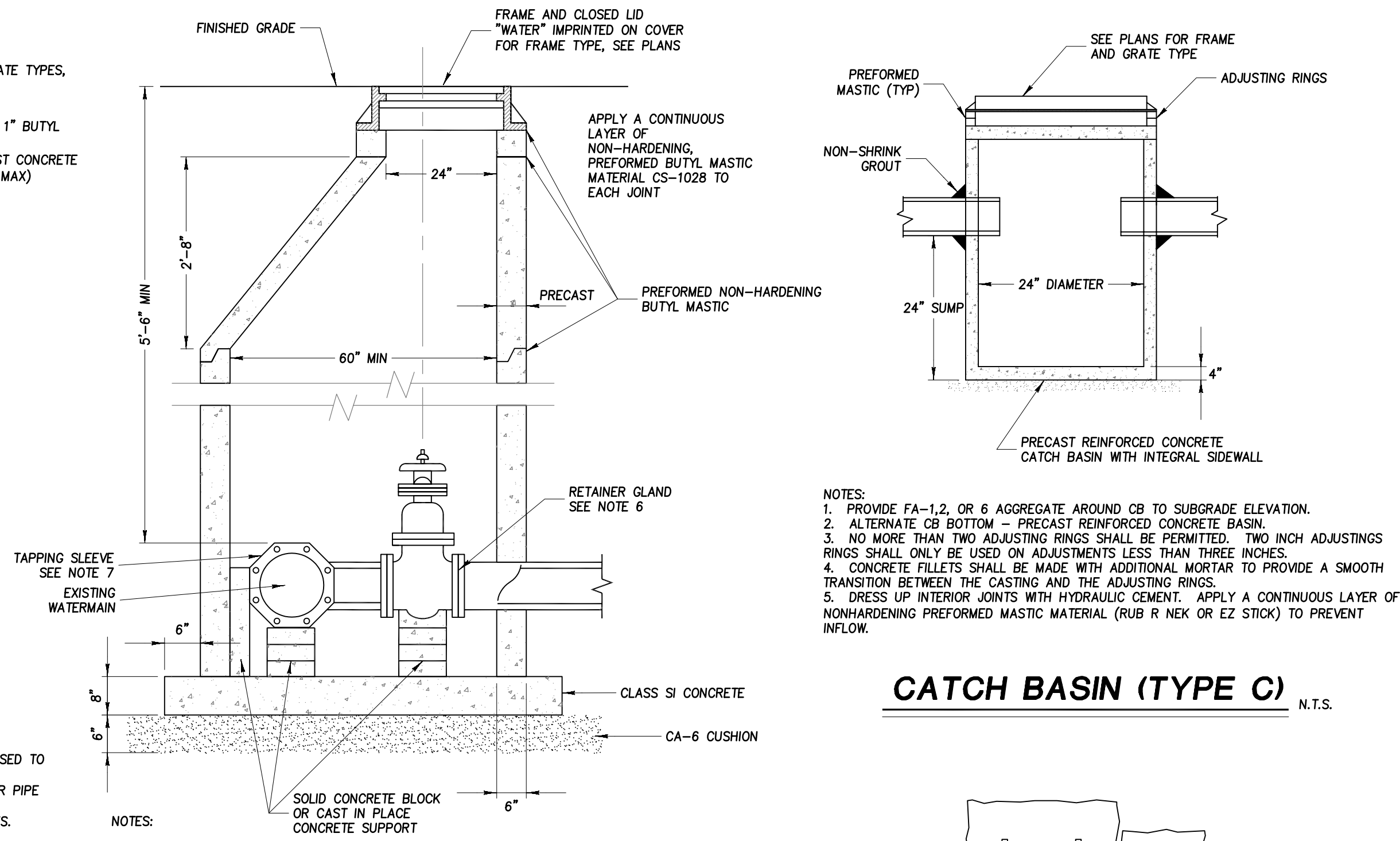


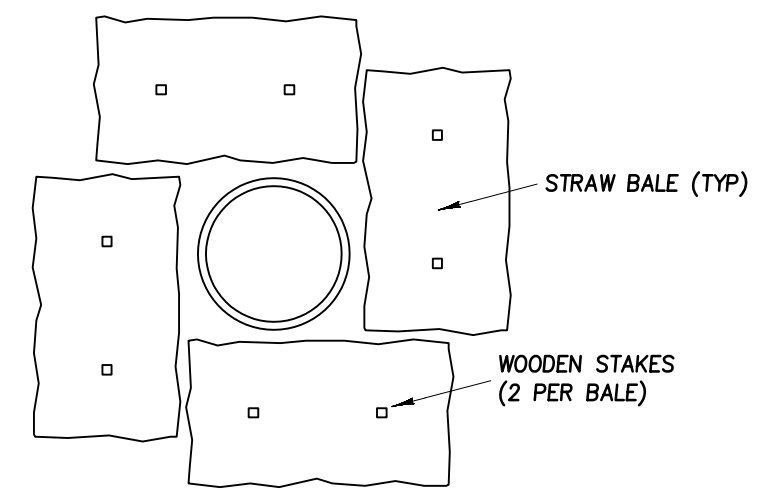
- NOTES:**
- FOR ABS, ADS, OR PVC PIPE AN APPROVED MANHOLE SLEEVE SHALL BE USED TO ASSURE A WATER TIGHT CONNECTION BETWEEN PIPE AND MANHOLE WALL.
 - FOR 18" DIAMETER AND SMALLER PIPE USE 48" DIAMETER MANHOLE. FOR PIPE LARGER THAN 18", USE 60" DIAMETER MANHOLE.
 - PRECAST CONCRETE SHALL CONFORM TO ASTM C-478 FOR ALL MANHOLES.
 - FOR FRAME AND GRATE TYPES, SEE CALLOUTS ON ENGINEERING PLANS.

STORM MANHOLE (TYPE A) N.T.S.

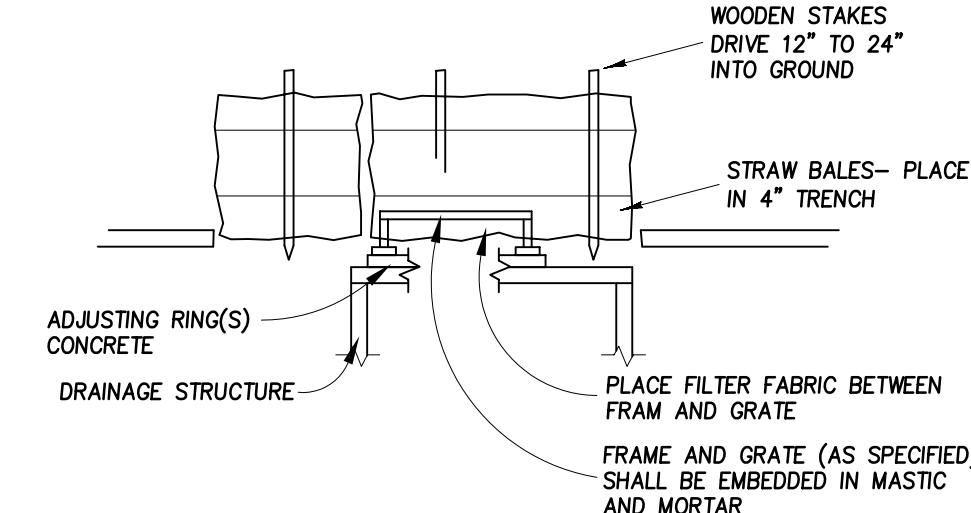


- NOTES:**
- PROVIDE FA-12, OR 6 AGGREGATE AROUND CB TO SUBGRADE ELEVATION.
 - ALTERNATE CB BOTTOM PRECAST REINFORCED CONCRETE BASIN.
 - NO MORE THAN TWO ADJUSTING RINGS SHALL BE PERMITTED, TWO INCH ADJUSTING RINGS SHALL ONLY BE USED ON ADJUSTMENTS LESS THAN THREE INCHES.
 - CONCRETE FILETS SHALL BE MADE WITH ADDITIONAL MORTAR TO PROVIDE A SMOOTH TRANSITION BETWEEN THE CASTING AND THE ADJUSTING RINGS.
 - DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT. APPLY A CONTINUOUS LAYER OF NONHARDENING PREFORMED MASTIC MATERIAL (RUB R NEK OR EZ STICK) TO PREVENT INFLOW.

