

## NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN, that the Undersigned, on behalf of the Essex County Board of Supervisors, will accept sealed bids until January 31, 2011 for **Terry Mountain Radio Tower Repair**.

The bids shall be opened and read aloud on January 31, 2011 at the Office of the Purchasing Agent, 7551 Court Street, Elizabethtown, New York, at 2:00 P.M. If additional information concerning the bidding is required, call (518) 873-3332.

Specifications are available at the above address or on the County's website at [www.co.essex.ny.us](http://www.co.essex.ny.us).

All bids submitted in response to this notice shall be marked "SEALED BID – TERRY MOUNTAIN RADIO TOWER REPAIR" clearly on the outside of the envelope. All bids shall be submitted on the bid sheets included in the package, and no other forms shall be accepted.

Attention of the bidders is particularly called to the requirements as to the conditions of employment to be observed and minimum wage rates under the contract.

Each proposal must be accompanied by either a Certified Check or a Bid Bond, in a form acceptable to the Essex County Attorney, payable to Essex County Treasurer in the amount of five percent (5%) of amount of the bid.

A labor and material Payment Bond and a Performance Bond in the form contained in the Contract documents will be required of the successful bidder.

Essex County reserves the right to reject any and all bids not considered to be in the best interest of Essex County, and to waive any technical or formal defect in the bids which is considered by Essex County to be merely irregular, immaterial, or unsubstantial.

In addition to bid sheets, the bidder shall submit executed non-collusion bid certificates signed by the bidder or one of its officers as required by the General Municipal Law Sec. 103d.

A Contract awarded pursuant to this notice shall be subject to the provisions of Sections 103-1, 103-b and 103-d of the General Municipal Law.

PLEASE TAKE FURTHER NOTICE that Essex County affirmatively states that in regard to any contract entered into pursuant to this notice, without regard to race, color, sex, religion, age, national origin, disability, sexual preference or Vietnam Era veteran status, disadvantaged and minority or women-owned business enterprises will be afforded equal opportunity to submit bids in response hereto.

Dated: January 10, 2011

Linda M. Wolf, CPA  
Purchasing Agent  
Essex County Government Center  
7551 Court Street – PO Box 217  
Elizabethtown, New York 12932 (518) 873-3332

## **SPECIFICATIONS**

### **Scope**

Essex County will be installing additional communication equipment on an existing tower on Terry Mountain, 1159 Peasleeve Road, Peru, New York. The tower is located approximately two miles off Peasleeve Road, accessed via a semi-improved one-lane gravel road. The tower will need to undergo structural modification to support the proposed equipment as per attached Structural Analysis Report prepared by North Woods Engineering (Appendix A).

### **Tower Description and Required Modifications**

The tower is an 890' guyed mast tower and is a Stainless, Inc. G-800 Series, constructed in 1962. The mast has five guy level attachment points, ranging from 151 ft to 890 ft. The guy anchors are positioned radially from the tower in two locations, approximately 390 feet and 680 feet from the base, providing a total of 6 anchors.

The tower has been modified since its original construction, additional members have been added and member sizes have been increased at strategic locations.

Tower modifications, reinforcements/repairs, and structural analysis are included in this scope of work. Upon completion of these modifications, the tower must be able to support the microwave dishes and other equipment being added in Appendices 5 and 6 of the North Woods Engineering Structural Analysis included herewith.

Repairs to comply with Telecommunications Industry Association Standard TIA/EIA 222 Revision G, including:

1. File FAA 7460-1, Notice of Proposed Construction or Alteration
2. Perform a structural analysis using the TIA-222-G standard considering the following tower modifications and with the addition of the equipment specified in Appendices 5 and 6 of the included Structural Analysis. The microwave antenna mounting details are provided in the footnote reference of scope number 4.a
3. **Tower Modifications:**
  - a. Removal of the VHF-TV antenna at the top of the Tower
  - b. Removal of the UHF-TV antenna on the side of the Tower (approximately 722' to 775')
  - c. Complete removal of both TV transmission lines and hardware from the Tower (antennas referenced above)
  - d. Removal of the tower steel down to the 690' level
  - e. Plumb the tower and re-tension guy wires, replacing rusted wires as required
  - f. Relocate beacons and side lights in accordance with FAA Advisory Circular 70/7460-1K (see Appendix B), replacing damaged units as required
  - g. Repaint tower in accordance with FAA Advisory Circular 70/7460-1K (see Appendix B)
  - h. Inspect and repair ladder attachment points beyond 500' as identified in the Structural Analysis
  - i. Install a new safety climb cable
  - j. Repair broken ground wires at all six guy anchor points

#### **4. Tower Reinforcements/Repairs**

- a. Perform all tower reinforcements/repairs required (in consideration of the aforementioned modifications) to support the installation of the additional equipment<sup>1</sup> specified in Appendices 5 and 6 of the North Woods Engineering Structural Report

File FAA Form 7460-2, Notice of Actual Construction or Alteration

#### **Experience Requirements**

Five years of work experience in field of communication tower repair/installation is required.

#### **Warranty**

Contractor warranties labor and repairs for one year after completion of project.

