ALL LANDSCAPE GRADES WHICH HAVE BECOME COMPACTED TO A DEPTH OF 12 INCHES WITH MULTIPLE PASSES, 90 DEGREES TO EACH OTHER. SCARIFY AREAS INACCESSIBLE TO MECHANIZED EQUIPMENT WITH HAND TOOLS.

REMOVE ALL SURFACE LUMPS, ROCKS, VEGETATION AND/OR DEBRIS LARGER THAN 1-INCH FROM ALL GRADES PRIOR TO ANY SOIL PREPARATION. PLACE ADDITIONAL AMENDED SOIL AS REQUIRED TO MEET FINISH ELEVATIONS. APPLY SOIL PREPARATION MATERIALS TO ALL PLANTING AREAS AND THOROUGHLY INCORPORATE INTO INTO THE TOP 6 INCHES OF SOIL.

WET SOIL THOROUGHLY AND ALLOW TO SETTLE. REPEAT THIS COMPACTING PROCEDURE UNTIL SOIL IS STABLE ENOUGH TO PERMIT AERATION AND DRAINAGE FOR PLANT MATERIAL. FINISH GRADE ALL PLANTING AREAS TO A SMOOTH, UNIFORM SURFACE DRAINING AWAY FROM BUILDINGS AND READY FOR PLANTING. FINISH GRADE TO BE 3 INCHES BELOW FINISH SURFACE OF ADJACENT PAVEMENT IN SHRUB AND GROUNDCOVER AREAS. FINISH GRADES TO BE APPROVED PRIOR TO PLACEMENT OF ANY PLANT MATERIAL. PARKING PLANTER ISLANDS SHALL BE OVER EXCAVATED. REMOVE ALL PAVING WASTE, GRAVEL BASE AND UNDERLYING SUBSOIL TO 18 INCHES BELOW TOP OF THE PAVING. SCARIFY AND OVER EXCAVATE PIT BOTTOM 12 INCHES TO MINIMIZE STRUCTURAL COMPACTION.

MULCH:
ORGANIC COMPOST IS PREFERRED MULCH TO BE USED AS TOP-DRESSING FOR ALL NEW LANDSCAPE BEDS. SHREDDED WOOD WILL NOT BE ALLOWED.

STAKES:
2-INCH DIAMETER, BY 10-FOOT MINIMUM TREATED LODGEPOLE PINE TREE STAKE.

GUY MATERIAL:
CINCH TYPE TIES. NO WIRE WILL BE ALLOWED.

HERBICIDE:
HERBICIDE IS NOT RECOMMENDED FOR THE FIRST YEAR AFTER INSTALLATION.

ANTI-DESICCANT:
"WILT-PROOF," 48 HOURS PRIOR TO SHIPMENT TO SITE FROM JUNE 1 THROUGH SEPTEMBER. THOROUGHLY ROOT WATER PLANTS PRIOR TO DELIVERY. PLANT MATERIAL DELIVERED TO SITE TO BE KEPT CONTINUALLY MOIST THROUGH INSTALLATION.

EXECUTION:

FINISH GRADES:
FINE GRADE AND REMOVE ROCKS AND FOREIGN OBJECTS OVER TWO INCHES (2") DIAMETER FROM TOP THREE INCHES (3") OF PREPARED PLANTING BED. ALL FINISH GRADES TO BE SMOOTH EVEN GRADES, LIGHTLY COMPACTED, AS SHOWN ON THE PLAN AND DETAILED. SITE CIVIL DRAWINGS IDENTIFY FINAL ELEVATIONS.

TREES:
ARRANGE TREES ON SITE IN PROPOSED LOCATIONS PER DRAWINGS. EXCAVATE PIT, PLANT AND STAKE OR GUY, AS CALLED OUT AND DETAILED. ALL TREES AND SUPPORTS TO STAND VERTICAL. TREES TO BE PLACED AS SHOWN ON THE PLANTING PLAN, LOCATED AS DETAILED AND AS CALLED OUT ON PLANT LIST. BACKFILL SHALL BE PIT SPOILS. SETTLE BACKFILL USING WATER ONLY. NO MECHANICAL COMPACTION.

SHRUBS:
INSTALL SHRUBS AS SPECIFIED FOR TREES.

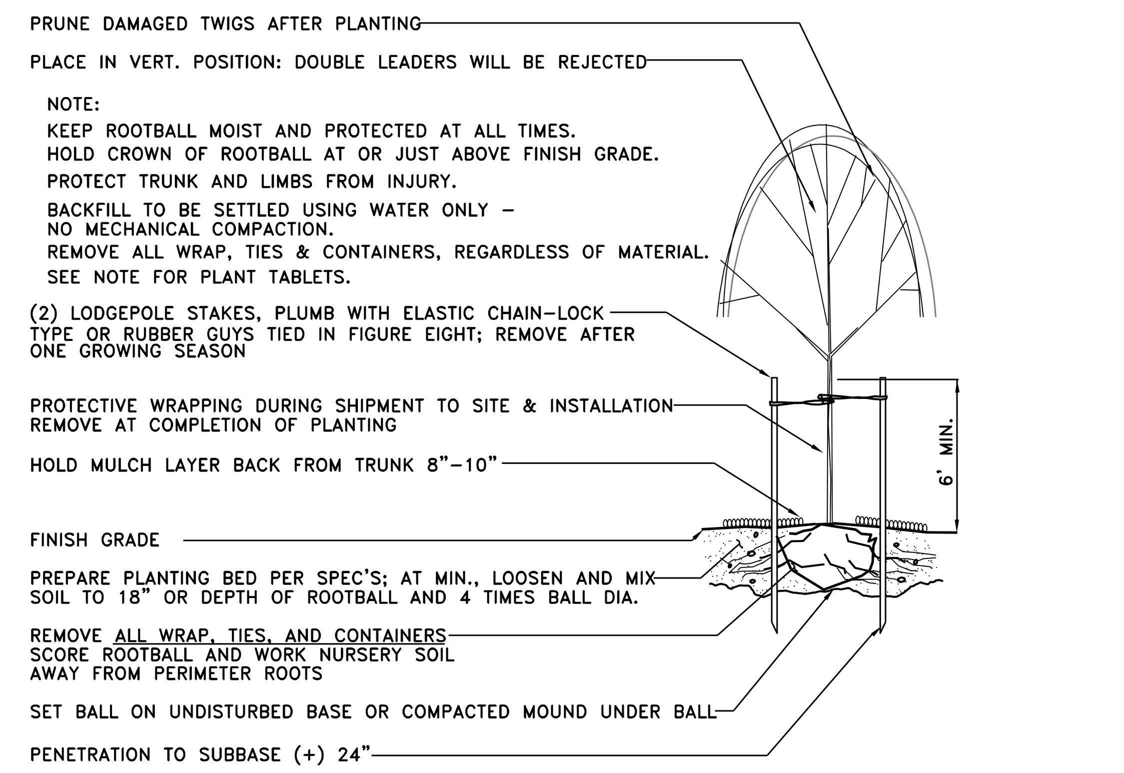
GROUNDCOVERS:
EXCAVATE PITS TO A MINIMUM OF THREE INCHES (3") BELOW, AND TWICE THE ROOT BALL DIAMETER. WATER THOROUGHLY AND TAKE CARE TO ENSURE THAT ROOT CROWN IS AT PROPER GRADE, AS DETAILED.