CATCH BASIN (TYPE C) N.T.S.

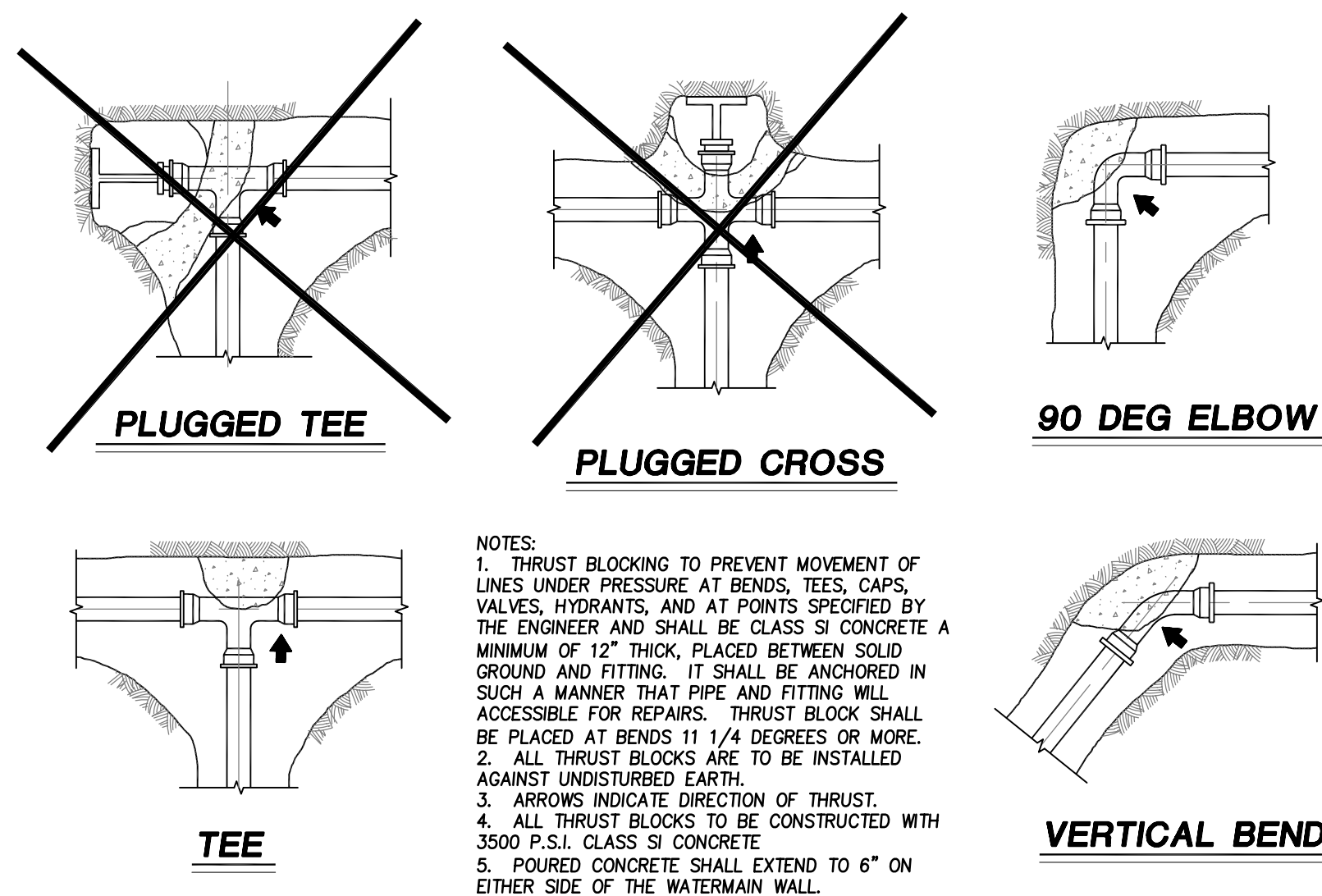


CAST IRON SLEEVE PRESSURE TAP VALVE VAULT DETAIL N.T.S.



