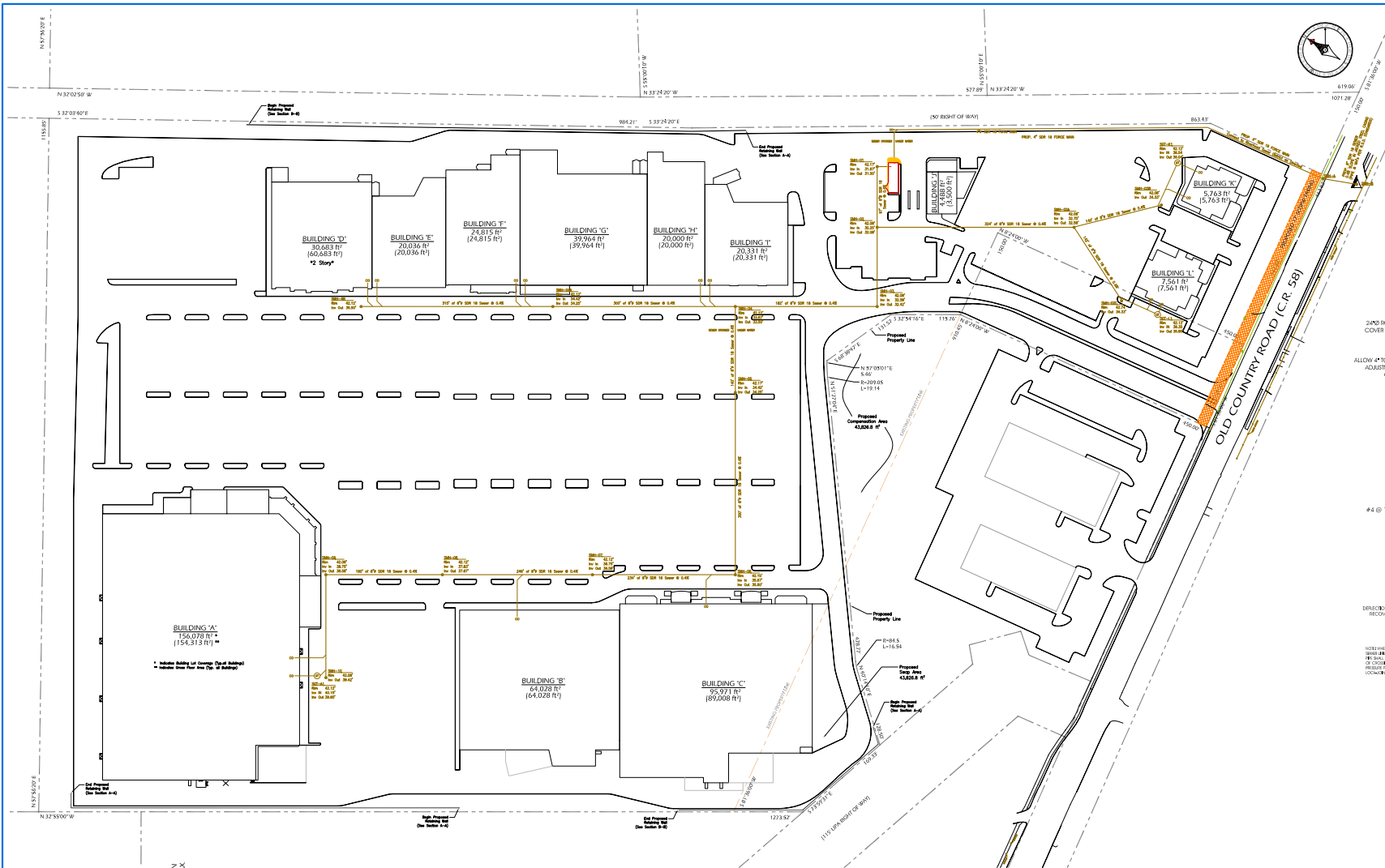


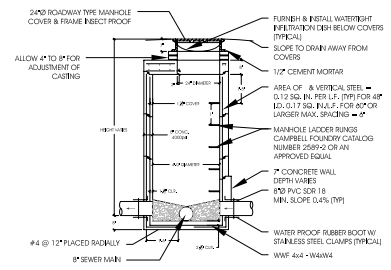
## **Appendix A**



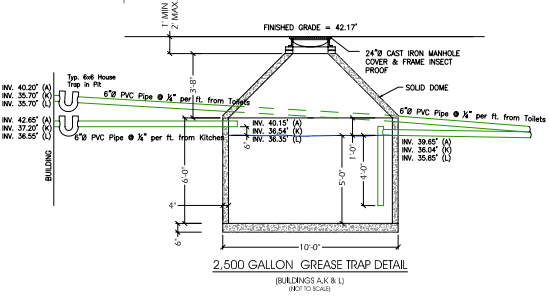
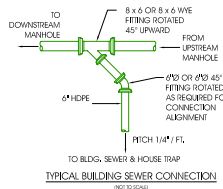
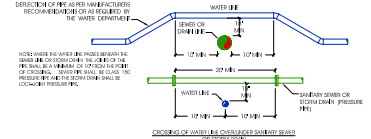
Date	Revision	Approved By
 <div style="text-align: right;"> <h2>The Shops at Riverhead</h2> <p>County Road 58 Riverhead, N.Y. 11901</p> </div>		
<div style="display: flex; align-items: center;">  <div> <h2>E.S. KALOGERAS, P.E.</h2> <p><i>Consulting Engineer</i></p> </div> </div>		
<p>UNAUTHORIZED ALTERATION OR ADDITION TO THE DRAWING AND RELATED DOCUMENT IS A VIOLATION OF THE EDUCATION LAW OF THE STATE OF NEW YORK.</p>		
Drawn By:	Date:	Scale:
Paul F. Sigismundi	May 11th, 2007	1" = 80'
DRC 06-01	Checked: Tanya Grading & Drainage Plan	Drawn By: 



GENERAL INFORMATION			
Location of Site: Town of Riverhead, Suffolk County			
Access: County Road 58 and Kroeber Avenue in the Town of Riverhead			
Suffolk County Tax Map Numbers:		600-101-01-36, 600-111-01-06	
Zoning District:		DRG (Distribution Retail Center)	
Area Data:	600-101-01-36, 63	1,698,573.668'	(38.99 Acres)
