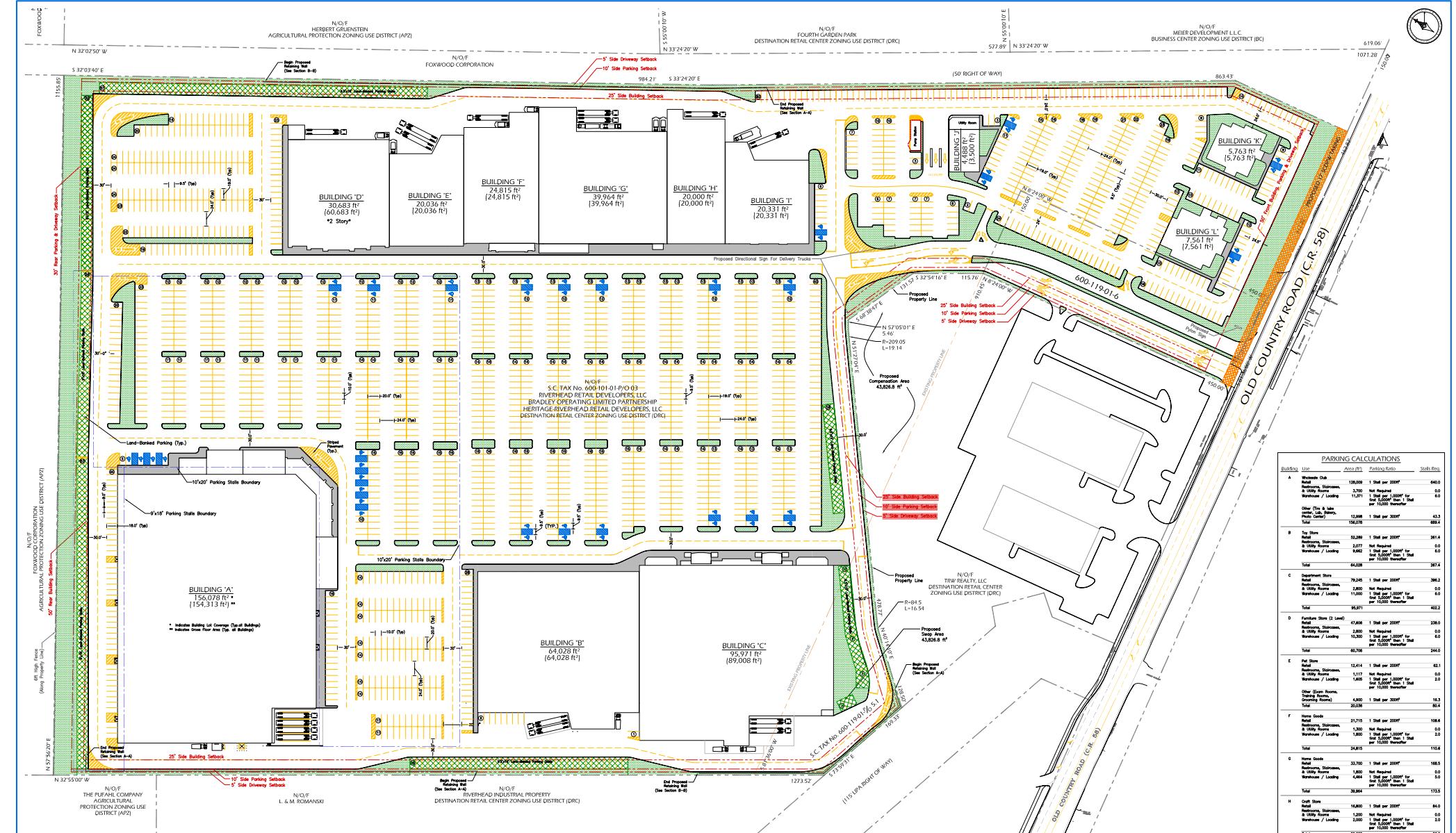


Appendix A



1000

FINAL BUILDING LOT COVERAGE (FOOTPRINT)

Top 1000 most active responses to the 2010 survey

www.foodandbeverage.com/resources/industry-awards/industry-awards-best-of-show.aspx for previous awards.

Drafting Lot - Coverage: 400,000 ft² / 1,000,000 ft² = 20.50%

DRC ZONING SETBACK REQUIREMENTS

PARKING SUMMARY

Digitized by srujanika@gmail.com

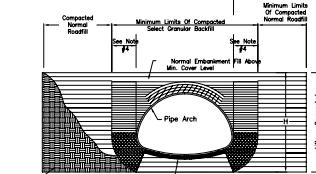
Development Pages		
Building lot Coverage without the use of Development Pages	15.00%	23.52%
Development Pages		

Description	Required	Provided
Estimated	12.00%	53.8

See Parking
Concessions 686
1,027

DIMENSIONAL REQUIREMENTS

Date	Revised	Approved
		
The Shops at Riverhead County Road 58 Riverhead, NY 11901		
 E.S. KALOGERAS, P.E. <i>Consulting Engineers</i> www.eskalogeras.com		
APPROVED FOR RECORD OR RELEASE BY THE PLANNING BOARD OF THE TOWN OF RIVERHEAD AND IS ALSO APPROVED FOR RECORD AS A PLANNING DRAWING BY THE TOWN OF RIVERHEAD		
DRAWN BY: <u>Paul E. Sigmonik</u> DATE: <u>October 23rd, 2007</u> SCALE: <u>1" = 50'</u> DRCC #6401 Sheet No: <u>1</u> Site Plan <u>S1</u>		



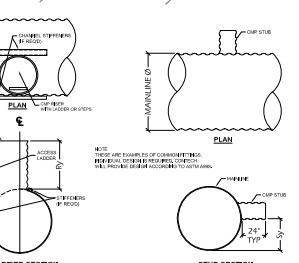
NOTES:

1. Select granular backfill to be placed in a balanced fashion in thin lifts (6"-8" loose typically) and compacted to 90 percent density per AASHTO T-180.
2. Complete and regular monitoring of the CSP arch shape is necessary during all backfilling of the structure.
3. Prevent excessive arch shape change by varying compaction methods and equipment.
4. This width should be equal to 1/2 span to one end of the structure. Greater widths may be required. Distance depends on bedding layer for any given loading, structure shape and backfill material. This must be evaluated by the Project Engineer.
5. Shaped bed for a minimum width of open/2. Minimum bedding thickness is twice the corrugation depth.
6. Embedment depth must be such that a stable embankment capable of resisting side pressures from CSP pipe-arch shape will be maintained throughout the life of installation. This width to be determined by the Project Engineer.

SECTION
Critical backfill zone, pressure on soil greatest here.
Initial lifts over crown of structure as indicated by shaded area to be compacted to required density with horse operated equipment or with small tractor (d-4 or smaller) drawn equipment.