#### **Work Completion**

The repair work needs to be completed by April 30, 2011

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<sup>1</sup> **Microwave Equipment Mounting Details (as of December 3, 2010) – SUBJECT TO CHANGE WITHOUT NOTICE**

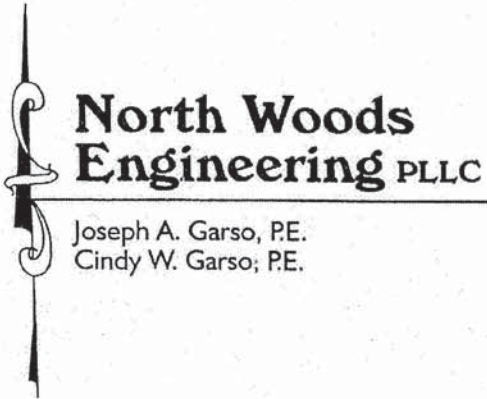
One (1) Six-foot MW dish at 43' CL, true azimuth 215° 38' 43.99"

One (1) Eight-foot MW dish at 226' CL, true azimuth 234° 28' 3.14"

One (1) Ten-foot MW dish at 650' CL, true azimuth 169° 6' 23.52"

One (1) Eight-foot MW dish at 620' CL, true azimuth 169° 6' 23.52"

One (1) Six-foot MW dish at 275' CL, true azimuth 60° 47' 27.75"



# STRUCTURAL ANALYSIS REPORT

## 890' Guyed Tower Terry Mountain Town of Peru, New York

Prepared For:  
Essex County Emergency Management  
Elizabethtown, New York

20 December 2010

It is a violation of New York  
State law for any person, unless  
acting under the supervision of a  
licensed Professional Engineer,  
to alter an item in any way.



20 DEC 10

348 Lake Street • Saranac Lake, NY 12983

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## **Executive Summary**

Essex County, New York has undertaken a project to provide emergency communication. To provide the communication, equipment is proposed to be installed on existing towers. The 890' guyed tower on Terry Mountain, in the Town of Peru, is one of the towers proposed for use in the emergency communication system.

North Woods Engineering, PLLC, conducted a structural analysis of the tower with the proposed equipment in accordance with Telecommunications Industry Association Standard TIA/EIA 222, Revision F.

The tower, with the proposed equipment, was found to have diagonal bracing members overstressed (ie supporting more than their calculated capacity). Therefore, the tower will need to undergo structural modifications to support the proposed equipment.

# **Introduction**

## **General**

North Woods Engineering, PLLC, was retained by Essex County to provide structural engineering services for evaluation of structural condition, review of proposed loading, and summary findings and recommendations for several towers proposed to be used for the County's E911 communication system. This report summarizes that work for the Terry Mountain tower.

Terry Mountain is located in the Town of Peru, Clinton County. There are three towers at the summit of Terry Mountain. This report summarizes the 890' guyed tower. The analysis was conducted to determine the adequacy of the tower in supporting additional communication equipment for use as part of the County's E-911 communication system. The analysis also included proposed new equipment for a microwave network to be shared with NYSEG.

## **Information Gathering**

The tower site was visited to review the construction of the tower and to obtain measurements in order to create a structural model of the tower. The tower was partially climbed by staff of North Woods on 12 November 2010 and was fully climbed and mapped by staff of Patriot Towers for North Woods on 30 November 2010.

## **Analysis**

Following the gathering of information relative to the tower, an engineering analysis was conducted for existing loading conditions and for the proposed equipment installation.

The engineering analysis was conducted in accordance with TIA/EIA 222, ASCE 7 and the New York State Building Code (an IBC based code). Please note that TIA/EIA 222 was revised from version F to G prior to our contract for services, however, New York State has not adopted the Revision G. A more detailed description of the TIA/EIA 222 code, and the application of its revisions, is found throughout later sections of this report.

The analysis was primarily conducted using proprietary software, specifically written to conduct analysis on tower structures for a variety of loading conditions and codes. Some loading, as well as verification of failure stresses was conducted "by hand".

## **Presentation of Findings**

Following completion of the analysis work, the results of the structural models were interpreted. Based on its findings, our office determined the capacity of the tower and how the proposed equipment will interact with it, especially when loaded in accordance with the above mentioned codes. With that information, this summary report was prepared.



## **Site and Tower Description**

The Terry Mountain tower site is located at 1159 Peasleeve Road, Peru, New York. The actual tower itself is located approximately two miles off Peasleeve Road, accessed via a semi-improved one-lane gravel road. At the summit, in addition to the reviewed tower, there are also two additional towers.

The tower is owned by WTPZ News Channel 5. It is an ~890 ft guyed mast tower, and is a Stainless, Inc. G-800 Series, constructed in 1962. The mast has five guy level attachment points, ranging from 151 ft to 890 ft. The guy anchors are positioned radially from the tower in two locations, approximately 390 feet and 680 feet from the base, providing a total of 6 anchors.

The tower has been modified since its original construction; additional members have been added and member sizes have been increased at strategic locations. These modifications coincide with the suggested improvements outlined in Stainless' 1997 structural analysis report.

The overall condition of the tower is satisfactory; later sections of this report detail our office's findings and recommendations regarding its condition.

## **Structural Information, Standards and Methods**

### **Background Information**

A report prepared by Stainless, Inc. (Stainless), titled, "Structural Analysis for a 890' G-7 Guyed Tower, Plattsburg [sic], New York", dated 27 February 1997, provides the original design criteria for the tower. The report states, "The tower was originally designed and furnished in 1962 by Stainless, Inc. It was designed in accordance with EIA Standard RS-222 to support the following equipment:

1. One (1) RCA TF-6BM TV antenna, top mounted
2. One (1) RCA TF-3EM TV antenna, side mounted at the 400' level
3. One (1) 8'x12' passive reflector at the 800' level
4. Two (2) 3-1/8" diameter transmission lines for the top mounted TV antenna
5. One (1) 2" conduit for obstruction lights and the de-icer
6. One (1) ladder full length of the tower."