	600-111-01-01, 55	61,500.000'	(1.55 Acres)
	600-111-01-02, 53	43,826.800'	(1.01 Acres)
	Total Site Area	1,809,900.000'	(41.55 Acres)
Survey information taken from survey done by: Joseph Ingogno, Land Surveyor (dated 12-18-2006)			
Basis of Design of Sanitary Sewer System			
<u>Proposed Design Flow (Based On Building Units):</u>			
Dry Score (Bldg. x A.U.)	306,417 B.U. x 0.02 gpd	= 15,193 gpd	
Restaurant (Bldg. x K & L)	218 Sewer x 30 gpd	= 9,540 gpd	
	Total		
Total Design Flow		= 24,733 gpd	



NOTE: PRECAST CONCRETE MANHOLE SHALL MEET ALL REQUIREMENTS OF SCDS STANDARDS.  
**PRECAST MANHOLE DETAIL (SCDHS)**  
 (NOT TO SCALE)



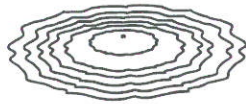
Date	Revision	Approval By:
 <b>The Shops at Riverhead</b> County Road 58 Riverhead, N.Y. 11901  <b>E.S. KALOGERAS, P.E.</b> Consulting Engineer UNION SQUARE, 727 UNION AVENUE, RIVERHEAD NEW YORK, 11901 TEL: (631) 722-4040 FAX: (631) 722-4004 E-mail: <a href="mailto:ekalogeras@msn.com">ekalogeras@msn.com</a>		
Drawn By: Paul F. Sigismundi	Date: October 23rd, 2007	Scale: 1" = 80'
Check: DRC 06-01	Sheet: Sanitary Sewer Plan	Drawn By: <b>U2</b>