NOTES:
Select granular structural backfill limits.
CORRUGATED METAL PIPE-ARCH
TYPICAL BACKFILL SECTION

TYPICAL FITTINGS FOR
CORRUGATED METAL PIPE-ARCH



1. THE CONCRETE CAP SHALL BE DESIGNED AND DESIGNED BY OTHERS SO THAT THE LOADS ARE TRANSMITTED
2. THE CONCRETE CAP SHALL BE DESIGNED TO PROVIDE AN APPROPRIATE BOTTOM AREA BASED ON THE ALLOWABLE
3. THE CONCRETE CAP SHALL BE DESIGNED SO THAT THE CONCRETE CAP CAN WITHSTAND THE LOADS AS
CAN OCCUR DUE TO THE SOIL CONDITIONS.

GENERAL INFORMATION	
Location of Site Town of Riverhead, Suffolk County	
Access County Road 58 and Koerner Avenue in the Town of Riverhead	400-101-041 & 400-119-048
Zoning District	DR-1 (Residential District)
Area Data	600-101-01-Z-03 6,095,517 ft² 600-150-01-Z-03 17,551 ft² 600-119-01-Z-01 4,326,060 ft² 600-101-01-Z-02 1,011 ft² Total Site Area 41,897 ft² 41.55 Acres
Survey Information taken from survey done by: Joseph Ingoglio, Land Surveyor (dated 12-18-2006)	1,809,900 ft² 41.55 Acres

Basis of Design of Storm Drainage System
Based on SC DRHS Code

SDA-1	349,022 ft³
Roof Surface Area	160,540 ft² x Storm x 1.2 RunOff Coefficient
Paved Surface Area	145,355 ft² x Storm x 1.0 RunOff Coefficient
Concrete Surface Area	2,739 ft² x Storm x 1.0 RunOff Coefficient
Grass / Undeveloped Area	42,071 ft² x Storm x 0.5 RunOff Coefficient
SDA-1 Required Storm Water Volume	52,020 ft³
Using 8 ft x 10 ft Perforated Gutterback Arched Ditch capable of holding 24.7 ft per linear foot	
80 ft x 10 ft = 800 linear feet	Required
2,334 ft x 24.7 ft = 56,901 ft³	Provided
SDA-1 Provided Storm Water Volume	63,951 ft³
SDA-2	638,700 ft³
Roof Surface Area	64 ft x 100 ft x Storm x 1.2 RunOff Coefficient
Paved Surface Area	53 ft x 30 ft x Storm x 1.0 RunOff Coefficient
Concrete Surface Area	24,517 ft² x Storm x 1.0 RunOff Coefficient
Grass / Undeveloped Area	42,329 ft² x Storm x 0.5 RunOff Coefficient
SDA-2 Required Storm Water Volume	93,916 ft³
Using 8 ft x 10 ft Perforated Gutterback Arched Ditch capable of holding 24.7 ft per linear foot	
80 ft x 10 ft = 800 linear feet	Required
4,120 ft x 24.7 ft = 101,764 ft³	Provided
SDA-2 Provided Storm Water Volume	101,764 ft³
SDA-3	545,077 ft³
Roof Surface Area	310,135 ft² x Storm x 1.2 RunOff Coefficient
Paved Surface Area	104,322 ft² x Storm x 1.0 RunOff Coefficient
Concrete Surface Area	11,763 ft² x Storm x 1.0 RunOff Coefficient
Grass / Undeveloped Area	58,936 ft² x Storm x 0.5 RunOff Coefficient
SDA-3 Required Storm Water Volume	82,920 ft³
Using 8 ft x 10 ft Perforated Gutterback Arched Ditch capable of holding 24.7 ft per linear foot	
80 ft x 10 ft = 800 linear feet	Required
3,655 ft x 24.7 ft = 90,010 ft³	Provided
SDA-3 Provided Storm Water Volume	100,010 ft³
SDA-4	232,871 ft³
Roof Surface Area	17,182 ft² x Storm x 1.2 RunOff Coefficient
Paved Surface Area	184,595 ft² x Storm x 1.0 RunOff Coefficient
Concrete Surface Area	2,646 ft² x Storm x 1.0 RunOff Coefficient
Grass / Undeveloped Area	26,994 ft² x Storm x 0.5 RunOff Coefficient
SDA-4 Required Storm Water Volume	1,521 ft³
Using 8 ft x 10 ft Perforated Gutterback Arched Ditch capable of holding 24.7 ft per linear foot	
33,263 ft x 24.7 ft = 1,110 linear feet	Required
1,788 ft x 24.7 ft = 41,164 ft³	Provided
SDA-4 Provided Storm Water Volume	44,164 ft³
SDA-5	57,021 ft³
Roof Surface Area	0 ft x 0 ft x Storm x 1.0 RunOff Coefficient
Paved Surface Area	28,663 ft² x Storm x 1.0 RunOff Coefficient
Concrete Surface Area	0 ft x 2 ft x Storm x 1.0 RunOff Coefficient
Grass / Undeveloped Area	29,162 ft² x Storm x 0.5 RunOff Coefficient
SDA-5 Required Storm Water Volume	0 ft³
Using 8 ft x 10 ft Perforated Gutterback Arched Ditch capable of holding 24.7 ft per linear foot	
5,823 ft x 24.7 ft = 141 ft	Required
730 ft x 9.6 ft = 7,008 ft³	Provided
SDA-5 Provided Storm Water Volume	7,008 ft³

Date	Revision	Approval By
May 11th, 2007		
DRC 06-01	Sheet 1 of 1	Grading & Drainage Plan