The analysis conducted as part of the 1997 structural review was completed to accommodate six new pieces of equipment. The loads applied to the tower from the new equipment, as well as the environmental loads of wind and ice, were established from EIA RS-222, Revision C, and from TIA/EIA Standard 222, Revision F.

The Stainless report found that some components of the tower were not sufficient for the code-mandated loads, and recommended that improvements be made to the tower in order to correct the deficiencies. Those improvements were then incorporated into the tower's structure, and the six pieces of equipment were added.

### **Proposed New Equipment**

As provided in a 11 December 2010 E-mail from Federal Engineering to North Woods, the analysis included the tower supporting the following proposed new equipment for Essex County:

- RFS Microwave Antenna DA8-59A, mounted at 226', set at an azimuth of 234.4 degrees, and connected with RFS E60 standard elliptical waveguide
- RFS Microwave Antenna PAD6-65B, mounted at 43', set at an azimuth of 215.6 degrees, and connected with RFS E65 standard elliptical waveguide
- RFS Microwave Antenna DA10-59A, mounted at 650', set to an azimuth of 169.1 degrees, and connected with RFS E60 standard elliptical waveguide
- RFS Microwave Antenna DA8-59A, mounted at 620', set to an azimuth of 169.1 degrees, and connected with RFS E60 standard elliptical waveguide



Also, as provided in a 15 October 2010 E-mail from Federal Engineering to North Woods, the analysis included the tower supporting the following proposed new equipment for a shared microwave network with NYSEG:

- RFS Microwave Antenna PAD6-59B, mounted at 275', set at an azimuth of 60.79 degrees, and connected with EW52 standard elliptical waveguide
- Sinclair SV227 Yagi LMR Antenna, mounted at 50', set to an azimuth of 200 degrees, and connected with 7/8" coaxial cable
- Sinclair SV227 Yagi LMR Antenna, mounted at 70', set to an azimuth of 200 degrees, and connected with 7/8" coaxial cable

## **Design Standards**

The New York State Building Code (both 2007 and 2010 editions) outlines a modest amount of control for radio and television towers: "... radio and television towers shall be designed and constructed as herein provided." (Section 3108.1, General). The Code further states: "Towers shall be designed to resist wind loads in accordance with TIA/EIA-222." (3108.4, Loads) The TIA/EIA-222 version that the Code refers to (per the reference standards section of the Code) is Revision F.

It should be noted that although Revision G of TIA/EIA 222 was issued in 2006, it has not been adopted in the New York State Building Code, even though two versions of the Code have been issued after the date of issuance of Revision G.

Therefore, the analysis that our office conducted on the Terry Mountain tower was completed in accordance with TIA/EIA 222-F. In summary, the loads applied were based upon the following conditions:

- 70 mile per hour (mph) basic wind speed without ice
- 61 mph basic wind speed with 1/2" of radial ice

TIA/EIA 222-G has a new chapter covering existing structures, which was not addressed in Revision F. Per Revision G, if an existing structure, such as the Terry Mountain tower, has changes to the appurtenances (ie type, size, or number of antenna), then a structural analysis must be conducted. We expect that at some point in the future, New York State may adopt this standard. Therefore, we conducted a modest amount of review per Revision G, to determine how the change proposed by this project would impact the tower.

The load requirements under Revision G are more severe than under Revision F. Of note is that the ice accumulation is much thicker. The thicker ice leads to much greater weight on towers, and much greater stresses. In addition, Revision G has a greater basic wind speed for review of strength and serviceability requirements.

Revision G also introduces various tower classes based on tower size and relative hazards to human life in the event of failure. In this case, the tower would be considered a Class III tower, which is the highest classification, due to its use for essential communications. Therefore, this tower would be subjected to more stringent loading requirements. Such classes are not considered under Revision F.

### **Software Employed**

To perform this analysis, North Woods utilized version 8 of the TOWER software program, by Power Line Systems, Inc. This program performs finite element analysis, and incorporates the predetermined jurisdictional code.



## **Limitations of Analysis and Assumptions**

### **Limitations of Analysis**

As per the New York State Building Code, the tower was analyzed according to the design requirements outlined in TIA/EIA 222-F. If the owner, client or any agency jurisdictional to this review require greater loading than as noted in Revision F, such as the loading found in Revision F, then North Woods should be made aware of this requirement so that the analysis can be updated.

A site visit was conducted, and the tower was climbed. The review of the condition of the tower was limited to surface conditions; no assurance can be made for the internal condition of members. The analysis assumed that there is no physical deterioration (ie fatigue, corrosion or hidden damage) of any structural component.

The review of the tower was not intended to include a thorough, complete inspection of every weld or connection; the adequacy of every connection was not verified.

The guy wires were not examined over their length, and were assumed to be in sound condition. It was also assumed that the temperature at the time of the guy wire installation was in accordance with installation standards.

Materials used in the tower construction were assumed to meet appropriate ASTM standards for towers of this size, type, and vintage, with associated strength and other properties. Without as-built information, there is no way to verify these properties without destructive testing; this was not part of the scope of work.

The integrity of the tower foundation cannot be verified without as-built information regarding the foundation construction. North Woods Engineering shall not accept any responsibility for the adequacy of the existing foundation system.

The software used in the analysis that led to our office's conclusions and recommendations is considered a state-of-the-art analysis procedure. North Woods assumes no obligation to revise any of the information, conclusions, or recommendations in this report, should such analysis software be modified or revised. Further, North Woods assumes no obligation for this opinion or responsibility whatsoever for any consequential or incidental damages sustained as a result of any information or conclusions contained in this report.