MULCH:
MULCH ALL LANDSCAPE AREAS WITH A THREE INCH (3") LAYER OF MULCH AS NOTED ON DETAIL.

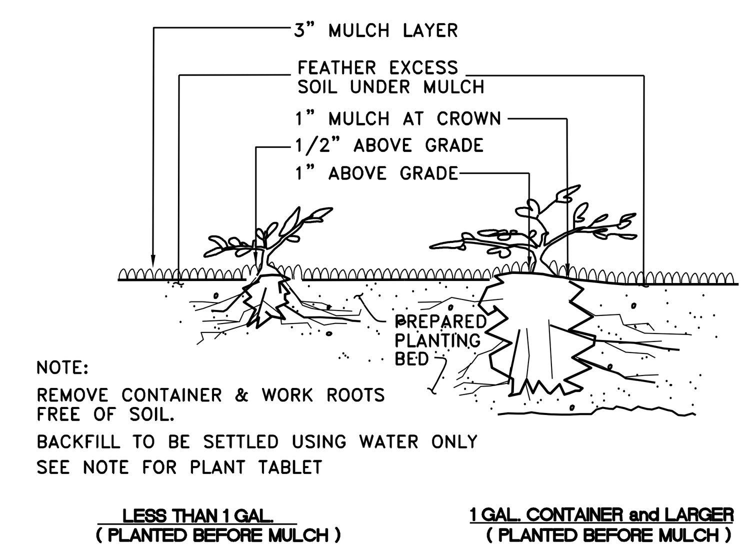
UTILITY CLEARANCES:
FIELD ADJUST PLANT LOCATIONS FOR 8-FOOT SEPARATION OF TREES/SHRUBS AND 2-FOOT SEPARATION FOR GROUNDCOVER FROM FIRE HYDRANTS AND UTILITY VAULTS.

PLANTING MAINTENANCE:
CONTRACTOR TO MAINTAIN PLANTINGS THROUGH COMPLETED INSTALLATION, AND UNTIL ACCEPTANCE OF LANDSCAPE INSTALLATION. PLANTING MAINTENANCE TO INCLUDE WATERING, WEEDING, CULTIVATING, TIGHTENING AND REPAIRING OF TREE GUYS, RESETTING PLANTS TO PROPER GRADES OR POSITION, AND RE-ESTABLISHING SETTING GRADES. HERBICIDE IS NOT RECOMMENDED FOR ONE YEAR FOLLOWING LANDSCAPE INSTALLATION. INCLUDED IS REPLACEMENT OF DEAD PLANTS AND PLANTS SHOWING LOSS OF 40 PERCENT OR MORE OF CANOPY.

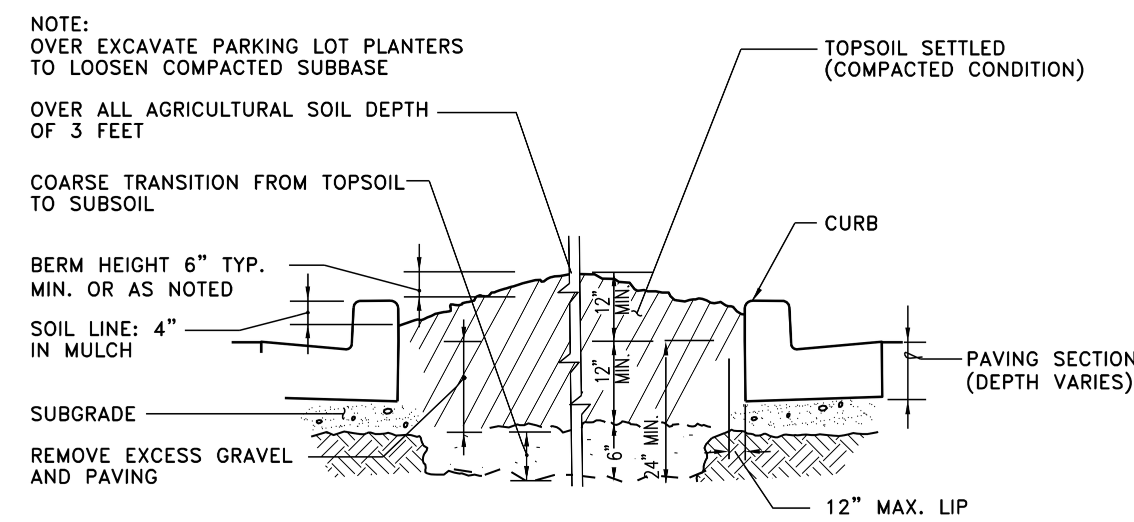
FERTILIZATION FOR GROUNDCOVER AREAS: UNIFORMLY BROADCAST SULFUR COATED UREA AT THE RATE OF FIVE (5) LBS. PER 1,000 SQUARE FEET. THE FIRST APPLICATION TO OCCUR APPROXIMATELY FORTY-FIVE (45) DAYS AFTER PLANTING. IN EARLY FALL AND SPRING, SUBSTITUTE A COMPLETE FERTILIZER SUCH AS 16-6-8 OR EQUAL FOR THE SULFUR COATED UREA AT THE RATE OF SIX (6) LBS. PER 1,000 SQUARE FEET. FOLLOW EACH FERTILIZATION WITH A THOROUGH IRRIGATION APPLICATION.