E.S. KALOGERAS, P.E.
Consulting Engineers

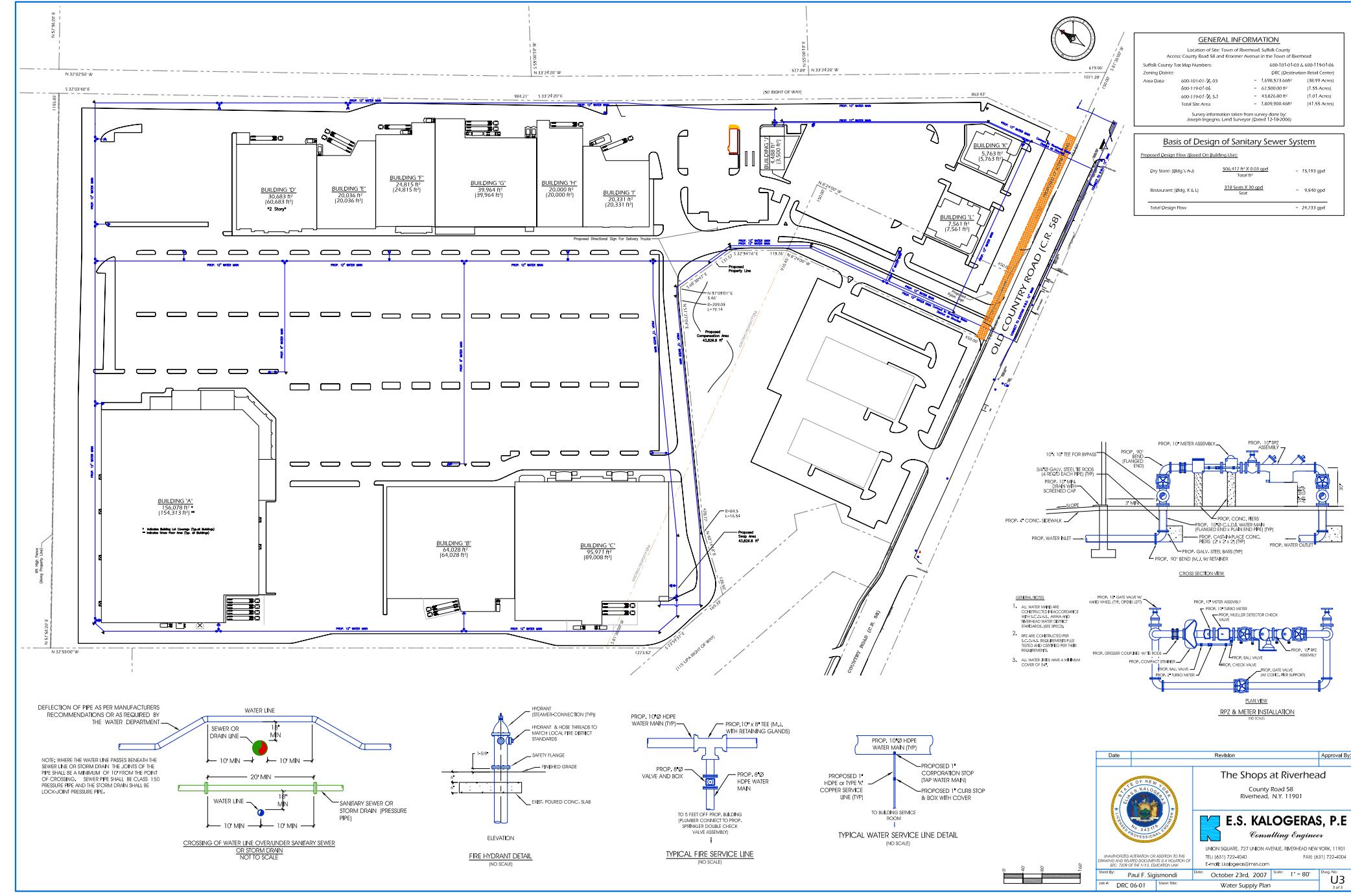
UNION SQUARE, 727 UNION AVENUE, RIVERHEAD, NEW YORK 11901
TEL: (631) 721-4000 FAX: (631) 722-4004

E-mail: eskogerass@msn.com

State By: Paul F. Sigismondi Date: May 11th, 2007 Scale: 1" = 80' Dwg. No: U1

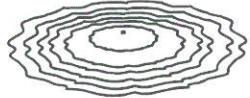
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1 of 3

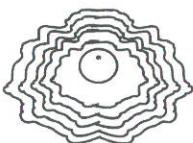


H-Wall Mount

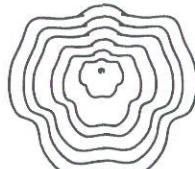
OPTICS



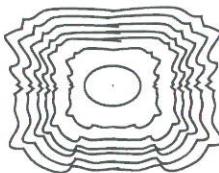
TYPE II (2)



TYPE III (3)



FORWARD THROW (FP)



TYPE V (5)

NOTE: Based on 1000 Watt MH vertical burn. Consult factory for accurate optics.

ORDERING INFORMATION

SELECT APPROPRIATE CHOICE FROM EACH COLUMN TO FORMULATE ORDER CODE. Refer to example below.

LUMINAIRE PREFIX	DISTRIBUTION	LAMP WATTAGE	LIGHT SOURCE	LENS	LINE VOLTAGE	LUMINAIRE FINISH	OPTIONS
Vertical Burn H-V	FP - Perimeter Forward Throw 5 - Type V AF - Automotive Forward	150W 175W 250W 320W 400W	MH - Metal Halide (175, 250W) MHR - Metal Halide Reduced (400W) SMHR - Super Metal Halide Reduced (400W) PSMH - Pulse-Start Metal Halide (175, 250, 320W) HPS - High Pressure Sodium (150W)	CT - Contoured Glass	480V MT - Multi Tap ³ TT - Tri Tap ²	BRZ - Bronze BLK - Black PLT - Platinum BUF - Buff WHT - White GRN - Green CC - Custom Color	RPP - Round Pole Plate LL - Less Lamp BKT-WM - Wall Mount Plate GS - Glare Shield GR - Tool-less Entry Ground Relamp (Vertical Only) PC - Photo Cell SF - Single Fusing DF - Double Fusing NO - No Options
Horizontal Burn H-S	3 - Type III FP - Perimeter Forward Throw 5 - Type V	100W 150W 175W 250W 350W 400W	MH - Metal Halide (175, 250W) MHR - Metal Halide Reduced (400W) SMHR - Super Metal Halide Reduced (400W) SMH - Super Metal Halide (175, 250W) HPS - High Pressure Sodium (100, 150, 250, 400W)	FG - Flat Glass			
H-M	3 - Type III FP - Perimeter Forward Throw 5 - Type V	250W 400W	SMH - Super Metal Halide MH - Metal Halide HPS - High Pressure Sodium				
H-L	3 - Type III FP - Perimeter Forward Throw ¹	1000W	MH - Metal Halide HPS - High Pressure Sodium				

H-V

5

400

MHR

CT

MT

BRZ

NO

(EXAMPLE ORDER)

ORDER:

WLS

NOTE:

1. Forward Throw reflectors are field-rotatable.
2. Consult factory for international voltages. (120, 277, 347 Voltage)
3. MT - Multi Tap is shipped standard unless otherwise specified.
(Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.)

Approved By: _____

Project Name: _____

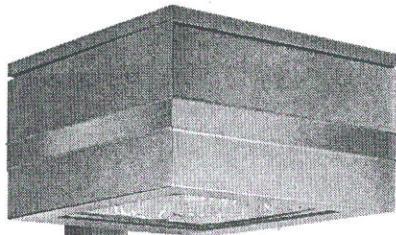
Location: _____

Date: _____

WLS LIGHTING SYSTEMS
MANUFACTURING SINCE 1969

P.O. Box 100519 * Fort Worth, TX 76185
800.633.8711 * Fax: 817.735.4824 * www.wslighting.com

WLS LIGHTING SYSTEMS

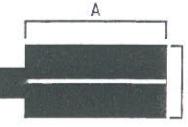


Flat-lensed fixtures meet IESNA full cutoff classification

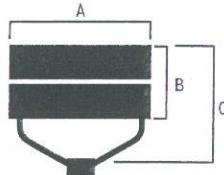


DIMENSIONS

ARM MOUNT

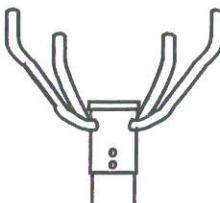


POLE TOP MOUNT



	A	B	C	EPA
FVM	21 5/8"	12 3/4"	21 15/16"	2.8
FVR	21 5/8"	16"	25"	3.5

MOUNTING BRACKETS



BOLT ON ARM

POLE TOP MOUNT

Approved By: _____
 Project Name: _____
 Location: _____
 Date: _____

FV VERTICAL LAMP/FLAT GLASS LENS SERIES

SPECIFICATIONS

HOUSING The FV Series formed aluminum housing is finished to produce a clean, sharp appearance and ensures weather-tight construction. Available in 2 sizes: Medium (reduced envelope 400 Watt Lamp) and Reduced (reduced envelope 1000 Watt Lamp).