- MAINTENANCE**
- FILTER BARRIER SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 - SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
 - ANY SEDIMENT DEPOSITS REMAINING IN-PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED, SEED, AND MULCHED.
 - MAINTAIN BALES UNTIL LANDSCAPING HAS BEEN ESTABLISHED.

STRAW BALES N.T.S.

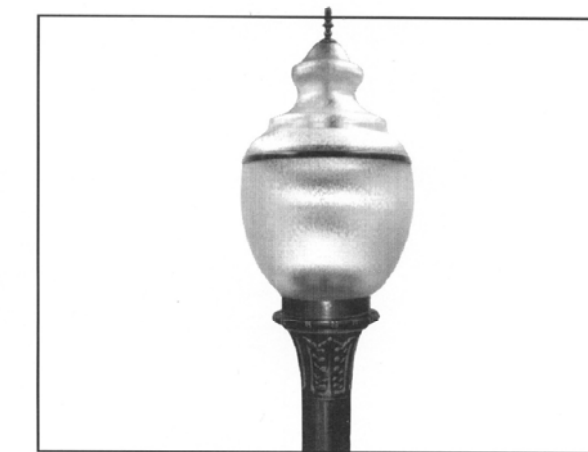


- NOTES:**
- THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, TEES, CAPS, VALVES, HYDRANTS, AND AT POINTS SPECIFIED BY THE ENGINEER AND SHALL BE CLASS SI CONCRETE A MINIMUM OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING. IT SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCK SHALL BE PLACED AT BENDS 11 1/4 DEGREES OR MORE.
 - ALL THRUST BLOCKS ARE TO BE INSTALLED AGAINST UNDISTURBED EARTH.
 - ARROWS INDICATE DIRECTION OF THRUST.
 - ALL THRUST BLOCKS TO BE CONSTRUCTED WITH 3500 P.S.I. CLASS SI CONCRETE.
 - POURED CONCRETE SHALL EXTEND TO 6" ON EITHER SIDE OF THE WATERMAIN WALL.

THRUST BLOCK INSTALLATION N.T.S.

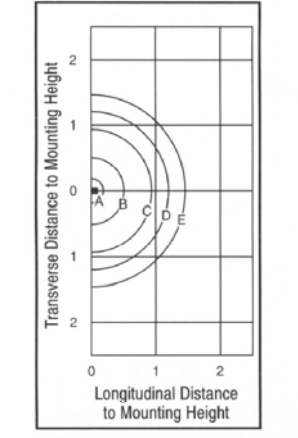
Design AC

- Attractive Acorn Post-Top Fixtures**
- Efficient post-top fixtures add a touch of nostalgia to parks, sidewalks and other pedestrian thoroughfares. Help provide increased pedestrian safety.
 - Vandal and weather-resistant design and construction provides long life with minimum outlays.
 - Easy access for relamping, cleaning and maintenance helps keep maintenance costs low.



Photometric Data:

Distribution: Type V
SP-70 Reflector Option
Lamp: 150W HPS (15,000 LMS)
Ballast: E-17 Medium
Report No.: L79212A



CONVERSION CHART - Footcandles are initial

Mounting	A	B	C	D	E
8'	4.88	3.12	1.58	0.78	0.39
10'	3.00	2.00	1.00	0.50	0.25
12'	2.00	1.38	0.69	0.35	0.17
15'	1.32	0.88	0.44	0.22	0.11
20'	0.75	0.50	0.25	0.13	0.06

Note: Multiply numbers above by .9375 for 175W MH

Specifications:

Overall: The Acorn post-top fixture is designed with an internal tension filter for mounting on a pole top. The overall diameter of the fixture is 16", with a height-to-width ratio of approximately 2.5:1. To provide proper aesthetic proportions, the fixture's design and construction provides maximum lighting efficiency, as well as vandal and weather resistance.

Housing and hardware: The housing globe holder is constructed of cast aluminum, to prevent deformation and deterioration. The ballast housing is spun aluminum. All external hardware is stainless steel to resist corrosion. The finish is of non-ferrous metal and is gasketed where it meets the top of the globe.