TREE PLANTING/STAKING DETAIL
NOT TO SCALE



GROUNDCOVER PLANTING DETAIL
NOT TO SCALE



GRADING IN PARKING LOT PLANTER DETAIL
NOT TO SCALE

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1	2/10/17	JMV	JMV	JMV	LAND USE SUBMITTAL

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PRELIMINARY LANDSCAPE AND IRRIGATION PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For:
COSTCO GASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

LICENSED LANDSCAPE ARCHITECT
JEFFREY VARLEY 6172
Signature
8-31-2017
Renewal Date
2-10-2017
Date
STATE OF CALIFORNIA

Scale:
Horizontal 1"=20'
Vertical N/A

Designed TR
Drawn BLS
Checked JMV
Approved CMT
Date 8/19/16

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH
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Job Number 6217
Sheet L-2 of 4

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COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
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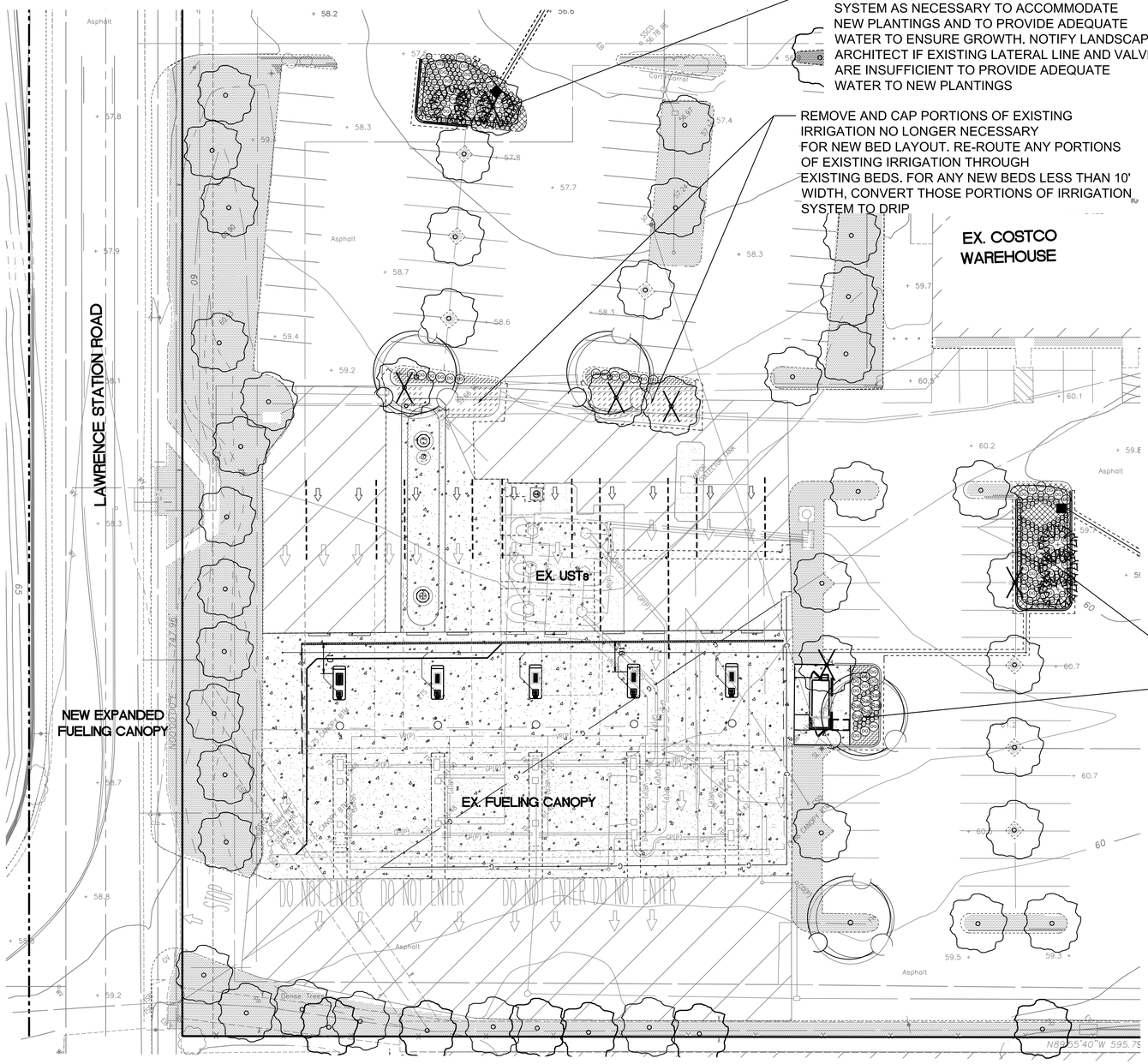

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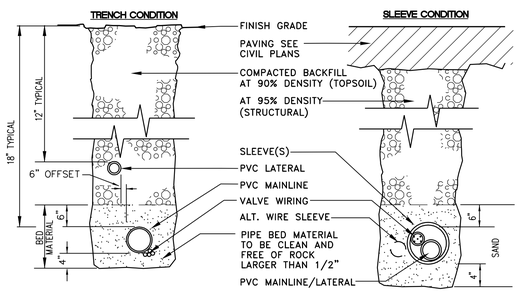
COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
COSTCO FACILITY #423