LENS/GASKET A flat tempered glass lens is sealed to the housing with an EPDM gasket, preventing entry of moisture and insects. Combined with the vertical burn feature, the flat glass lens provides high performance lighting.

TOP ACCESS Is secured by four captive stainless steel fasteners and provides ease of installation and servicing.

FINISHES Each fixture is finished with a baked-on polyester powder finishing process to give the fixture an exceptionally attractive appearance. Standard finish colors include bronze, buff, black, platinum, white and green. The polyester finish withstands extreme weather changes without cracking or peeling. Consult factory for available custom colors and pinstripe decal options.

REFLECTORS/DISTRIBUTION PATTERNS The FV Series fixture is available in four reflector systems and distribution patterns, all with vertical burn lamps: Type II (2), Type III (3), Type V (5), and Perimeter Forward Throw (FP). Reflectors are field-rotatable, enabling generous flexibility in distribution patterns without fixture movement.

LIGHT SOURCES Designed to operate with Pulse-Start Metal Halide, Super Metal Halide, Metal Halide, Metal Halide Reduced Envelope or High Pressure Sodium.

SOCKETS Porcelain mogul-base sockets with spring-reinforced contacts.

BALLAST Metal Halide, Super Metal Halide, and High Pressure Sodium feature a high-power factor CWA ballast, and are designed for -20 F operation.

BRACKETS **Arm Mount:** 5 1/2" x 2 1/2" x 12" length shipped standard. (An 8" bracket is available for single or D180 configurations, but must be ordered separately from Options column of the ordering chart.) A Round Pole Plate (RPP) is required for mounting to 3" - 5" round poles. (See Options in Luminaire Ordering Information.) **Pole Top:** Cast aluminum mounting hub conceals the wiring compartment and mounting hardware (consisting of four 11/16" O.D. aluminum rods for medium fixtures and 7/8" O.D. aluminum rods for large fixtures, and high-strength grade-five steel bolt with nylon insert and split lock washer for double locking.)

Listed for wet locations.

WLS LIGHTING SYSTEMS
MANUFACTURING SINCE 1969

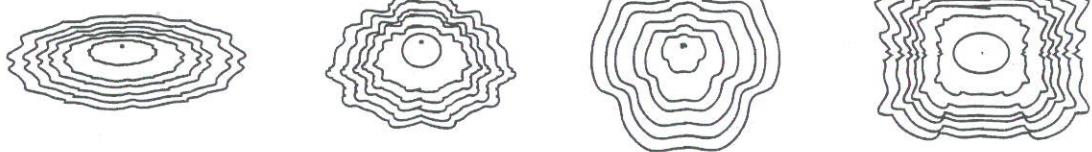
P.O. Box 100519 • Fort Worth, TX 76185
800.633.8711 • Fax: 817.735.4824 • www.wlslighting.com

FV VERTICAL LAMP/FLAT GLASS LENS SERIES

Fixture Mounting Configurations



OPTICS



TYPE II (2)

TYPE III (3)

FORWARD THROW (FP)

TYPE V (5)

NOTE: Based on 1000 Watt MH vertical burn. Consult factory for accurate optics.

ORDERING INFORMATION

SELECT APPROPRIATE CHOICE FROM EACH COLUMN TO FORMULATE ORDER CODE. Refer to example below.

LUMINAIRE PREFIX	DISTRIBUTION	LAMP WATTAGE	LIGHT SOURCE	LENS	LINE VOLTAGE	LUMINAIRE FINISH	OPTIONS
FVM	2 - Type II 3 - Type III FP - Perimeter Forward Throw 5 - Type V	250W 320W 400W	PSMH - Pulse-Start Metal Halide 250, 320 Watt HPS - High Pressure Sodium 250, 400 Watt MHR - Metal Halide Reduced Envelope 400 Watt MH - Metal Halide 250 Watt	FG - Flat Glass	480V MT - Multi Tap ³ TT - Tri Tap ²	BRZ - Bronze BLK - Black PLT - Platinum BUF - Buff WHT - White GRN - Green CC - Custom Color	LL - Less Lamp GS - Glare Shield 8BK - 8" Bracket RPP - Round Pole Plate BKT-WM - Wall Mount Plate PT - Pole Top SF - Single Fusing DF - Double Fusing AS - Accent Striping PC - Photo Cell NO - No Options
FVR	2 - Type II 3 - Type III FP - Perimeter Forward Throw 5 - Type V AF - Automotive Forward	400W 750W 1000W	MHR - Metal Halide Reduced Envelope 1000 Watt PSMH - Pulse-Start Metal Halide HPS - High Pressure Sodium ¹				

FVR
(EXAMPLE ORDER)

5

1000

MHR

FG

MT

BRZ

NO

ORDER:

WLS

NOTE:

1. Voltage for 750W High Pressure Sodium must be specified.
2. Consult factory for international voltages. (120, 277, 347 Voltage)
3. MT - Multi Tap is shipped standard unless otherwise specified.
(Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.)

Approved By: _____

Project Name: _____

Location: _____

Date: _____

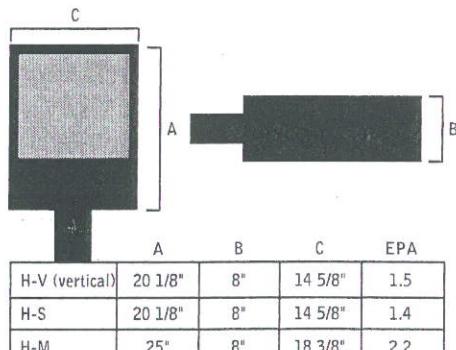
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P.O. Box 100519 • Fort Worth, TX 76185
800.633.8711 • Fax: 817.735.4824 • www.wlslighting.com

WLS LIGHTING SYSTEMS

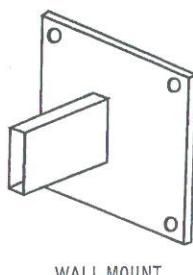


DIMENSIONS



NOTE: Add to H Vertical: 3 1/4" for Vertical Burn Sag Glass

MOUNTING BRACKETS



Approved By: _____

Project Name: _____

Location: _____

Date: _____

H-Wall Mount

SPECIFICATIONS

HOUSING The H Series one piece aluminum housing is designed to ensure weather-tight construction. Continuous heliarc welds at all seams produce a clean sharp appearance. The bottom access door provides ease of installation and servicing.