## **Assumptions**

Assumptions made for the tower analysis are presented below. Should information come to light that any of the assumptions made in the creation of the structural model, or in the associated analysis, were incorrect, that information must be provided to North Woods immediately.

We assumed that the steel used in the construction of the main tower components was ASTM A36; which is consistent with other towers of this size and age.

For the various appurtenances, we assumed the characteristics (such as weight and density) were industry standard.

Due to limitations in access, for many of the appurtenances, simplifications were made in the model regarding wind and surface areas. The simplifications were made utilizing conservative assumptions for these areas.

Ice weight is assumed to be 56 pounds per cubic foot.

Temperature for guy wire installation was assumed to be 60°F, with an initial tension of 15%.

## Summary of Analysis

An analysis was conducted on the tower, with the existing and proposed equipment. Loading was in accordance with the design requirements outlined in TIA/EIA 222-F, namely, a load condition with a 70 mph wind and a load condition with a 61 mph wind with ½" of ice. Further, a service load condition was analyzed to review twist and deformation. Wind loading was applied to the tower in six directions, for each of the three conditions outlined above. Stresses of each tower component (ie legs, braces, guys, etc) were calculated for each condition and wind direction. The stresses were compared to code mandated calculated capacities for each component.

From the analysis, we noted that the legs, main horizontal braces and guys are all acceptable for the proposed loading. The areas that were previously reinforced, as noted in the report from Stainless, were all within acceptable limits. Sway, twist and deformation of the tower was also within acceptable limits.

However, the results of the analysis indicate that many of the typical diagonal bracing members, a 9/16" diameter steel rod, are overstressed up to 184% of their capacity. Specifically, 156 diagonal bracing rods in eight separate areas . These areas are noted in heights above the base:

- from 92' to 125',
- from 158' to 175',
- from 283' to 317',
- from 325' to 392',
- from 508' to 558',
- from 658' to 692',
- from 708' to 742' and
- from 867' to 890'.

North Woods also conducted a sensitivity analysis that included the removal of the TV transmitter mast at the top of the tower, as well as the linear appurtenances (conduits) associated with the mast. If this mast was removed, we found that 114 diagonal bracing rods in eight separate areas are overstressed up to 169% of their capacity. In other words, the removal of the equipment reduces the number of diagonal bracing rods that are overstressed, but does not eliminate the problem. Those areas of diagonal overstress in the sensitivity analysis are noted in heights above the base:

- from 100' to 125',
- from 158' to 167',
- from 283' to 317',
- from 325' to 383',
- from 508' to 550',
- from 667' to 683',



from 708' to 733' and  
from 867' to 890'.

The Stainless report noted the original design loads of the foundation. They are presented in the chart below, in comparison with the calculated loads:

Foundation Loads		
Component	Original	Rev F Loads
Download at Base	327 kips	552 kips
Inner Anchor Uplift	58 kips	83 kips
Inner Anchor Horizontal Load	63 kips	87 kips
Outer Anchor Uplift	57 kips	75 kips
Outer Anchor Horizontal Load	48 kips	64 kips

Note: 1 kip = 1,000 pounds

It was noted that the calculated download at the base under our analysis was much higher than the original calculation. Our analysis includes the effect of deformation during the analysis, as well as the vertical forces transferred from the guys to the tower. Therefore, as the tower experiences wind loads, the guy tensions that are developed, both from straight loading and twist, lead to increases in vertical forces in the structure.



## Conclusions and Recommendations

Based on the analysis, we can conclude that the tower, with the proposed equipment, is not adequate to resist the loading cases from TIA/EIA 222, Revision F.

Therefore, to have the tower structurally adequate to support the proposed additional equipment we recommend replacing the existing diagonal bracing rods with higher capacity members (such as 7/8" diameter rods) in the following sections:

from 92' to 125',  
from 158' to 175',  
from 283' to 317',  
from 325' to 392',  
from 508' to 558',  
from 658' to 692',  
from 708' to 742',  
and from 867' to 890'.

Further, in comparison of the capacity gained in the tower by the removal of the top mounted TV equipment (ie reduction in overstressed diagonals) versus the cost to replace the diagonals only and leave the TV equipment in place, it is our opinion that the incremental gain from the equipment removal is likely not worth the cost.

Should the County elect to proceed with the installation of the equipment, we will coordinate with the project team geotechnical engineer to evaluate the adequacy of the foundations and the supporting rock conditions.

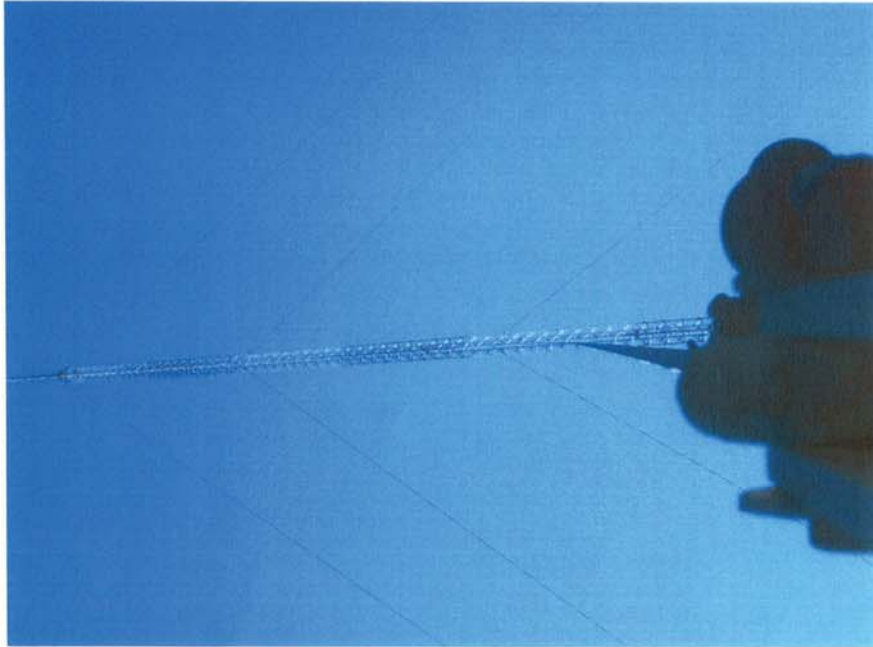
The additional loading mandated by TIA/EIA 222-G was cursory reviewed. If that revision becomes mandated to be code in New York State, and there are proposed changes to equipment or appurtenances, a structural analysis will be required. Our opinion is that the tower would not pass loading requirements, and would require significant renovation, in the event of an analysis under Revision G.