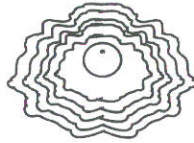


# H-Wall Mount

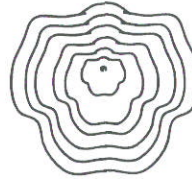
## OPTICS



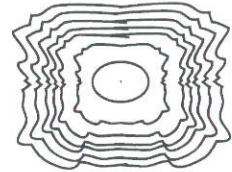
TYPE II (2)



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 <sup>3</sup> TT - Tri Tap <sup>2</sup>	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 <sup>1</sup>	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**  
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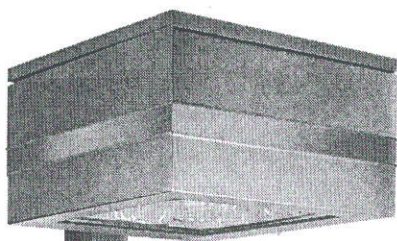
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**WLS LIGHTING SYSTEMS**

# FV SERIES

VERTICAL LAMP/FLAT GLASS LENS



Flat-lensed fixtures meet IESNA full cutoff classification

## 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.

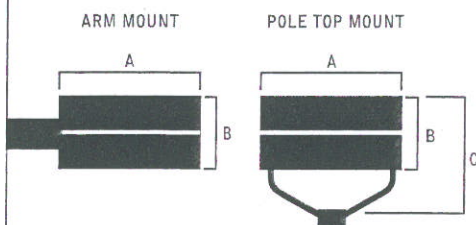
**SOCKETS** Porcelain mogul-base sockets with spring-reinforced contacts.

**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.)

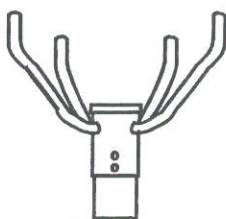
 LISTED  
listed for wet locations.

## DIMENSIONS



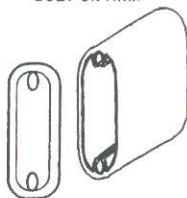
	A	B	C	EPA
FVM	21 5/8"	12 3/4"	21 15/16"	2.8
FVR	21 5/8"	16"	25"	3.5

## MOUNTING BRACKETS



POLE TOP MOUNT

BOLT ON ARM



Approved By: \_\_\_\_\_

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

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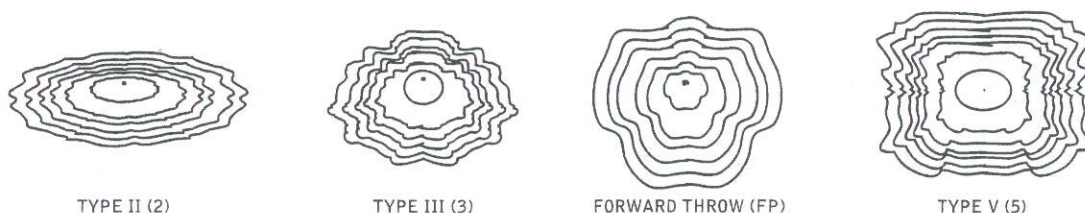
# FV SERIES

## VERTICAL LAMP/FLAT GLASS LENS

### FIXTURE MOUNTING CONFIGURATIONS



### OPTICS



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

**FVR**   **5**   **1000**   **MHR**   **FG**   **MT**   **BRZ**   **NO**  
(EXAMPLE ORDER)

### 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: \_\_\_\_\_

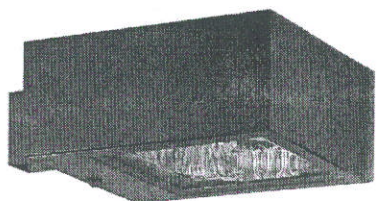
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# WLS LIGHTING SYSTEMS