IRRIGATION NOTES

1. GENERAL CONTRACTOR AND LANDSCAPE CONTRACTOR TO COORDINATE:
   - A) INSTALLATION OF 110V ELECTRICAL SERVICE FROM ELECTRICAL SOURCE TO AUTOMATIC CONTROLLER, INCLUDING WIRE HOOK-UP INTO MOUNTED CONTROLLER. IRRIGATION CONTRACTOR WILL MOUNT CONTROLLER PER DESIGN AND COORDINATE WITH GENERAL CONTRACTOR.
   - B) VERIFICATION OF STATIC WATER PRESSURE AT POINT-OF-CONNECTION (P.O.C.) CONTRACTOR SHALL NOTIFY OWNER AND BARGHAUSEN CONSULTING ENGINEERS, INC., OF ANY VARIATION IN STATIC PRESSURE OVER 5 PSI GREATER/LESS THAN DESIGN PRESSURE.
   - C) INSTALLATION OF SLEEVING.
2. PROVIDE ALL LABOR, MATERIALS, TRANSPORTATION, AND SERVICES NECESSARY TO FURNISH AND INSTALL A COMPLETE IRRIGATION SYSTEM AS INDICATED ON THE DRAWINGS AND/OR NOTES. PROVIDE A ONE (1) YEAR WARRANTY/GUARANTEE FROM FINAL ACCEPTANCE AGAINST ALL DEFECTS IN MATERIALS, EQUIPMENT, AND WORKMANSHIP.
3. COORDINATE IRRIGATION INSTALLATION WITH GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, LANDSCAPE CONTRACTOR, OWNER, ARCHITECT, AND LANDSCAPE ARCHITECT.
4. LANDSCAPE CONTRACTOR TO TEST WATER PRESSURE PRIOR TO BEGINNING ANY WORK. NOTIFY OWNER AND LANDSCAPE ARCHITECT IF WATER PRESSURE IS INSUFFICIENT FOR PROPOSED WORK.
5. ALL WORK PER LOCAL CODE. INSTALLATION PER MANUFACTURER'S WRITTEN SPECIFICATIONS.
6. CONTRACTOR TO OBTAIN AND PAY FOR ALL PERMITS, FEES, AND REQUIRED CITY INSPECTIONS.
7. SUBMITTALS:
   - A) SUBMIT FIVE (5) COPIES OF EACH ITEM LISTED BELOW FOR LANDSCAPE ARCHITECT'S REVIEW AND APPROVAL,
   - B) PRODUCT DATA: FOR EACH TYPE OF PRODUCT INDICATED,
   - C) CONTROL WIRING PATH DIAGRAM,
   - D) "AS-BUILT" DRAWINGS.
   - E) OPERATION AND MAINTENANCE MANUALS.
8. PROVIDE AND KEEP UP TO DATE A COMPLETE "AS-BUILT" RECORD SET OF PRINTS WHICH ARE TO BE CORRECTED DAILY AND SHOW EVERY CHANGE FROM THE ORIGINAL DRAWINGS AND NOTES AND EXACT "AS-BUILT" LOCATIONS, SIZES AND KIND OF EQUIPMENT. THIS SET OF DRAWINGS. ARE TO BE KEPT ON SITE AND ARE TO BE USED ONLY AS THE RECORD SET. ALL WORK IS TO BE NEAT AND LEGIBLE ANNOTATIONS THEREON DAILY AS THE WORK PROCEEDS, SHOWING WORK AS ACTUALLY INSTALLED.
   DIMENSION FORM TWO (2) PERMANENT POINTS OF REFERENCE, BUILDING CORNERS, WALKS, OR ROAD INTERSECTIONS, ETC., THE LOCATION OF THE FOLLOWING:
   - A) CONNECTION TO WATER LINES (P.O.C.),
   - B) CONNECTIONS TO ELECTRICAL POWER,
   - C) GATE VALVE, QUICK COUPLERS, AND REMOTE CONTROL VALVE,
   - D) ROUTING OF MAINLINE (DIMENSION MAXIMUM 100' ALONG ROUTING),
   - E) ROUTING OF CONTROL WIRING,
   - F) OTHER RELATED EQUIPMENT AS DIRECTED BY THE LANDSCAPE ARCHITECT.
9. PREPARE AND PROVIDE PRIOR TO COMPLETION OF CONSTRUCTION, A THREE RING BINDER CONTAINING THE FOLLOWING INFORMATION:
   - A) INDEX SHEET STATING CONTRACTOR'S ADDRESS, TELEPHONE NUMBER, FAX, E-MAIL AND A LIST OF EQUIPMENT WITH NAME AND ADDRESS OF LOCAL MANUFACTURER'S REPRESENTATIVES,
   - B) CATALOG AND PARTS SHEETS ON EVERY MATERIAL AND EQUIPMENT INSTALLED UNDER THIS CONTRACT,
   - C) GUARANTEE STATEMENT,
   - D) COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT.
   - E) CONSTRUCTION DETAILS FROM THE PROJECT,
   - F) COMPLETE TROUBLE-SHOOTING GUIDE TO COMMON IRRIGATION PROBLEMS,
   - G) WINTERIZATION AND SPRING START-UP PROCEDURES,
   - H) CHART OF APPROXIMATE WATERING TIMES FOR SPRING, SUMMER, AND FALL,
   - I) A COPY OF THE "AS-BUILT" DRAWINGS AND CONTROLLER CHART.
10. ALL VALVES TO BE PLACED IN "CARSON" GRADE LEVEL BOXES WITH BOLT-LOCK LIDS (OR APPROVED EQUIVALENT). SET BOXES 2 INCHES HIGHER THAN FINISH GRADE IN MULCH AREAS AND FLUSH WITH FINISH GRADE IN LAWN AREAS. JUMBO BOX FOR CHECK VALVE, 10" ROUND BOX FOR GATE/QUICK COUPLER/WIRE SPLICES, AND 12" STANDARD FOR CONTROL VALVES. PROVIDE BOX EXTENSIONS AS REQUIRED.
11. MAINLINE PIPE TO BE BURIED 18 INCHES, LATERALS 12 INCHES, AND SLEEVES 24" INCHES BELOW FINISH GRADE. NO ROCK OR DEBRIS TO BE BACKFILLED OVER PIPE.
12. HEAD AND LINE POSITIONING IS DIAGRAMMATIC ON PLAN. ADJUST IN FIELD AS NECESSARY FOR 100 PERCENT COVERAGE. VALVES TO BE POSITIONED ADJACENT TO PAVEMENT/CURBS, IN SHRUB BEDS WHERE POSSIBLE.
13. FAMILIARIZE OWNERS FACILITY OPERATOR WITH IRRIGATION SYSTEM FUNCTION, CONTROLLER PROGRAMMING, SYSTEM OPERATION AND MAINTENANCE REQUIREMENTS.
14. SPRINKLERS ON RISERS WILL NOT BE ALLOWED UNLESS NOTED ON PLANS.
15. RADIUS REDUCTION TO BE MADE BY USE OF PRESSURE ADJUSTMENT, SCREENS, AND/OR ALTERNATE NOZZLES. IN-NOZZLE ADJUSTMENT IS LIMITED TO 10 PERCENT FOR SPRAY HEADS AND PER MANUFACTURER'S LIMITS FOR OTHER SPRINKLERS. SPRINKLER SPACING NOT EXCEED 60% OF THE DIAMETER OF THE PUBLISHED DATA.
16. ALL CONTROL WIRE SPLICES TO BE MADE AT VALVE BOXES WITH WATER TIGHT ELECTRICAL SPLICES, 3M, SCOTT'S LOCK SEAL TACK 3576-78, OR EQUIVALENT.
17. EACH VALVE BOX TO CONTAIN A MINIMUM OF TWO (2) SPARE ORANGE CONTROL WIRES FOR JACKETED WIRE. ROUTE SPARE WIRES FROM THE CONTROLLER TO THE LAST VALVE OF EACH MAINLINE BRANCH. COMMON WIRE TO BE WHITE. SINGLE STRAND WIRE TO BE A MINIMUM OF 14 GAUGE.
18. ALL ELECTRICAL EQUIPMENT TO BE U.L. TESTED AND APPROVED, AND BEAR THE U.L. LABEL.
19. CROSS CONNECTION PROTECTION INSPECTION REQUIRED. THE BACKFLOW DEVICE TO BE TESTED UPON THE ORIGINAL INSTALLATION. THE TESTING TO BE PERFORMED BY A PERSON HOLDING A CURRENT CERTIFICATE AS A BACKFLOW TESTER. THE TEST REPORT TO BE SUBMITTED TO THE LOCAL WATER DISTRICT, OR PURVEYOR, AND OWNER WITH A COPY TO BARGHAUSEN CONSULTING ENGINEERS, INC. CONTRACTOR TO INCLUDE TESTING IN THE SCOPE OF WORK. OWNER IS RESPONSIBLE FOR ANNUAL INSPECTIONS AFTER THE INTIAL INSPECTION.
20. CONTRACTOR TO PROVIDE SYSTEM WINTERIZATION/SPRING SERVICE WHEN INSTALLATION HAS BEEN COMPLETED WITHIN 90 DAYS OF NOVEMBER 1 FOR WINTERIZATION, OR MAY 15 FOR SPRING SERVICE. SERVICE TO BE PERFORMED AS NEAR AS PRACTICAL TO THE ABOVE DATES, OR AS FREEZE/PRECIPITATION CONDITIONS DETERMINE SERVICE NEED.