Globe: The Design AC fixture's globe is rotationally molded of UV-stabilized polycarbonate material. The external finish is textured to provide even diffusion of light. Where the globe is split to allow installation of the optional SP-70 High Efficiency Reflector System, the joint between the upper and lower globe halves is reinforced with a dip-proof spun aluminum ring. All globe joint surfaces are precision machined to provide close fit.

Gasketing: Gasketing is only used where it is absolutely necessary. Whenever possible, joints between internal parts are designed in such a way as to remain dip-proof without the use of gasketing.

Installation: The fixture is easily installed on the post top, using the internal tension spring. No field disassembly is required.

Optical System: The optional SP-70 High Efficiency Reflector System consists of four specially-designed multiple reflectors, each constructed of high purity spun aluminum with specular Alzak® finish. The reflector system is designed in such a way that maximum beam candpower is produced at an angle of 70° above the vertical, with cutoff at 75°. The system provides shielding of the lamp to prevent glare and brightness from showing through the reflector elements.

Ballast: Design AC fixtures operating on more than 120 V use High Power Factor Ballasts. Ballasts used in fixtures operating on 120 V are Normal Power Factor. All ballasts are mounted within the fixture before the lamp, to avoid damage from lamp heat.

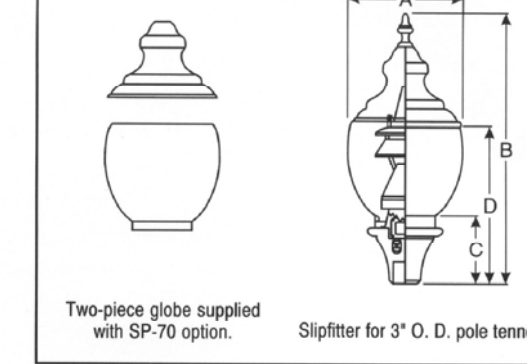
Finish: High solids exterior polyester finish is electrostatically applied over pretreated and primed substrates. The double-baked finish meets or exceeds all AAMA requirements for 1,000-hour salt spray exposure.



Dimensional and Physical Data:

DIMENSIONS:	MAXIMUM LAMP WATTAGE:
A: 16.00" (Diameter)	Lamp: 150W Base
B: 37.00"	HPS 150W Medium
C: 10.00"	MH 175W Medium
D: 22.00"	LPS 55W D.C. Bayonet

WEIGHT: 22.0 lbs.
PROJECTED AREA (EPA): 1.7 sq. ft.



Ordering Information:

ORDERING EXAMPLE:

AC-16-BL-HPS-150-120-CC-FD

(Design at right illustrates sequence in the example.)
This example illustrates the standard ordering sequence. Each part of the ordering number is chosen from the appropriate column in the ordering chart below. The number in the example designates a Design AC fixture, 16", with bare lamp. The fixture is to be equipped for use with a 150W MH lamp, with primary voltage of 120 V. The finish is to be Custom Color, and the fixture is to be equipped with Single Fusing. (For pole ordering information, see catalog.)

DESIGN	SIZE	OPTICAL SYSTEM	LAMP SYSTEM	LAMP HPS	LAMP MH	LAMP LPS	VOLTS	OPTIONS
AC	16	BL = Bare Lamp	35W	50W	15W	120	ELECTRICAL:	
		R = Reflector	50W	70W	35W	208	FD	Single Fusing 120V/277V
		SP-70	70W	100W	55W	240	DFD	Double Fusing 208V/240V
			100W	150W †		277		
			150W	175W		480V		
						(Not Available)		

† 150W MH uses Venture lamp with 175W MH Ballast

DESIGN OPTIONS:

- PT - Painted Top
- SP-70 - High Performance Reflector



PROJECT NAME: NELSON MEADOW

QTY.	LABEL	LUMINAIRE DESCRIPTION / MOUNTING HEIGHT	LUMENS
12	B	AC-16-SP-70-HPS-100-VND-BK/LS-40-17-14-BK	9500

PREPARED BY: Quality Lighting
FILE NAME: F:\AG1-FILE\0509298.AG1
DATE: 04-03-2006
L.P.F.: .81
SCALE: 1"=30'
DWG BY: D.H.