# 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).

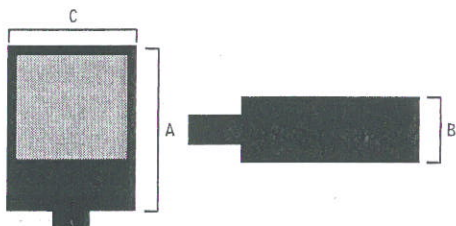
**LIGHT SOURCES** Designed to operate up to 1000 Watt High Pressure Sodium and Metal Halide lamps with the larger housings. The vertical burn lamp is designed to operate up to 400 Watt Metal Halide Reduced envelope.

**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.

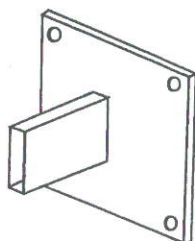
## DIMENSIONS



	A	B	C	EPA
H-V (vertical)	20 1/8"	8"	14 5/8"	1.5
H-S	20 1/8"	8"	14 5/8"	1.4
H-M	25"	8"	18 3/8"	2.2
H-L	29"	10"	21"	3.2

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

## MOUNTING BRACKETS



WALL MOUNT

Approved By: \_\_\_\_\_

Project Name: \_\_\_\_\_

Location: \_\_\_\_\_

Date: \_\_\_\_\_

**WLS LIGHTING SYSTEMS**  
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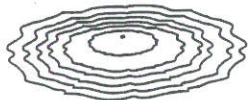
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 LISTED  
for wet locations.



# H-Wall Mount

## OPTICS



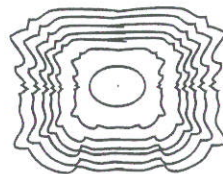
TYPE II (2)



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 <sup>3</sup> TT - Tri Tap <sup>2</sup>	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 <sup>1</sup>	1000W	MH - Metal Halide HPS - High Pressure Sodium				

H-V  
(EXAMPLE ORDER)

5

400

MHR

CT

MT

BRZ

NO

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: \_\_\_\_\_

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**WLS** LIGHTING SYSTEMS

# RNTS ROUND NON-TAPERED STEEL SERIES

## 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.

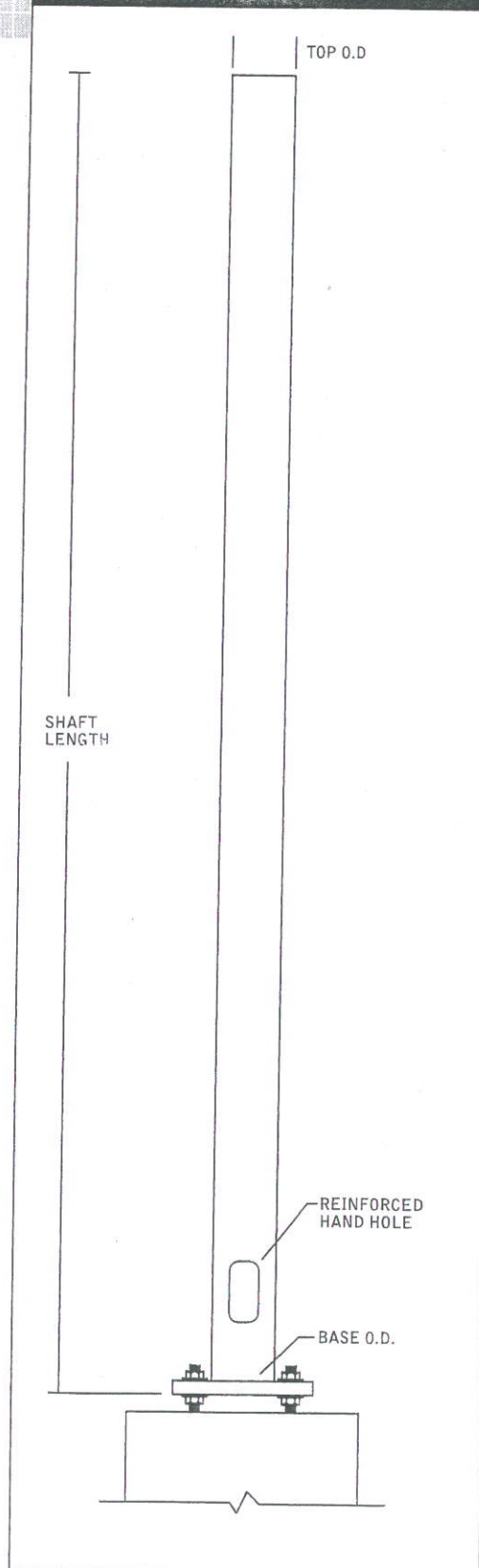
**BASE PLATE** Base plates are integrally welded to the bottom pole section of all anchor base-type assemblies with either a telescopic weld or a full-penetration weld with a back-up-bar. The material used for these plates will conform to either ASTM A36 or ASTM A572.