Although outside our purview, we recommend that the tower access ladder attachment points above 500' be inspected and repaired. It was noted during the site visit by our tower climbing crew that the ladder had questionable capacity above that elevation.

Also, again although outside our purview, we recommend that the tower undergo a painting and corrosion protection project. There are several areas in need of painting and if not treated in the near future, the exposure to the elements could lead to corrosion. The corrosion could then result in structural weakening of the tower.

# **Appendix 1**

## **Photographs**



*View of tower from guy attachment.*



*Tower base and ice bridge.*

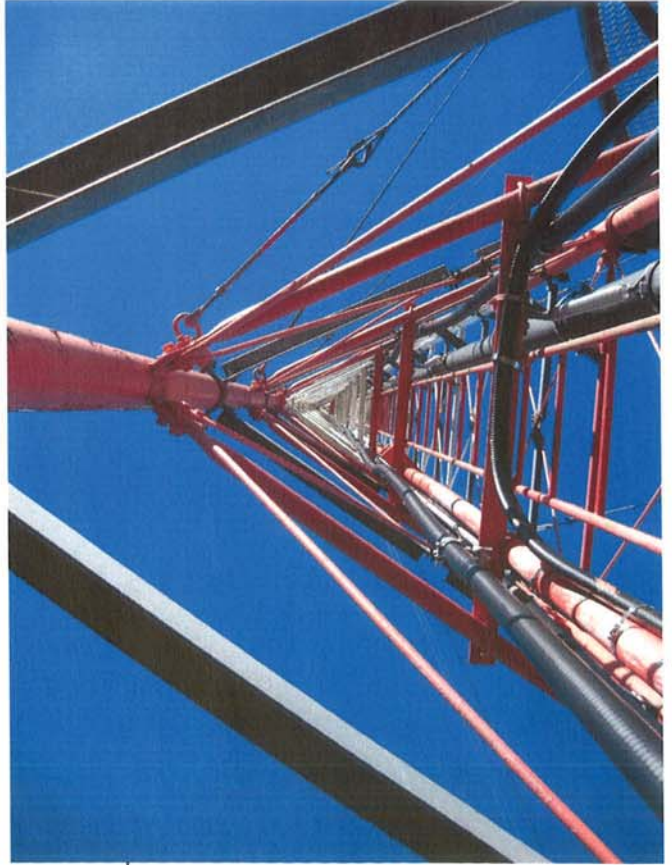




*Typical leg section connection.*



*Typical horizontal and diagonal brace connection to leg.*