PREPARED FOR C. M. LAVOIE & ASSOCIATES

FIXTURES AND POLES MANUFACTURED BY QUALITY LIGHTING

FOR INFORMATION CONTACT DAVE HOLLADAY AT (800) 545-1326

STATISTICAL AREA : ROAD 1: BROOKBANK, JEFFERSON, NELSON

AVERAGE FC = .43
MAXIMUM FC = .93
MINIMUM FC = .10
AVERAGE/MINIMUM = 4.3
MAXIMUM/MINIMUM = 9.3
TOTAL NUMBER OF POINTS = 270

STATISTICAL AREA : ROAD 2: CARPENTER

AVERAGE FC = .48
MAXIMUM FC = .89
MINIMUM FC = .16
AVERAGE/MINIMUM = 3
MAXIMUM/MINIMUM = 5.56
TOTAL NUMBER OF POINTS = 46

PLANE : @GRADE

POINT SPACING LEFT-TO-RIGHT = 10 ft
POINT SPACING TOP-TO-BOTTOM = 10 ft
LOWER LEFTHAND CORNER OF PLANE:
X = 4061.98 Y = 4726.08 Z = 0
UPPER RIGHTHAND CORNER OF PLANE:
X = 5270.03 Y = 5697.63 Z = 0
LIGHT METER IS NORMAL TO PLANE
TOTAL NUMBER OF POINTS = 334

LS-40

Specifications

Description: The lighting post shall be all aluminum, one piece construction, with a fluted shaft and a classic, double tapered and fluted base.

Materials: The base material shall be heavy wall cast aluminum, formed true to the pattern with complete detail. The shaft material shall be fluted, extruded aluminum. All hardware shall be tamper resistant stainless steel. Anchor bolts to be hot dipped galvanized.

Dimensions: The post shall be "X"-"X" in height with a 13-5/8" or 17" diameter base. The post shaft shall have a 4" outside diameter with a 3" tenon at the top for luminaire mounting. The base shall have a height of 17" or 18".

Installation: The post shall be provided with four 5/8" diameter by 18" long L-type anchor bolts to be installed on a 9-1/2" or 12" bolt circle. An access door shall be provided in the base for securing anchor bolts and wiring access. A grounding screw shall be provided inside the base opposite the door for easy access.

Finish: The post shall be shipped pre-finished with a premium polyester powder coat. Colors available are black (BK), standard, dark bronze (DB), dark green (DG), or custom (CC). Prime painted (PP) ports are also available.

Product Order Guide

Series	Base Size	Mounting Height	Finish	Option
LS-40	13-5/8"	14"	BK Black	PC Powder Coat
	17"	12"	DB Dark Bronze	WDR8 Weatherproof duplex receptacle in base
		10"	DG Dark Green	WDRP Weatherproof duplex receptacle in post
			CC Custom	
			PP Prime Painted	

Example: LS-40-13-5/8-12-DG-PC

Dimensions

Model	Base Dia.	Base Height	Weight
LS-40	13-5/8"	17"	25#
	17"	18"	32#



NELSON MEADOW

WEST SIDE OF CARPENTER STREET
DOWNERS GROVE, ILLINOIS

DATE	DESCRIPTION
2-10-06	PER VILLAGE REVIEW
7-21-06	PER VILLAGE REVIEW
10-5-06	PER VILLAGE REVIEW
9-4-06	PER VILLAGE REVIEW

SCALE: N.T.S. DATE: 1-24-05

JOB NUMBER: 04-239 SHEET: 5 OF 17

Consulting Civil Engineering
Land Planning & Surveying
1050 W. Route 126
Plainfield, Illinois 60544
voice 815-254-0505
fax 815-436-5158

C.M. Lavoie & Associates, Inc.

Downers Grove Tree Protection Requirements

Ordinances regarding trees, including tree protection requirements for public trees, are located in Chapter 24 of the Downers Grove Municipal Code. The Forestry Division of the Public Works Department implements and enforces these codes. The following identifies tree protection requirements for projects near public roadway trees.