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

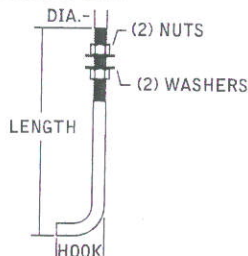
**HAND HOLES** All hand holes are peripherally reinforced with flat bar which is integrally welded to the pole shaft. Each pole will have a 3"x5" reinforced hand hole located 12" to 18" from the base of the pole. Cover plates are included with all hand holes and are attached to the pole with a back-bar 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.

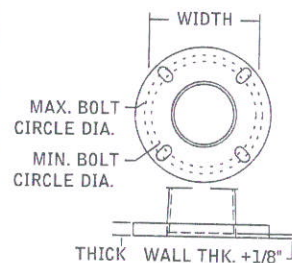
**WELDING** All welding is performed by AWS certified welders and all welds comply with the most recent edition of the AWS Structural Welding Code.



### ANCHOR BOLT



### BASEPLATE



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

(EXAMPLE ORDER)

WLS-RNTS-10-4-11

Pole Height  
Base Diameter  
Gauge

AB

DM19

OR

TN238

GV

WH

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" <sup>1</sup>	.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" <sup>1</sup>	.75"x30"x4"	136	21	16.5	13.5	11	9
WLS-RNTS-20-5-11	20'	5"	10.5"x.75"	10.5" <sup>2</sup>	.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" <sup>2</sup>	.75"x30"x4"	265	15	12	9.5	7.5	6
WLS-RNTS-25-5-7	25'	5"	11"x.75"	10.5" <sup>2</sup>	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" <sup>2</sup>	1"x36"x4"	314	10.5	8	6.5	5	4
WLS-RNTS-30-5-7	30'	5"	11"x1"	10.5" <sup>2</sup>	1"x36"x4"	368	13	10	8	6.5	5

\*1.3 gust factor <sup>1</sup>Slotted 9"-10" <sup>2</sup>Slotted 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: \_\_\_\_\_