*Interior view of tower.*





*Guy connection co-located with brace point connection.*



*View of top of tower and mast from base of mast connection.*



*Typical lower level guy attachment point.*

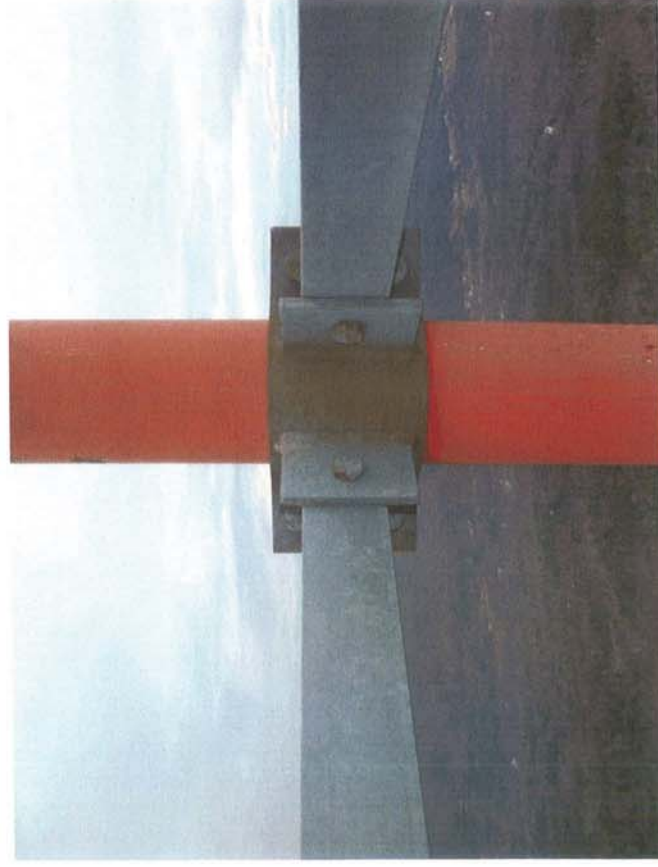




*Recent guy wire and attachment improvement.*



*Interior view of recent sub-brace connection to rod bracing.*



*Interior view of sub-brace connection to leg.*

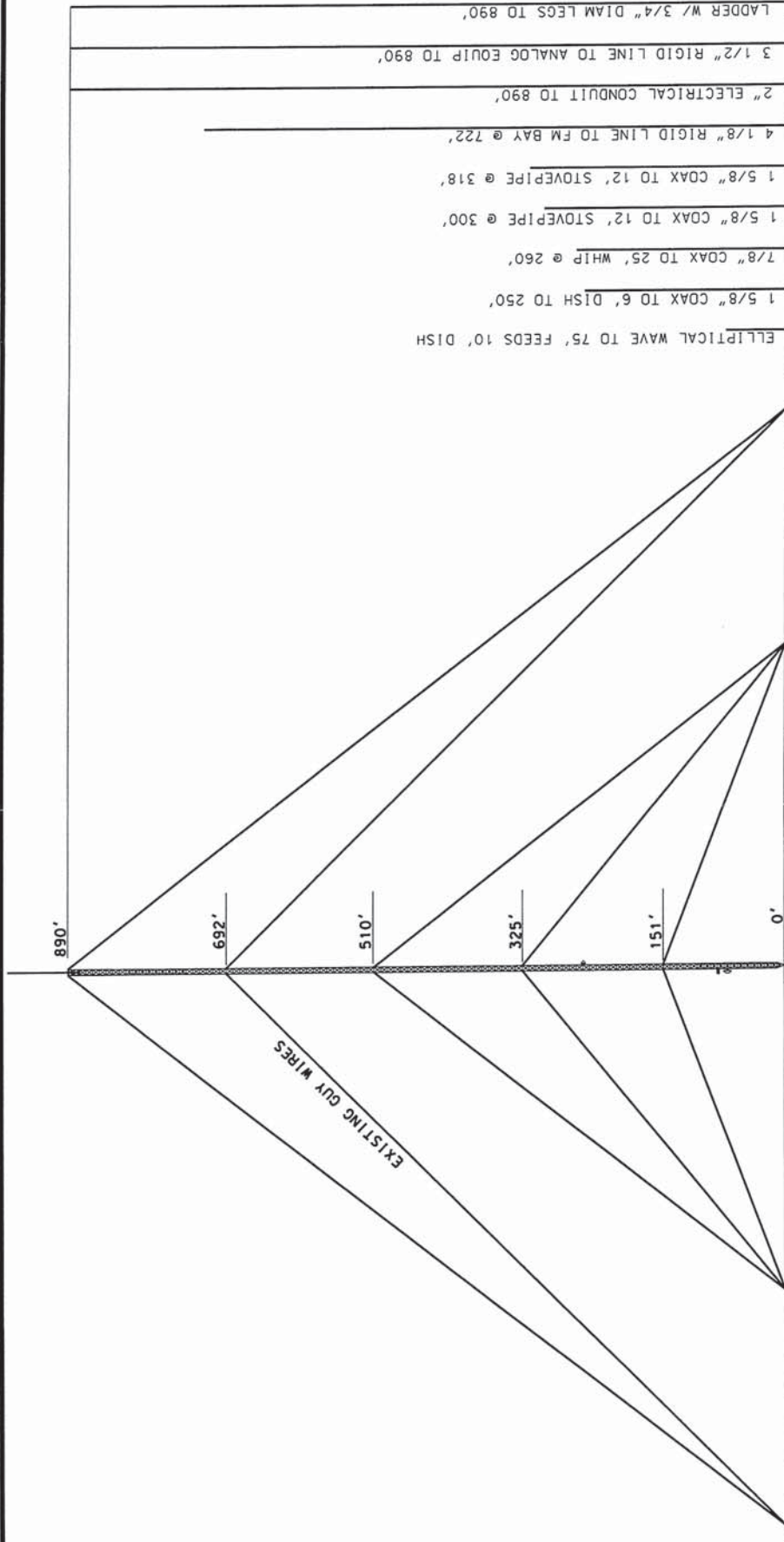


*Exterior view of recent sub-brace connection to rod bracing.*



# **Appendix 2**

## **Tower Elevation**

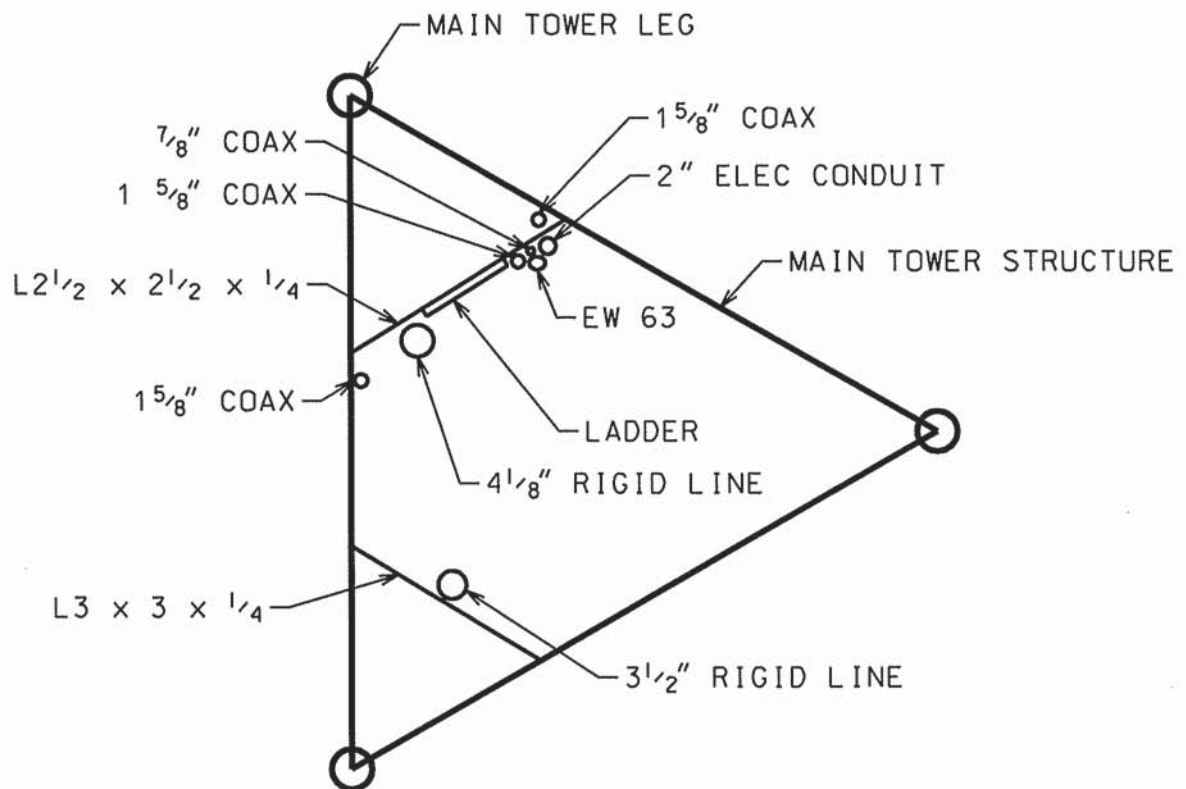


# TOWER ELEVATION NOT TO SCALE

IT IS A VIOLATION OF NEW YORK STATE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER TO ALTER AN ITEM IN ANY WAY.	PROJECT TITLE:  <b>ESSEX COUNTY E911 TOWERS</b>	DRAWING TITLE:  <b>TOWER ELEVATION</b>	CADD FILE: terry.dgn PROJ. NO.: 08-009 REVISION: DRAWING NUMBER:
	LOCATION: TERRY MOUNTAIN, TOWN OF PERU, NY DRAWN BY: CW GARSO CHECKED BY: JA GARSO	DATE: 12/16/10 SCALE: NTS	1

# **Appendix 3**

## **Typical Tower Cross-Section Existing Conditions**



## TYPICAL TOWER CROSS-SECTION EXISTING CONDITIONS

NOT TO SCALE

DRAWING  
TITLE:  
**TYPICAL TOWER CROSS-SECTION  
EXISTING CONDITIONS**

PROJECT:  
**ESSEX COUNTY E911 TOWERS**

DRAWN BY: NC  
DATE: 12-16-10

CHECKED BY: TJN  
DATE: 12-17-10

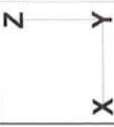
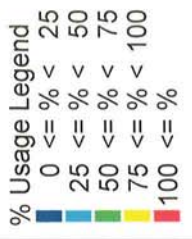
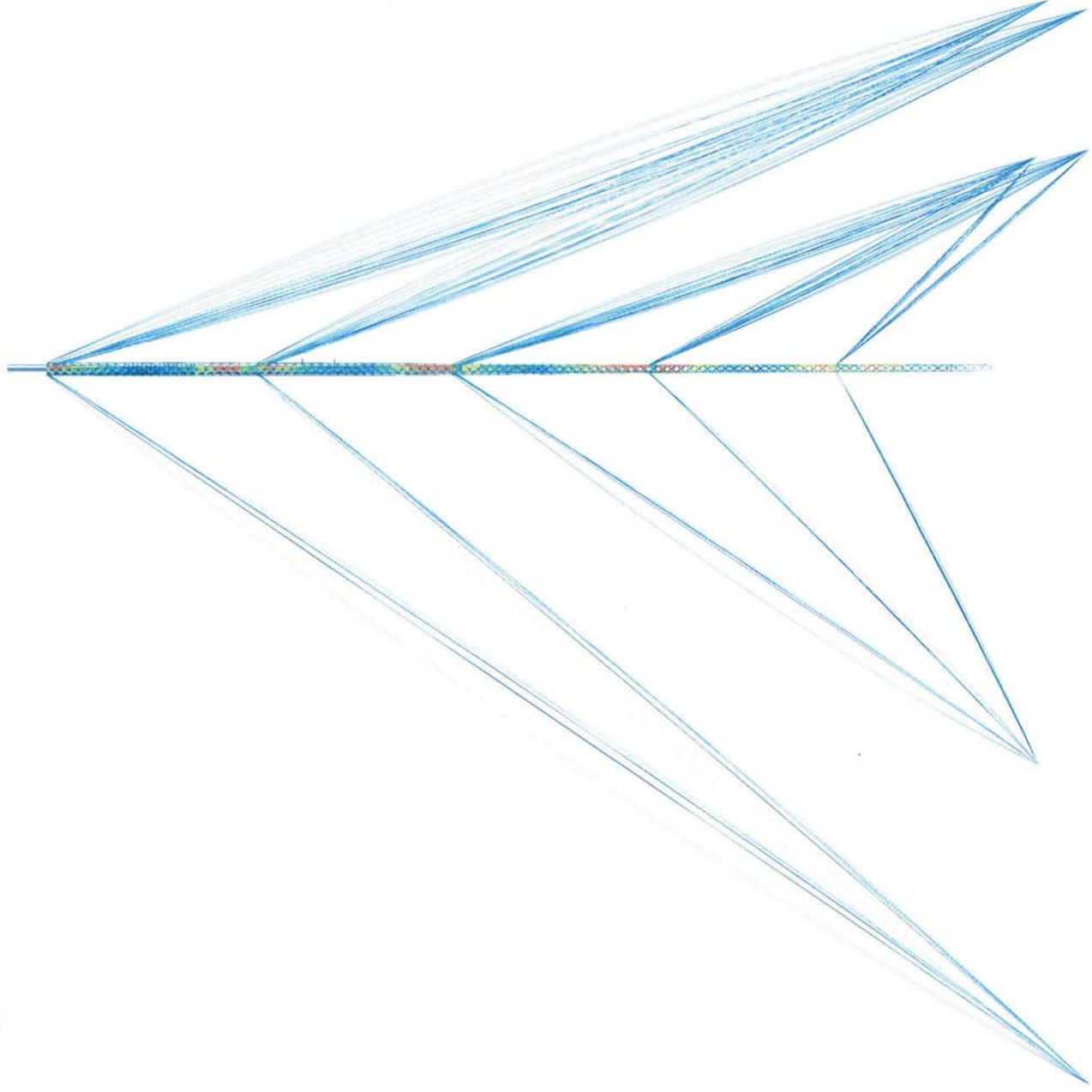
IT IS A VIOLATION OF  
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FOR ANY PERSON,  
UNLESS ACTING UNDER  
THE SUPERVISION OF A  
LICENSED PROFESSIONAL  
ENGINEER, TO ALTER  
AN ITEM IN ANY WAY.