Tree protection shall include avoiding damage to the above ground tree branches and trunk, and the below ground root system and surrounding soil. Roots are one of the most vital parts of a tree and must be protected from severing or changes in their soil environment caused by compaction and regrading. The majority of a tree's nutrient and water absorbing roots are in the upper 18 to 24 inches of soil. Damage to the roots can lead to irreversible tree decline or death in the coming years, unless the area around the tree trunk is protected during construction activities. The Critical Root Zone, or CRZ, is the area immediately surrounding a tree that needs to be protected from damage. The size of this area, measured from the center of the tree, is generally a circle with a radius of one foot for each inch of trunk diameter. The depth of the CRZ extends to 4 feet below the natural ground surface level.

In a municipal parkway setting with utilities and paved or concrete surfaces, the size of the CRZ has been adjusted to form a rectangle around the parkway tree trunk with the minimum dimensions listed in the following table. At a minimum, the listed CRZ shall be fenced. Whenever possible, the entire parkway shall be fenced in except where access has been permitted.

Parkway Tree diameter at 4' N	Width from street to property (minimum curb to sidewalk)	Length along street (minimum)	Depth
0 - 12.0 inches	10.0 feet	10 feet	4 feet
12.1 - 24.0 inches	10.0 feet	20 feet	4 feet
24.1 or more inches	10.0 feet	30 feet	4 feet

For public parkway trees, roots located within the determined CRZ shall be protected from compaction, severing, and the storage of materials or equipment. If utilities pass through a CRZ, they must be augered underneath the tree. In cases when severing of roots within a portion of the CRZ may be unavoidable (ex. sidewalk installation, curb replacement), subject to the approval of the Village Forester, sharp clean cuts shall be made on root ends to promote wound closure and root regeneration. All fencing around each tree's CRZ is to be 4 feet high, secured to metal posts spaced no further than 10 feet apart, and maintained daily in good condition.

In addition to fines and citations that may be assessed for violations of any Chapter 24 municipal code (such as not maintaining fencing around the CRZ or unauthorized removal of protected trees), violators may be subject to the following provisions:

- issuance of an invoice for the value or partial value of the tree lost due to damage to either the above ground or below ground portions of the parkway tree, or unauthorized tree removal.
- forfeiture of bonds issued for the work should funds be sufficient to cover tree values and fines.
- costs of repairs, such as pruning or cabling, or costs for removal of the damaged parkway tree along with the stump if the tree cannot remain in the right-of-way.
- fines of \$500 for the 1st offense, \$1,000 for the 2nd offense, \$2,500 for 3rd and subsequent offenses.
- each day during which a violation continues shall be construed as a separate and distinct offense.

For more information, contact the Forestry Division at 434-5475 or 434-5476.

May 2005 Page 1 of 1

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- REVISD PLANS PER INTEROFFICE CORRESPONDENCE BY PUBLIC WORKS DEPARTMENT VILLAGE OF D.G. DATED SEPTEMBER 2, 2005.
 - PLUGGED CROSS AND PLUGGED TEE DETAIL HAVE BEEN CROSSED OUT ON THE THRUST BLOCK DETAIL.
- REVISD PLANS PER REVIEW LETTERS FROM VILLAGE OF D.G. JULY 5, 2005 AND FROM CBEL DATED JULY 29, 2005.
 - ADDED AND REVISD THRUST BLOCK INSTALLATION DETAIL AND PLUGGED TEE DETAIL.
 - REVISD LIGHT POLE DETAIL.
- REVISD PLANS PER REVIEW LETTERS FROM VILLAGE OF D.G. MAY 6, 2005.
 - ADDED PRESSURE CONNECTION VAULT DETAIL.
 - REMOVED CASING DETAIL.
 - ADDED LIGHT POLE DETAILS.
- REVISD PLANS PER REVIEW LETTERS FROM VILLAGE OF D.G. MARCH 18, 2005 & D.G. SANITARY DISTRICT APRIL 4, 2005.
 - CREATED SHEET.
 - ADDED CASING DETAIL.
 - ADDED STORM MANHOLE (TYPE A) DETAIL.
 - ADDED CATCH BASIN (TYPE C) DETAIL.