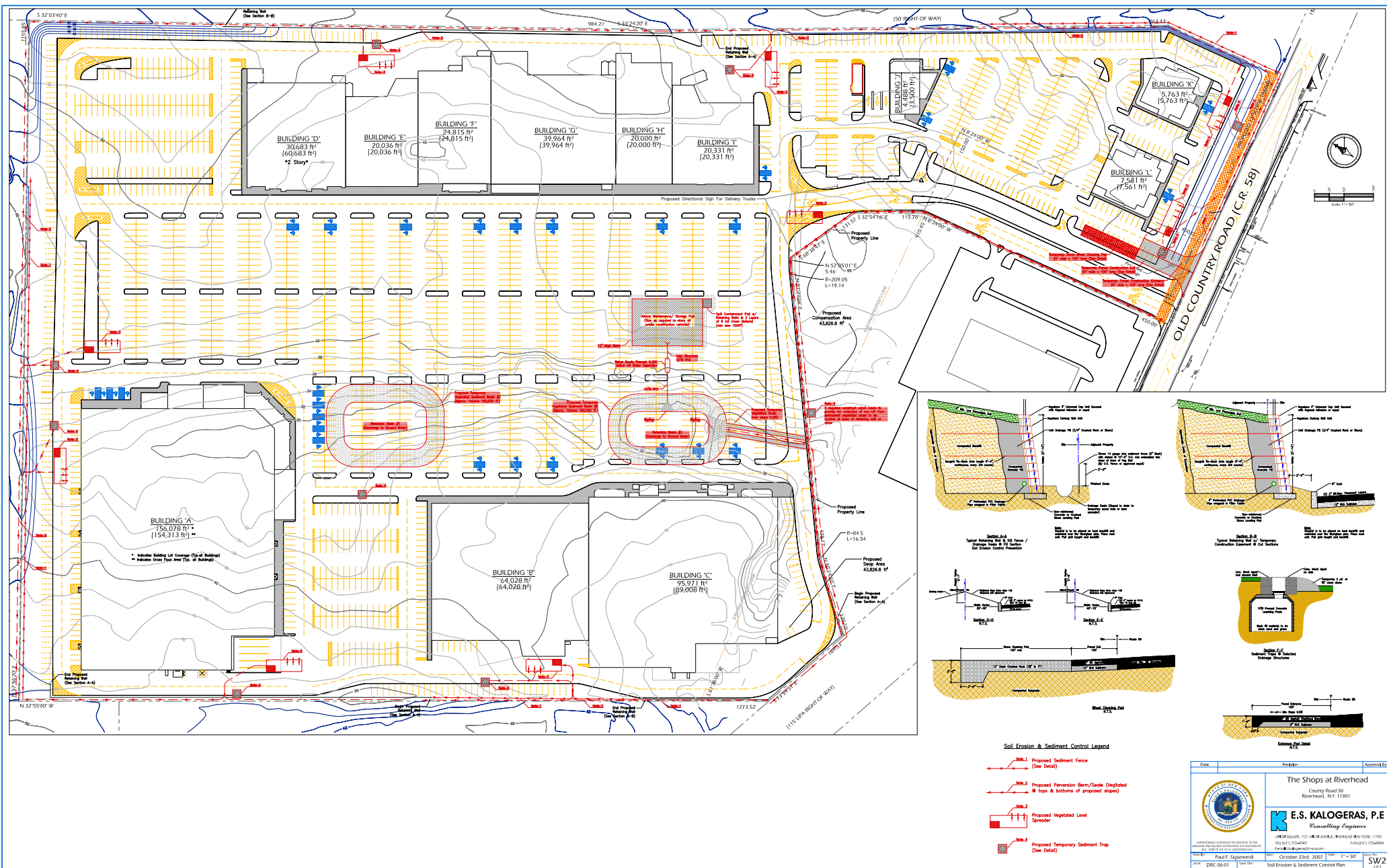
Location: \_\_\_\_\_


Date: \_\_\_\_\_

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# **APPENDIX A**

## **Records of Subsurface Exploration**



# RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-1

(Page 1 of 1)