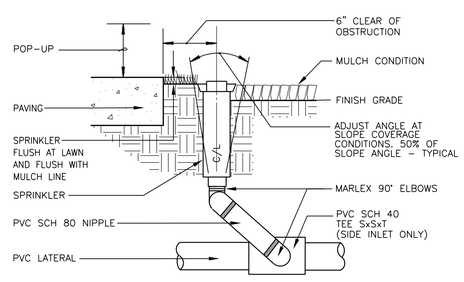
IRRIGATION NOTES CONT'D

21. IRRIGATION SCHEDULING:
    THE IRRIGATION CONTROLLER CONTAINS A WATER BUDGET FEATURE. PERIODIC (WEEKLY) ADJUSTMENT OF THE WATER SCHEDULE IS INTENDED TO BE MADE VIA BUDGET ADJUSTMENT. RE-ADJUST WATERING DAYS AT 100 PERCENT BUDGET WHEN ADJUSTMENT EXCEEDS 30%. SET CONTROLLER FOR HIGHEST Eto WATER SCHEDULE, BASED ON PUBLISHED LOCAL EVAPOTRANSPIRATION DATA. SYSTEM HAS BEEN DESIGNED FOR 50 TO 80 PERCENT DISTRIBUTION UNIFORMITY. LAWN ZONES SHOULD BE SCHEDULED FOR 100 PERCENT REPLACEMENT FACTOR ON A TYPICAL MINIMUM 3-DAY CYCLE. SHRUB ZONES SHOULD BE PROGRAMMED AT 40 TO 70 PERCENT OF THE MONTHLY LAWN WATER REQUIREMENT ON A ONCE PER WEEK CYCLE. ALL WATERING IN EXCESS OF THE LOCAL ETo ("FIELD RECHARGE") TO BE COMPLETED DURING THE CONSTRUCTION PHASE WHILE THE CONTRACTOR IS ON THE JOB SITE. OVER WATERING OF LANDSCAPE DUE TO CONTROLLER SCHEDULING TO BE GROUNDS FOR CONTRACTOR TO REPAIR ANY RESULTANT DAMAGES AT CONTRACTOR'S OWN EXPENSE.
22. SUBSTITUTION OF IRRIGATION MATERIAL/EQUIPMENT TO BE MADE ONLY UPON WRITTEN APPROVAL OF OWNER'S REPRESENTATIVE.
23. ALL ZONES TO PASS A MINIMUM DISTRIBUTION UNIFORMITY OF 62 PERCENT, AS TESTED THROUGH AN IRRIGATION ASSOCIATION CERTIFIED WATER AUDIT.
24. CLEANUP AND PROTECTION: DURING IRRIGATION WORK, KEEP ALL PAVEMENT CLEAN AND WORK AREAS IN AN ORDERLY CONDITION. PROTECT IRRIGATION WORK AND MATERIALS FROM DAMAGE DUE TO LANDSCAPE AND IRRIGATION OPERATIONS AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIOD. TREAT, REPAIR, OR REPLACE DAMAGE LANDSCAPE AND IRRIGATION WORK AS DIRECTED BY THE OWNER.
25. USE SIMILAR MANUFACTURERS FOR ALL IRRIGATION MATERIALS THAT ARE CURRENTLY AT THE SITE. FOR INSTANCE, USE RAINBIRD NOZZLES IF EXISTING IRRIGATION SYSTEM USES RAINBIRD NOZZLES. DO NOT USE CLASS 200 PIPE IF SCHEDULE 40 PVC IS USED FOR LATERALS AND MAINLINE.



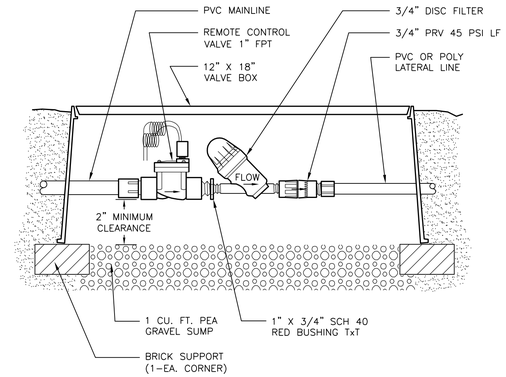
NOTE:
DIMENSIONS ARE MINIMUM CLEARANCES.
ALL IRRIGATION SLEEVING TRENCH BACKFILL MATERIAL TO BE CLASS "B" OR BETTER (MAX. OF 10% PASSING NO.40 SCREEN) AND BE COMPACTED TO MIN. 95% OPTIMUM DENSITY PER ASTM D-1557-70 (MODIFIED PROCTOR)

SLEEVE/TRENCHING DETAIL
NOT TO SCALE

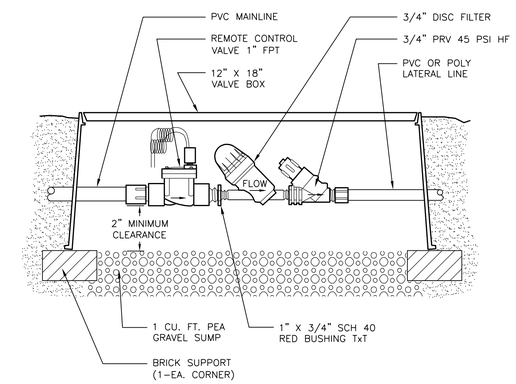


NOTE:
MANUFACTURER'S LIMITS PREVAIL FOR INSTALLATION AND ADJUSTMENTS.
PROVIDE SWING JOINT RISERS AT WALKS AND CURBS. 24" FLEXIBLE RISERS ACCEPTABLE ELSEWHERE.