LENS AND FRAME The standard lens is flat impact resistant tempered glass. A contoured lens is provided with the vertical lamp option. The lens door frame is attached with 2 stainless steel hinges, is equipped with a spring-loaded fastener for easy access, and closes securely on a poron gasket preventing entry of moisture and insects.

FINISHES Fixtures are finished with a thermoset baked-on polyester powder finishing process to give the fixture an exceptionally attractive appearance. The polyester finish withstands extreme weather change without cracking or peeling. Standard and custom colors available.

REFLECTORS/DISTRIBUTION PATTERNS Fixtures are equipped with a polished aluminum segmented reflector available in four distribution patterns with vertical or horizontal burn lamps: Type III (3), Type V (5), Perimeter Forward Throw (FP) and Automotive Forward Throw (AF).

LIGHT SOURCES Designed to operate up to 1000 Watt High Pressure Sodium and Metal Halide lamps with the larger housings. The vertical burn lamp is designed to operate up to 400 Watt Metal Halide Reduced envelope.

SOCKETS Glazed porcelain mogul-base sockets feature spring-reinforced contacts. Rated to 600V.

BALLAST CWA or HPF regulating auto transformers. Available in Metal Halide and High Pressure Sodium. Starting temperature is -20 F for Metal Halide and -40 F for High Pressure Sodium. Maximum wattage is 1000W.

Wall Mount Bracket: A 2 1/2" x 5 3/8" x 6" is shipped with size H-V and H-S. H-M is shipped with an 8" arm, and H-L is shipped with a 12" arm. A 6" arm is shipped with the H-M and H-L for single and D180 configurations. A round pole plate is available for round poles.

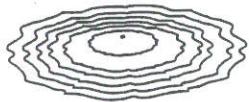
listed for wet locations.

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MANUFACTURING SINCE 1969

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H-Wall Mount

OPTICS



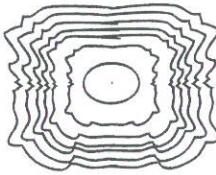
TYPE II (2)



TYPE III (3)



FORWARD THROW (FP)



TYPE V (5)

NOTE: Based on 1000 Watt MH vertical burn. Consult factory for accurate optics.

ORDERING INFORMATION

SELECT APPROPRIATE CHOICE FROM EACH COLUMN TO FORMULATE ORDER CODE. Refer to example below.

LUMINAIRE PREFIX	DISTRIBUTION	LAMP WATTAGE	LIGHT SOURCE	LENS	LINE VOLTAGE	LUMINAIRE FINISH	OPTIONS
Vertical Burn H-V	FP - Perimeter Forward Throw 5 - Type V AF - Automotive Forward	150W 175W 250W 320W 400W	MH - Metal Halide (175, 250W) MHR - Metal Halide Reduced (400W) SMHR - Super Metal Halide Reduced (400W) PSMH - Pulse-Start Metal Halide (175, 250, 320W) HPS - High Pressure Sodium (150W)	CT - Contoured Glass	480V MT - Multi Tap ³ TT - Tri Tap ²	BRZ - Bronze BLK - Black PLT - Platinum BUF - Buff WHT - White GRN - Green CC - Custom Color	RPP - Round Pole Plate LL - Less Lamp BKT-WM - Wall Mount Plate GS - Glare Shield GR - Tool-less Entry Ground Relamp (Vertical Only) PC - Photo Cell SF - Single Fusing DF - Double Fusing NO - No Options
Horizontal Burn H-S	3 - Type III FP - Perimeter Forward Throw 5 - Type V	100W 150W 175W 250W 350W 400W	MH - Metal Halide (175, 250W) MHR - Metal Halide Reduced (400W) SMHR - Super Metal Halide Reduced (400W) SMH - Super Metal Halide (175, 250W) HPS - High Pressure Sodium (100, 150, 250, 400W)	FG - Flat Glass			
H-M	3 - Type III FP - Perimeter Forward Throw 5 - Type V	250W 400W	SMH - Super Metal Halide MH - Metal Halide HPS - High Pressure Sodium				
H-L	3 - Type III FP - Perimeter Forward Throw ¹	1000W	MH - Metal Halide HPS - High Pressure Sodium				

H-V

5

400

MHR

CT

MT

BRZ

NO

(EXAMPLE ORDER)

ORDER:

WLS

NOTE:

1. Forward Throw reflectors are field-rotatable.
2. Consult factory for international voltages. (120, 277, 347 Voltage)
3. MT - Multi Tap is shipped standard unless otherwise specified.
(Multi Tap consists of 120V, 208V, 240V, and 277V. Multi Tap is pre-wired for highest voltage. Alternate voltages will require field re-wiring.)

Approved By: _____

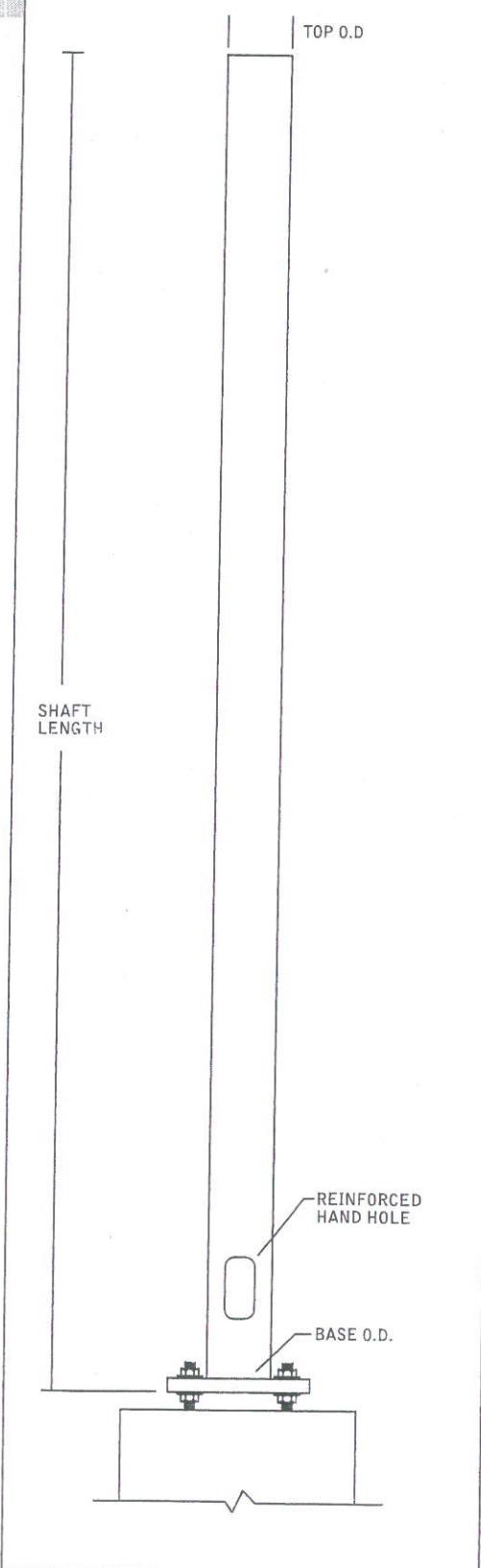
Project Name: _____

Location: _____

Date: _____

WLS LIGHTING SYSTEMS
MANUFACTURING SINCE 1969

P.O. Box 100519 • Fort Worth, TX 76185
800.633.8711 • Fax: 817.735.4824 • www.wlslighting.com



SPECIFICATIONS

STRUCTURAL DESIGN WLS poles are designed for the combined effects of both wind and dead load. The wind load effects have been analyzed with wind velocities ranging from 80 to 120 mph, with a 1.3 gust factor. Due to varying wind effects, height correction factors and drag coefficients have been applied to the entire structure.