Project: <b>Proposed Costco Wholesale Facility</b>		WAI Project No.: <b>WJ06-8805</b>	
Location: <b>Old Country Road (CR 58); Riverhead, Suffolk County, NY</b>		Client: <b>Costco Wholesale Corporation</b>	
Surface Elevation: <b>Not Surveyed</b>	Date Started: <b>06/23/06</b>	Water Depths/Elevations (feet / feet msl)	Cave-in Depths/Elevations (feet / feet msl)
Termination Depth: <b>18.0 feet bgs</b>	Date Completed: <b>06/23/06</b>		
Proposed Location: <b>Building</b>	Logged By: <b>K. Feath</b>	While Drilling: <b>NE</b> <input checked="" type="checkbox"/>	At Completion: <b>NE</b> <input checked="" type="checkbox"/>
Drilling/Test Method: <b>HSA / SPT</b>	Contractor: <b>Tri-State</b>	24 Hours: <b>---</b> <input checked="" type="checkbox"/>	At Completion: <b>17.6</b> <input checked="" type="checkbox"/>
	Equipment: <b>Tri-Pod</b>		24 Hours: <b>---</b>

Sample Information					Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	Blows Per 6" Recovery	N				
					0.0	OM	2" Organic Topsoil and Vegetation Mat	
0.0 - 2.0	S-1	X	2-2-2-3 (14 in.)	4	0.2	Coastal Plain Deposits	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	

NOTES: NE = Not Encountered, NR = No Recovery

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





# RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-2

(Page 1 of 1)

Project: <b>Proposed Costco Wholesale Facility</b>		WAI Project No.: <b>WJ06-8805</b>	
Location: <b>Old Country Road (CR 58); Riverhead, Suffolk County, NY</b>		Client: <b>Costco Wholesale Corporation</b>	
Surface Elevation: <b>Not Surveyed</b>	Date Started: <b>06/23/06</b>	Water Depths/Elevations (feet / feet msl)	Cave-in Depths/Elevations (feet / feet msl)
Termination Depth: <b>18.0 feet bgs</b>	Date Completed: <b>06/23/06</b>		
Proposed Location: <b>Building</b>	Logged By: <b>K. Feath</b>	While Drilling: <b>NE</b> <input checked="" type="checkbox"/>	At Completion: <b>17.3</b> <input checked="" type="checkbox"/>
Drilling/Test Method: <b>HSA / SPT</b>	Contractor: <b>Tri-State</b>	At Completion: <b>NE</b> <input checked="" type="checkbox"/>	
	Equipment: <b>Tri-Pod</b>	24 Hours: <b>---</b> <input checked="" type="checkbox"/>	

Sample Information					Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	Blows Per 6" Recovery	N				
					0.0	OM	1 1/2" Organic Topsoil and Vegetation Mat	
0.0 - 2.0	S-1	X	2-2-2-2 (18 in.)	4	0.2	Coastal Plain Deposits	Yellowish-Brown Medium to Fine Sand, Little Silt, Little Gravel, Trace Roots, Moist, Loose (SP-SM)	
2.0 - 4.0	S-2	X	2-3-3-3 (18 in.)	6	2.5		Brownish-Yellow Medium to Fine Sand, Some Gravel, Trace Silt, Loose (SP)	
5.0 - 7.0	S-3	X	4-4-4-5 (16 in.)	8			As Above, Little Gravel (SP)	
8.0 - 10.0	S-4	X	5-6-7-7 (18 in.)	13			As Above, Medium Dense (SP)	
10.0 - 12.0	S-5	X	5-6-6-7 (16 in.)	12			As Above, Trace Gravel (SP)	
13.0 - 15.0	S-6	X	8-8-9-10 (16 in.)	17			As Above (SP)	
16.0 - 18.0	S-7	X	8-10-12-13 (18 in.)	22			As Above, No Gravel (SP)	
					18.0			
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: <b>Proposed Costco Wholesale Facility</b>		WAI Project No.: <b>WJ06-8805</b>	
Location: <b>Old Country Road (CR 58); Riverhead, Suffolk County, NY</b>		Client: <b>Costco Wholesale Corporation</b>	
Surface Elevation: <b>Not Surveyed</b>	Date Started: <b>06/23/06</b>	Water Depths/Elevations (feet / feet msl)	Cave-in Depths/Elevations (feet / feet msl)
Termination Depth: <b>158.0 feet bgs</b>	Date Completed: <b>06/23/06</b>		
Proposed Location: <b>Building</b>	Logged By: <b>K. Feath</b>	While Drilling: <b>7.5 feet</b> <input checked="" type="checkbox"/>	
Drilling/Test Method: <b>HSA / SPT</b>	Contractor: <b>Tri-State</b>	At Completion: <b>NE</b> <input checked="" type="checkbox"/>	At Completion: <b>7.7</b> <input checked="" type="checkbox"/>
	Equipment: <b>Tri-Pod</b>	24 Hours: <b>---</b> <input checked="" type="checkbox"/>	24 Hours: <b>---</b>