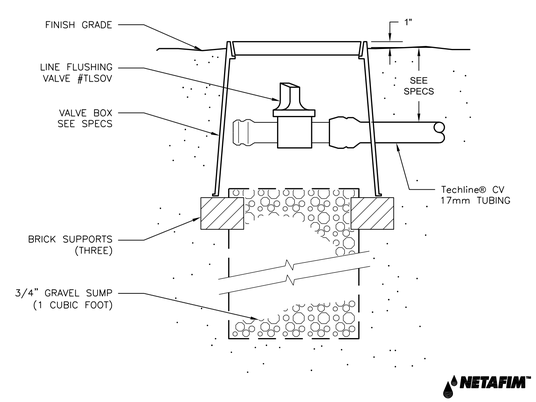
POP-UP RISER ASSEMBLY
NOT TO SCALE



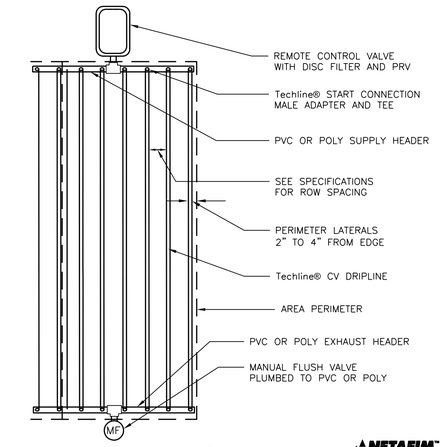
LOW-VOLUME CONTROL SYSTEM:
P/N LVCZS80-10075-LF .25 - 4.4 GPM
NOT TO SCALE — DETAIL - L201LF



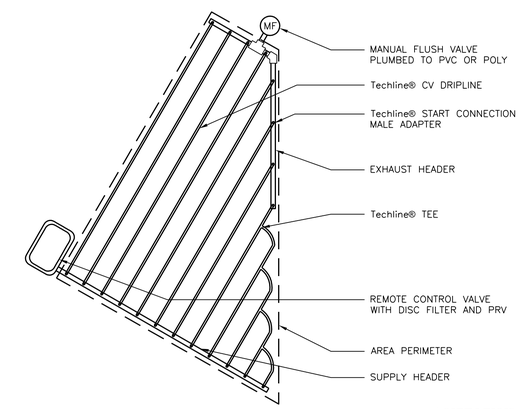
LOW-VOLUME CONTROL ZONE ASSEMBLY:
P/N LVCZS80-10075-HF 4.5 - 17.6 GPM
NOT TO SCALE — DETAIL - L211HF



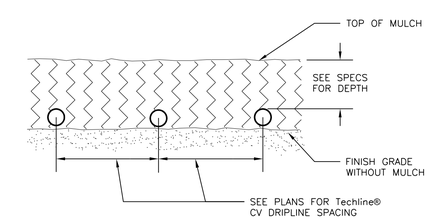
MANUAL LINE FLUSHING VALVE TLSOV PLUMBED TO TUBING
NOT TO SCALE — DETAIL - D211



Techline® CV END FEED LAYOUT
NOT TO SCALE — DETAIL - C101



Techline® CV IRREGULAR AREAS: Triangular
NOT TO SCALE — DETAIL - C104



Techline® CV SUBGRADE INSTALLATION
NOT TO SCALE — DETAIL - C201

No.	Date	By	Ckd.	Appr.	Revision
1	2/10/17	JMV	JMV	JMV	LAND USE SUBMITTAL

Title: PRELIMINARY LANDSCAPE AND IRRIGATION PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For: COSTCO GASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

LICENSED LANDSCAPE ARCHITECT — JEFFREY VARLEY — Signature — 8-31-2017 Renewal Date — 2-10-2017 Date — STATE OF CALIFORNIA

Scale: Horizontal 1"=20' Vertical N/A

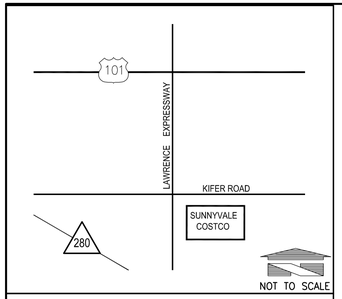
Designed TR
Drawn BLS
Checked JMV
Approved CMT
Date 8/19/16

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH
KENT, WA 98032
(425)251-6222
(425)251-8782 FAX
CIVIL ENGINEERING, LAND PLANNING, SURVEYING, ENVIRONMENTAL SERVICES

Job Number 6217
Sheet L-4 of 4

File:P:\06006\6217\preliminary\2016 EXPANSION\6217-pl.dwg Date/Time:5/30/2017 8:09 AM Scale:0.386863 JVARLEY Xref: -----

PRELIMINARY UTILITY PLAN
COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086



VICINITY MAP

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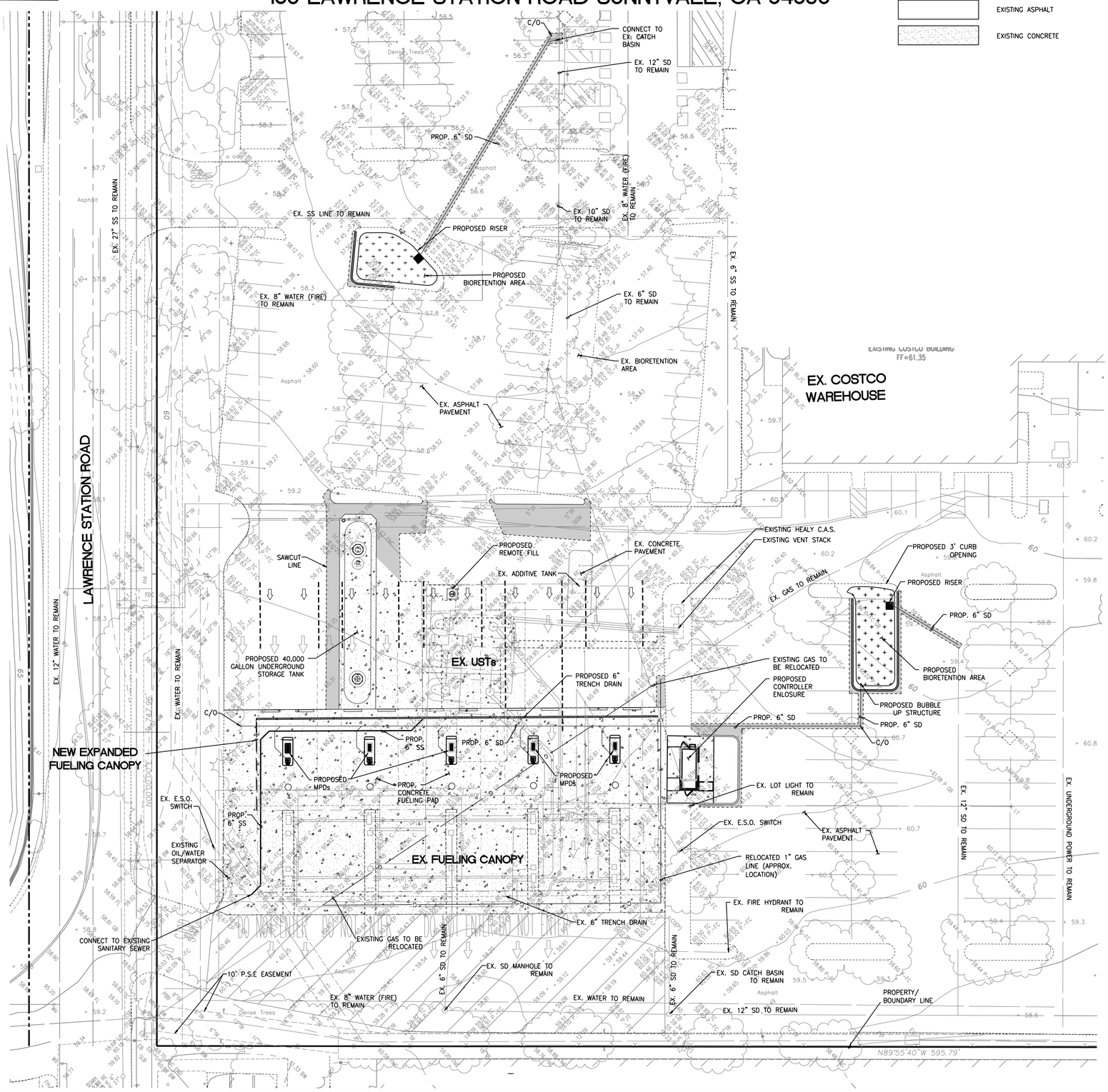