POLE SHAFT Each pole shaft is made from a single ply sheet, which is formed into a tubular shape with one or more longitude welds; no welded splices are permitted. The material used for the pole sections meet the requirements of ASTM A572 or ASTM 595 Grade-A.

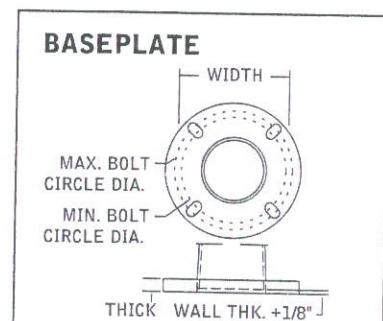
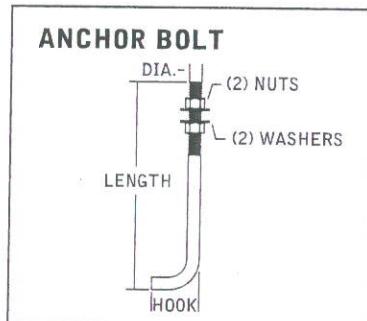
BASE PLATE Base plates are integrally welded to the bottom pole section of all anchor base-type assemblies with either a telescopic weld or a full-penetration weld with a back-up-bar. The material used for these plates will conform to either ASTM A36 or ASTM A572.

ANCHOR BOLTS All standard anchor bolts, nuts, and washers are not dipped, fully galvanized and meet the requirements of ASTM F1554, Grade 55.

HAND HOLES All hand holes are peripherally reinforced with flat bar which is integrally welded to the pole shaft. Each pole will have a 3" x 5" reinforced hand hole located 12" to 18" from the base of the pole. Cover plates are included with all hand holes and are attached to the pole with a back-bar and screw.

PROTECTIVE COATINGS All WLS poles are galvanized, powder coated, or a combination of the two. Galvanizing is in accordance with the requirements of ASTM A123. All poles are single dipped inside and out. In accordance with the USGA, no pole will be double dipped. Powder coated poles are cured at 400° Fahrenheit with urethane polyester powder covered throughout.

WELDING All welding is performed by AWS certified welders and all welds comply with the most recent edition of the AWS Structural Welding Code.



WLS LIGHTING SYSTEMS
MANUFACTURING SINCE 1969

RNTS SERIES

ROUND NON-TAPERED STEEL

ORDERING INFORMATION

SELECT APPROPRIATE CHOICE FROM EACH COLUMN TO FORMULATE ORDER CODE. Refer to example below.

CATALOG NUMBER	BASE TYPE	STANDARD DRILLING PATTERNS	STANDARD TENONS	FINISH	STANDARD COLORS
WLS-RNTS-10-4-11	AB - Anchor Base	DM19 - 1 @ 90°	TN238-2 3/8" O.D. x 5" Length	PC - Powder Coated	BRZ - Bronze
WLS-RNTS-15-4-11	EM - Embedded	DM28 - 2 @ 180°	TN278-2 7/8" O.D. x 5" Length	GV - Galvanized	BLK - Black
WLS-RNTS-20-5-11	LAB - Less Anchor Bolts	DM29 - 2 @ 90°	TN312-3 1/2" O.D. x 5" Length	GP - Galvanized & Powder Coated	PLT - Platinum
WLS-RNTS-25-5-11		DM32 - 3 @ 120°			BUF - Buff
WLS-RNTS-25-4-7		DM39 - 3 @ 90°			WHT - White
WLS-RNTS-30-5-11		DM49 - 4 @ 90°			GRN - Green
WLS-RNTS-30-5-7					CC - Custom Color

(EXAMPLE ORDER)

WLS-RNTS-10-4-11

AB

DM19

OR

TN238

GV

WH

Pole Height Base Diameter Gauge

ORDER:

WLS-RNTS

CATALOG NUMBER	SHAFT LENGTH	SHAFT SIZE	BASE PLATE	BOLT CIRCLE	ANCHOR BOLT SIZE	WT.	80 MPH EPA*	90 MPH EPA*	100 MPH EPA*	110 MPH EPA*	120 MPH EPA*
WLS-RNTS-10-4-11	10'	4"	10"x.75"	9.5 ¹	.75"x30"x4"	97	35	27.5	22.5	18.5	15.5
WLS-RNTS-15-4-11	15'	4"	10.5"x.75"	9.5 ¹	.75"x30"x4"	136	21	16.5	13.5	11	9
WLS-RNTS-20-5-11	20'	5"	10.5"x.75"	10.5 ²	.75"x30"x4"	218	22.5	18	14.5	11.5	9.5
WLS-RNTS-25-5-11	25'	5"	11"x.75"	10.5 ²	.75"x30"x4"	265	15	12	9.5	7.5	6
WLS-RNTS-25-5-7	25'	5"	11"x.75"	10.5 ²	1"x36"x4"	311	18.5	14.5	11.5	9.5	7.5
WLS-RNTS-30-5-11	30'	5"	11"x1"	10.5 ²	1"x36"x4"	314	10.5	8	6.5	5	4
WLS-RNTS-30-5-7	30'	5"	11"x1"	10.5 ²	1"x36"x4"	368	13	10	8	6.5	5

*1.3 gust factor ¹Slotted 9"-10" ²Solted 10"-11"

POLE SPECIFICATION CRITERIA:

1. POLE HEIGHT – The pole height will be determined by the lighting requirements as specified by the project designer. These lighting requirements will cause variance in the pole height, which is dependent upon fixture types, lighting level and uniformity requirements.

2. POLE DUTY RATING – The pole duty rating should be determined by comparing the system EPA and weight with the EPA and weight capacities listed in the table above. The values detailed in this table reflect the maximum capacities of the respective poles and are based upon a loading centroid located at the top of the pole.

3. POLE BASE – The pole base (Anchor Bolt or Embedded) is typically determined by the project specifications.

4. WIND VELOCITY – The wind velocity shall be determined from either the project specifications or the wind velocity map. This wind velocity map is based

upon a 50-year mean recurrence interval. The wind values shown on this map represent wind velocities at 30 feet above the ground. When a project location is sited between adjacent wind zones, the wind zone with the greater wind velocity should be used. Unusual wind conditions may exist around mountainous areas or locations with unique terrain. Special design consideration should be given to such areas.

5. EPA – The EPA (Effective Projected Area) of the system should be computed by summing all of the EPA's of the external appurtenances, which are mounted on the pole. EPA values for WLS fixtures can be found on the appropriate product sheet located in this catalog.