Sample Information					Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	Blows Per 6" Recovery	N				
					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)	
							Brownish-Yellow Medium to Fine Sand, Some Gravel, Trace Silt, Moist, Loose (SP)	
5.0 - 7.0	S-3	X	4-5-5-7 (14 in.)	10			As Above, Little Gravel, Medium Dense (SP)	
8.0 - 10.0	S-4	X	6-7-7-8 (18 in.)	14			As Above, Some Gravel, Wet (SP)	
10.0 - 12.0	S-5	X	7-10-12-14 (22 in.)	22			As Above, Little Gravel (SP)	
13.0 - 15.0	S-6	X	13-12-11-10 (22 in.)	23	15.0		As Above (SP)	
							Boring B-3 Terminated at a Depth of 15.0 Feet Below Ground Surface (Hole Collapsing)	

NOTES: NE = Not Encountered, NR = No Recovery

RECORD OF SUBSURFACE EXPLORATION 8805logs wpd 06/29/0



# RECORD OF SUBSURFACE EXPLORATION

Boring No.: B-

(Page 1 of 1)

Project: <b>Proposed Costco Wholesale Facility</b>		WAI Project No.: <b>WJ06-8805</b>	
Location: <b>Old Country Road (CR 58); Riverhead, Suffolk County, NY</b>		Client: <b>Costco Wholesale Corporation</b>	
Surface Elevation: <b>Not Surveyed</b>	Date Started: <b>06/28/06</b>	Water Depths/Elevations (feet / feet msl)	Cave-in Depths/Elevation (feet / feet msl)
Termination Depth: <b>18.0 feet bgs</b>	Date Completed: <b>06/28/06</b>		
Proposed Location: <b>Building</b>	Logged By: <b>G. Achey</b>	While Drilling: <b>10.5</b> ▼	
Drilling/Test Method: <b>HSA / SPT</b>	Contractor: <b>Tri-State</b>	At Completion: <b>NE</b> ▼	At Completion: <b>10.5</b> ▼
	Equipment: <b>Tri-Pod</b>	24 Hours: <b>---</b> ▼	24 Hours: <b>---</b>

Sample Information					Depth (feet)	Strata	DESCRIPTION OF MATERIALS (Classification)	REMARKS
Depth (feet)	Number	Type	Blows Per 6" Recovery	N				
					0.0	OM	2" Organic Topsoil and Vegetation Mat	
0.0 - 2.0	S-1	X	2-2-2-2 (20 in.)	4	0.2	Coastal Plain Deposits	Yellowish-Brown Poorly Graded Medium to Fine Sand, Dry, Loose (SP)	
2.0 - 4.0	S-2	X	3-3-3-4 (20 in.)	6			White to Light Yellow Poorly Graded Sand, Moist, Loose (SP)	
5.0 - 7.0	S-3	X	9-6-5-6 (18 in.)	11			As Above, Medium Dense (SP)	
8.0 - 10.0	S-4	X	6-7-7-7 (16 in.)	14			As Above (SP)	
10.0 - 12.0	S-5	X	9-11-13-15 (24 in.)	24			As Above, Some Gravel, Wet, (SP)	
13.0 - 15.0	S-6	X	10-13-12-14 (20 in.)	25			As Above (SP)	
16.0 - 18.0	S-7	X	10-12-12-10 (20 in.)	24			As Above (SP)	
					18.0			
							Boring B-4 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