LEGEND

- EXISTING ASPHALT
- EXISTING CONCRETE
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED BIORETENTION AREA

No.	Date	By	Ckd.	Appr.	Revision
3	5/31/17	TR	KS	CMT	LAND USE SUBMITTAL

Title: PRELIMINARY UTILITY PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For: COSTCO GASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

Scale: Horizontal 1"=20' Vertical N/A

Designed TR
Drawn TR
Checked KS
Approved CMT
Date 8/19/16

BARGHAUSEN CONSULTING ENGINEERS, INC.
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Job Number 6217
Sheet 2 of 2

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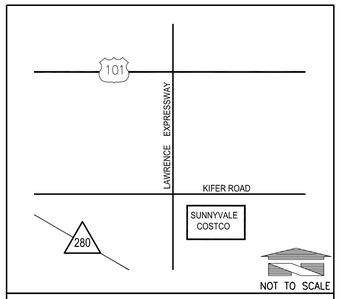
PRELIMINARY SITE PLAN

COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
COSTCO FACILITY #423



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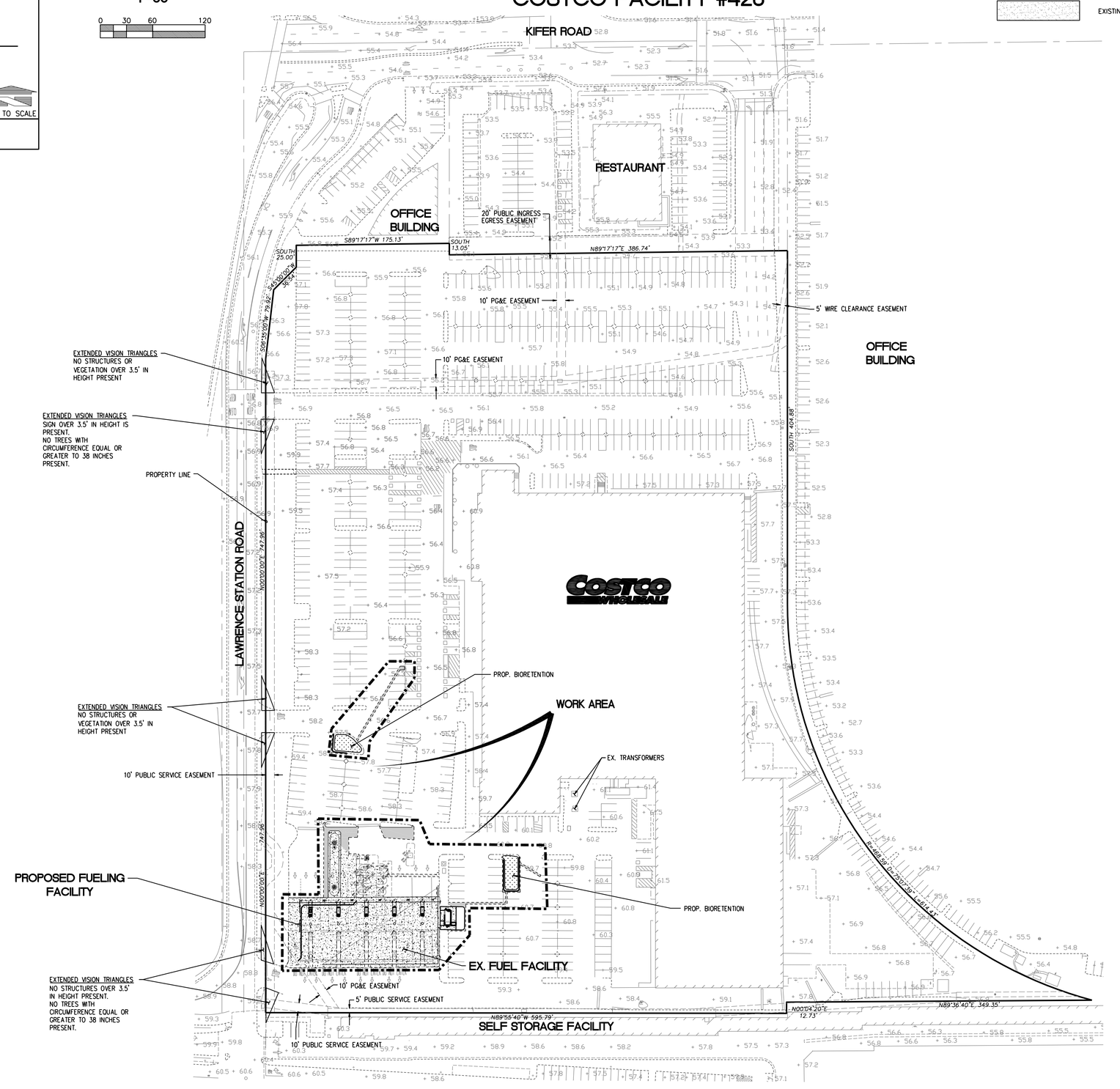

LEGEND

- EXISTING ASPHALT
- EXISTING CONCRETE
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED BIORETENTION AREA

OWNER

COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

ENGINEER/APPLICANT

BARGHAUSEN CONSULTING ENGINEERS, INC.
18215 72ND AVENUE SOUTH
KENT, WA 98032
PHONE: (425) 251-6222
FAX: (425) 251-8782
CONTACT: CHRIS TEBALDI

PROJECT DATA:

PROJECT ADDRESS:	150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086
JURISDICTION:	CITY OF SUNNYVALE

EX. TOPOGRAPHY/SURVEY INFORMATION NOTE:

BARGHAUSEN CONSULTING ENGINEERS, INC. DOES NOT WARRANT THAT THE TOPOGRAPHY SHOWN ON THESE DRAWINGS IS REPRESENTATIVE OF WHAT IS CONSTRUCTED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE OWNER TO HAVE ALL IMPROVEMENTS FIELD VERIFIED PRIOR TO CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF BARGHAUSEN CONSULTING ENGINEERS, INC. PRIOR TO WORK. UTILITIES AND UTILITY EASEMENTS FOR THIS SITE HAVE NOT BEEN RESEARCHED OR CONFIRMED.