6. WEIGHT – The weight of the system should be computed by summing all of the weights of the external appurtenances mounted on the pole. Weights of fixtures and brackets can be determined from the appropriate lighting fixture manufacturer.

Approved By: _____

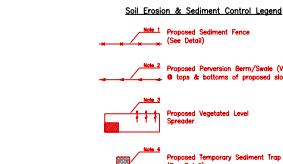
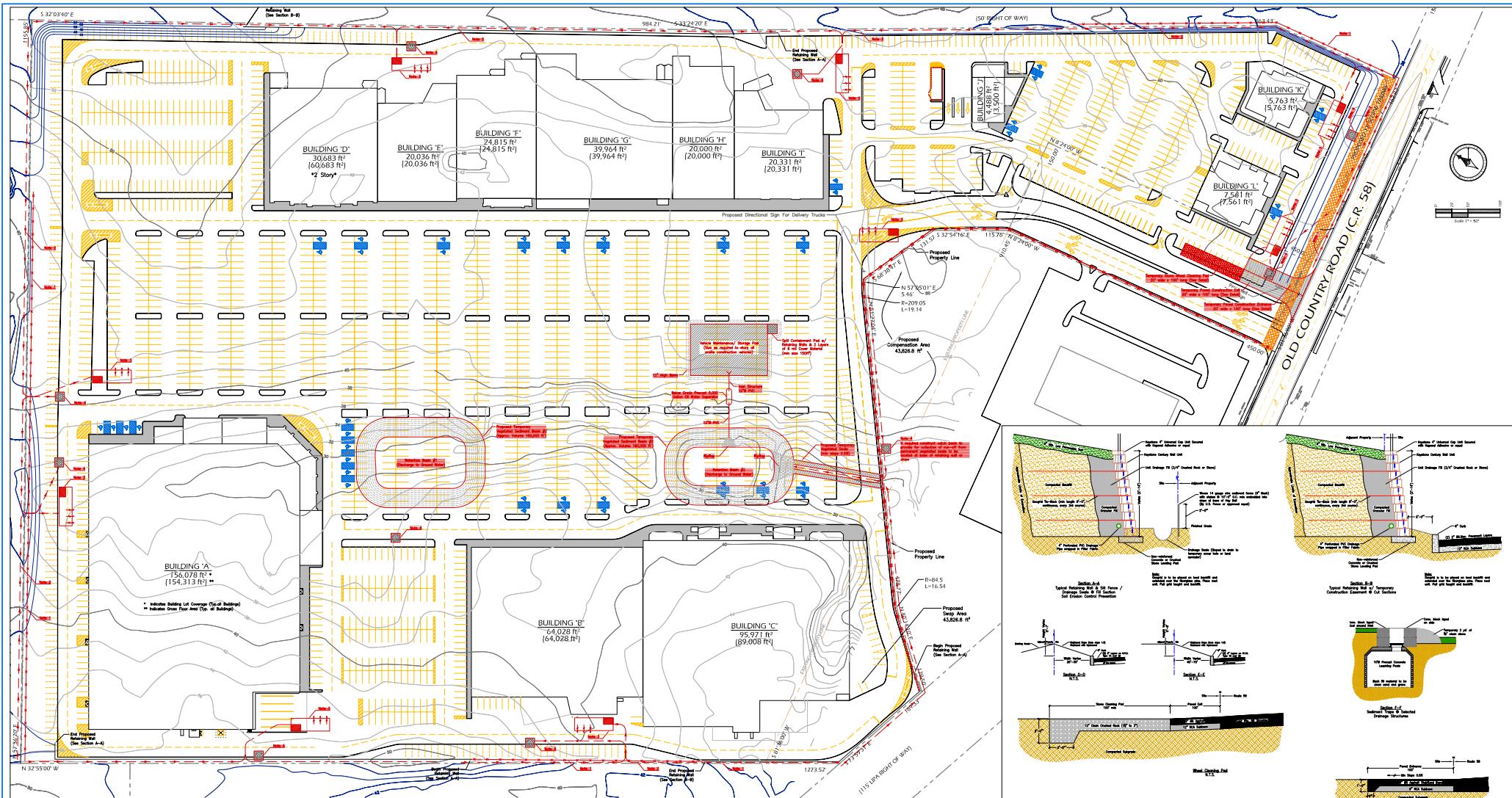
Project Name: _____

Location: _____

Date: _____

WLS LIGHTING SYSTEMS
MANUFACTURING SINCE 1969

P.O. Box 100519 • Fort Worth, TX 76185
800.633.8711 • Fax: 817.735.4824 • www.wslighting.com



Date	Replies	Approved By
 <p>E.S. KALOGERAS, P.E. Engineering Services</p>		
<p>The Shops at Riverhead County Road 58 Riverhead, NY 11901</p>		
 <p>E.S. KALOGERAS, P.E. Consulting Engineers</p>		
<p>100 E. 42nd Street, Suite 1500 • New York, NY 10017 • (212) 904-1000 • FAX: (212) 904-1001 E-mail: ekaloger@msn.com</p>		
Permit No.:	DRC-061-1	
Permit Holder:	P.E. S. Kalogeris	
Permit Type:	Soil Erosion & Sediment Control Plan	
Permit Date:	October 23, 2007	
Permit Expiry:	11/07/2008	
<input checked="" type="checkbox"/> SW2 <input type="checkbox"/> SW3 <input type="checkbox"/> SW4		



APPENDIX A

Records of Subsurface Exploration



WHITESTONE
ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

(Page 1 of 1)

Project: Proposed Costco Wholesale Facility					WAI Project No.: WJ06-8805		
Location: Old Country Road (CR 58); Riverhead, Suffolk County, NY					Client: Costco Wholesale Corporation		
Surface Elevation:	Not Surveyed		Date Started:	06/23/06		Water Depths/Elevations	
Termination Depth:	18.0 feet bgs		Date Completed:	06/23/06		(feet / feet msl)	
Proposed Location:	Building		Logged By:	K. Feath		While Drilling:	NE
Drilling/Test Method:	HSA / SPT		Contractor:	Tri-State		At Completion:	NE
			Equipment:	Tri-Pod		24 Hours:	--
Sample Information				Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	
Depth (feet)	Number	Type	Blows Per 6" Recovery				
0.0 - 2.0	S-1	X	2-2-2-3 (14 in.)	4	0.0 - 0.2 OM Coastal Plain Deposits	2" Organic Topsoil and Vegetation Mat Yellowish-Brown Medium to Fine Sand, Some Gravel, Little Silt, Moist, Loose (SM)	
2.0 - 4.0	S-2	X	3-3-4-4 (16 in.)	7	2.5	Brownish-Yellow Medium to Fine Sand, Some Gravel, Trace Silt, Moist, Loose (SP)	
5.0 - 7.0	S-3	X	5-7-9-7 (18 in.)	16		As Above, Little Gravel, Medium Dense (SP)	
8.0 - 10.0	S-4	X	8-6-8-6 (12 in.)	14		As Above, No Gravel (SP)	
10.0 - 12.0	S-5	X	6-7-6-7 (14 in.)	13		As Above, Little Gravel (SP)	
13.0 - 15.0	S-6	X	7-7-8-9 (16 in.)	15		As Above, Trace Gravel (SP)	
16.0 - 18.0	S-7	X	8-7-7-7 (18 in.)	14	18.0	As Above (SP)	
						Boring B-1 Terminated at a Depth of 18.0 Feet Below Ground Surface	



WHITESTONE
ASSOCIATES, INC.

RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

(Page 1 of 1

Project: Proposed Costco Wholesale Facility					WAI Project No.: WJ06-8805				
Location: Old Country Road (CR 58); Riverhead, Suffolk County, NY					Client: Costco Wholesale Corporation				
Surface Elevation: Not Surveyed			Date Started: 06/23/06 Date Completed: 06/23/06	Water Depths/Elevations (feet / feet msl)			Cave-in Depths/Elevations (feet / feet msl)		
Termination Depth: 18.0 feet bgs				Logged By: K. Feath					
Proposed Location: Building				Contractor: Tri-State					
Drilling/Test Method: HSA / SPT			Equipment: Tri-Pod			At Completion: NE ▼			
Sample Information					While Drilling: NE ▼				
Depth (feet)	Number	Type	Blows Per 6" Recovery	N	Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)		
0.0 - 2.0	S-1	X	2-2-2-2 (18 in.)	4	0.0	OM	1½" Organic Topsoil and Vegetation Mat		
2.0 - 4.0	S-2	X	2-3-3-3 (18 in.)	6	0.2	Coastal Plain Deposits	Yellowish-Brown Medium to Fine Sand, Little Silt, Little Gravel, Trace Roots, Moist, Loose (SP-SM)		
5.0 - 7.0	S-3	X	4-4-4-5 (16 in.)	8	2.5		Brownish-Yellow Medium to Fine Sand, Some Gravel, Trace Silt, Loose (SP)		
8.0 - 10.0	S-4	X	5-6-7-7 (18 in.)	13			As Above, Little Gravel (SP)		
10.0 - 12.0	S-5	X	5-6-6-7 (16 in.)	12			As Above, Medium Dense (SP)		
13.0 - 15.0	S-6	X	8-8-9-10 (16 in.)	17			As Above, Trace Gravel (SP)		
16.0 - 18.0	S-7	X	8-10-12-13 (18 in.)	22 NR	18.0		As Above (SP)		
							As Above, No Gravel (SP)		
							Boring B-2 Terminated at a Depth of 18.0 Feet Below Ground Surface		

NOTES: NE = Not Encountered, NR = No Recovery

RECORD OF SUBSURFACE EXPLORATION 8805logs.wpd 06/29/06



RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-3

(Page 1 of 1)

Project: Proposed Costco Wholesale Facility					WAI Project No.: WJ06-8805		
Location: Old Country Road (CR 58); Riverhead, Suffolk County, NY					Client: Costco Wholesale Corporation		
Surface Elevation: Not Surveyed			Date Started: 06/23/06		Water Depths/Elevations (feet / feet msl)		Cave-in Depths/Elevations (feet / feet msl)
Termination Depth: 158.0 feet bgs			Date Completed: 06/23/06				
Proposed Location: Building			Logged By: K. Feath		While Drilling: 7.5 feet ▼		
Drilling/Test Method: HSA / SPT			Contractor: Tri-State		At Completion: NE ▼		At Completion: 7.7 ▼
			Equipment: Tri-Pod		24 Hours: --- ▼		24 Hours: ---
Sample Information					DESCRIPTION OF MATERIALS (Classification)		
Depth (feet)	Number	Type	Blows Per 6" Recovery	N	Depth (feet)	Strata	REMARKS
					0.0	OM	2" Organic Topsoil and Vegetation Mat
0.0 - 2.0	S-1	X	2-2-2-3 (16 in.)	4	0.2	Coastal Plain Deposits	Yellowish-Orange Medium to Fine Sand, Little Silt, Trace Gravel, Moist, Loose (SM)
2.0 - 4.0	S-2	X	3-3-3-4 (16 in.)	6	3.0		As Above (SM)
5.0 - 7.0	S-3	X	4-5-5-7 (14 in.)	10			Brownish-Yellow Medium to Fine Sand, Some Gravel, Trace Silt, Moist, Loose (SP)
8.0 - 10.0	S-4	X	6-7-7-8 (18 in.)	14			As Above, Little Gravel, Medium Dense (SP)
10.0 - 12.0	S-5	X	7-10-12-14 (22 in.)	22			As Above, Some Gravel, Wet (SP)
13.0 - 15.0	S-6	X	13-12-11-10 (22 in.)	23	15.0		As Above, Little Gravel (SP)
							As Above (SP)
							Boring B-3 Terminated at a Depth of 15.0 Feet Below Ground Surface (Hole Collapsing)



RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-

(Page 1 of 1)

Project: Proposed Costco Wholesale Facility					WAI Project No.: WJ06-8805			
Location: Old Country Road (CR 58); Riverhead, Suffolk County, NY					Client: Costco Wholesale Corporation			
Surface Elevation: Not Surveyed			Date Started: 06/28/06 Date Completed: 06/28/06 Logged By: G. Achey Contractor: Tri-State Equipment: Tri-Pod	Water Depths/Elevations (feet / feet msl)		Cave-in Depths/Elevation (feet / feet msl)		
Termination Depth: 18.0 feet bgs				While Drilling: 10.5		At Completion: NE		
Proposed Location: Building				At Completion: 10.5		At Completion: 10.5		
Drilling/Test Method: HSA / SPT				24 Hours: ---		24 Hours: ---		
Sample Information					DESCRIPTION OF MATERIALS (Classification)			
Depth (feet)	Number	Type	Blows Per 6" Recovery	N	Depth (feet)	Strata	REMARKS	
0.0 - 2.0	S-1		2-2-2-2 (20 in.)	4	0.0 - 0.2	OM Coastal Plain Deposits	2" Organic Topsoil and Vegetation Mat Yellowish-Brown Poorly Graded Medium to Fine Sand, Dry, Loose (SP)	
2.0 - 4.0	S-2		3-3-3-4 (20 in.)	6			White to Light Yellow Poorly Graded Sand, Moist, Loose (SP)	
5.0 - 7.0	S-3		9-6-5-6 (18 in.)	11			As Above, Medium Dense (SP)	
8.0 - 10.0	S-4		6-7-7-7 (16 in.)	14			As Above (SP)	
10.0 - 12.0	S-5		9-11-13-15 (24 in.)	24			As Above, Some Gravel, Wet, (SP)	
13.0 - 15.0	S-6		10-13-12-14 (20 in.)	25			As Above (SP)	
16.0 - 18.0	S-7		10-12-12-10 (20 in.)	24	18.0		As Above (SP)	
							Boring B-4 Terminated at a Depth of 18.0 Feet Below Ground Surface	