No.	Date	By	Ckd.	Appr.	Revision
3	5/31/17	TR	KS	CMT	LAND USE SUBMITTAL

Title: PRELIMINARY SITE PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For: COSTCO GASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

Scale: Horizontal / Vertical N/A

Designed TR
Drawn TR
Checked KS
Approved CMT
Date 8/19/16

Scale: 1" = 1'

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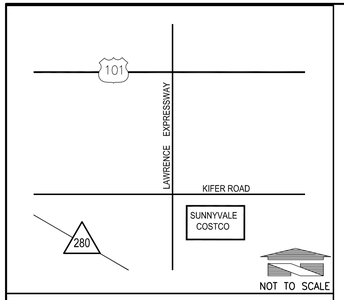
Job Number 6217

Sheet 1 of 1

File:P:\06006\6217\preliminary\2016 EXPANSION\6217-pp.dwg Date/Time:4/17/2017 5:09 PM KSTUBBS Xref: ----

PRELIMINARY GRADING PLAN
COSTCO WHOLESALE FUEL FACILITY EXPANSION
150 LAWRENCE STATION ROAD SUNNYVALE, CA 94086



VICINITY MAP

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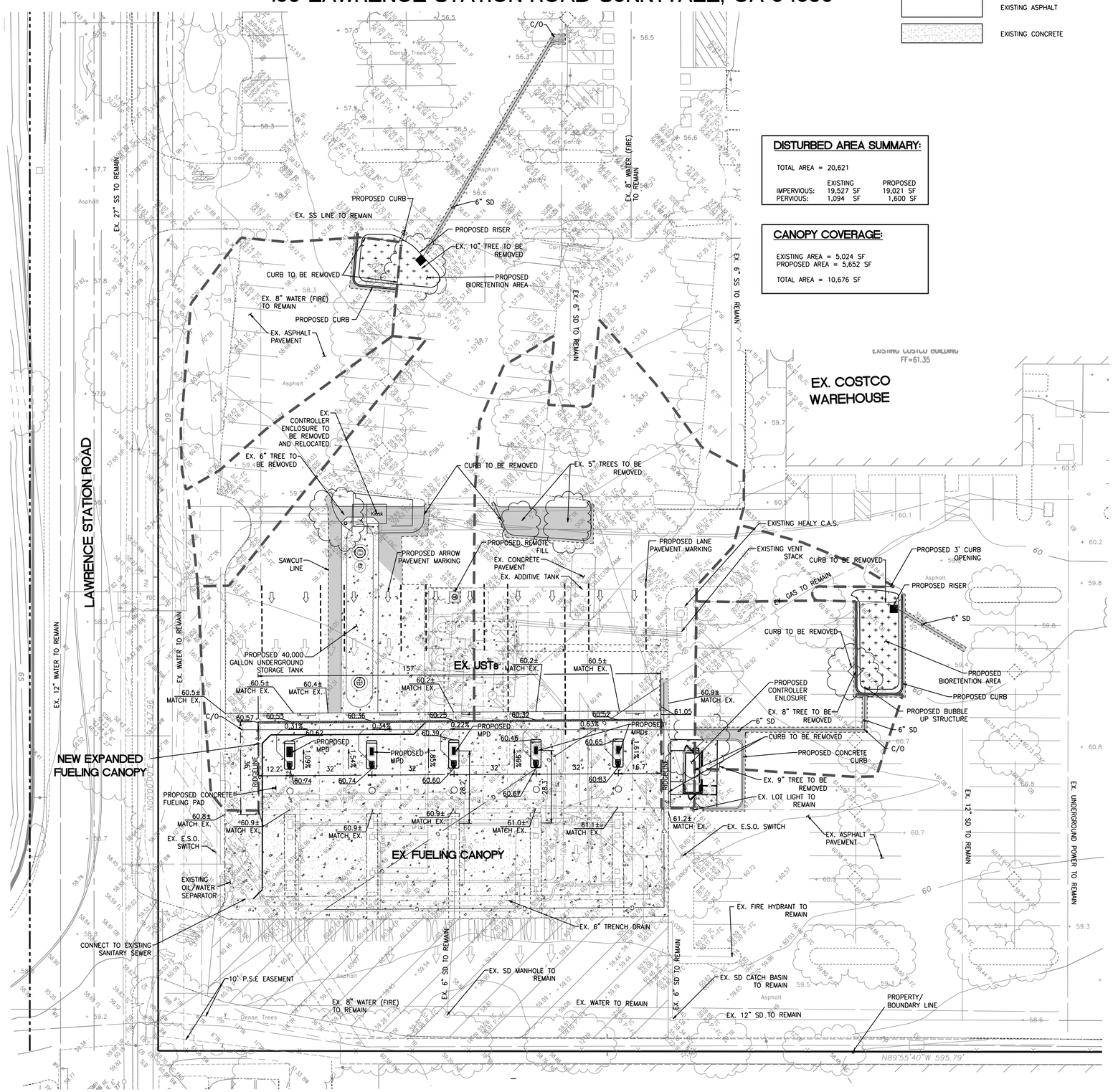

LEGEND

- EXISTING ASPHALT
- EXISTING CONCRETE
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- PROPOSED BIORETENTION AREA

DISTURBED AREA SUMMARY:

TOTAL AREA = 20,621

	EXISTING	PROPOSED
IMPERVIOUS:	19,527 SF	19,021 SF
PERVIOUS:	1,094 SF	1,600 SF

CANOPY COVERAGE:

EXISTING AREA = 5,024 SF
PROPOSED AREA = 5,652 SF

TOTAL AREA = 10,676 SF

No.	Date	By	Ckd.	Appr.	Revision
3	5/31/17	TR	KS	CMT	LAND USE SUBMITTAL

Title: PRELIMINARY GRADING PLAN
150 LAWRENCE STATION ROAD
SUNNYVALE, CA 94086
COSTCO FUEL FACILITY #423

For: CostcoGASOLINE
COSTCO WHOLESALE
999 LAKE DRIVE
ISSAQUAH, WA 98027

Scale: Horizontal 1"=20'; Vertical N/A

Designed TR
Drawn TR
Checked KS
Approved CMT
Date 8/19/16

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Job Number 6217
Sheet 1 of 2

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