**North Woods  
Engineering PLLC**

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# **Appendix 4**

## **Software Output**





Max Element Usage by Load Case			
Load Case	Maximum Usage %	Element Label	Element Type
DL1 0	149.3	g345P	Typ Diag
DL1 60	137.2	g474P	Typ Diag
DL1 90	165.9	g342P	Typ Diag
DL1 180	140.5	g476P	Typ Diag
DL1 -90	165.2	g343P	Typ Diag
DL1 -60	136.8	g475P	Typ Diag
DL2 0	167.2	g345P	Typ Diag
DL2 60	149.3	g477P	Typ Diag
DL2 90	184.6	g342P	Typ Diag
DL2 180	150.6	g476P	Typ Diag
DL2 -90	183.3	g343P	Typ Diag
DL2 -60	147.5	g343P	Typ Diag
SL 0	85.1	g265P	Typ Diag
SL 60	81.6	g232P	Typ Diag
SL 90	83.8	g474P	Typ Diag
SL 180	84.5	g288P	Typ Diag
SL -90	81.8	g475P	Typ Diag
SL -60	84.4	g165P	Typ Diag

Max Guy Usage by Load Case		
Load Case	Maximum Usage, %	Guy Label
DL1 0	31.6	W4
DL1 60	42.8	W4
DL1 90	40.1	W4
DL1 180	42.2	N4
DL1 -90	38.6	E4
DL1 -60	40.7	E4
DL2 0	36.8	W4
DL2 60	51.3	W4
DL2 90	47.3	W4
DL2 180	50.7	N4
DL2 -90	45.7	E4
DL2 -60	49.0	E4
SL 0	20.5	W4
SL 60	26.5	W4
SL 90	24.7	W4
SL 180	26.2	N4
SL -90	23.8	E4
SL -60	25.3	E4

Max Joint Support Reactions					
Joint Label	X Force (kips)	Y Force (kips)	Z Force (kips)	Result Force (kips)	Load Case
BaseP	1.65	-0.16	551.87	551.87	DL2 180
\$Gnd1	87.36	0	-80.41	118.73	DL2 180
\$Gnd2	-43.32	75.57	-76.79	116.23	DL2 -60
\$Gnd3	-43.11	-74.68	-83.03	119.71	DL2 60
\$Gnd10	64.08	0	-73.92	97.83	DL2 180
\$Gnd11	-31.86	55.2	-69.72	94.46	DL2 -60
\$Gnd12	-32.05	-55.52	-75.01	98.67	DL2 60

Group Summary- Compression										
Group Type	Group Description	Angle Type	Angle Size	Steel Strength (Fy), ksi	Max Usage %	Max Usage in Compression, %	Comp Control Member	Comp. Force (kips)	Comp control Load Case	L/R Capacity (kips)
Legs	Legs	SRO	5"	36	61.75	61.75	g182	-215.519	DL2 90	301.417
Typ Diag	Typ Diagonal	SRO	9/16"	36	184.55	85.11	g265P	-0.17	SL 0	0.172
Typ horz	Typ Horz	HRO	2"	36	86.93	86.93	g7932	-7.188	DL2 90	7.14
L Diag	Large Diag	SRO	7/8"	36	86.36	86.36	g603P	-1.009	DL2 -60	1.009
Guy Horz	Guy girts	DAE	2L 3x3x1/4	36	22.3	0	g755P	0		40.523
Ant Horz	Antenna mount C	C	C8x18.7	36	46.17	46.17	g8562	-24.696	DL2 -90	46.192
Base Hoz	Base girts	SAE	L4X4X1/2	36	45.44	0	g8592	0		41.66
Base CD	Base Cross Diag	FS	4X1/2	36	37.66	37.66	g8602	-2.534	DL2 60	5.812
Reif Gir	Reinforcement girts	SAE	2.5x2.5x.25	36	12.6	12.6	g8721	-0.854	DL1 90	5.851

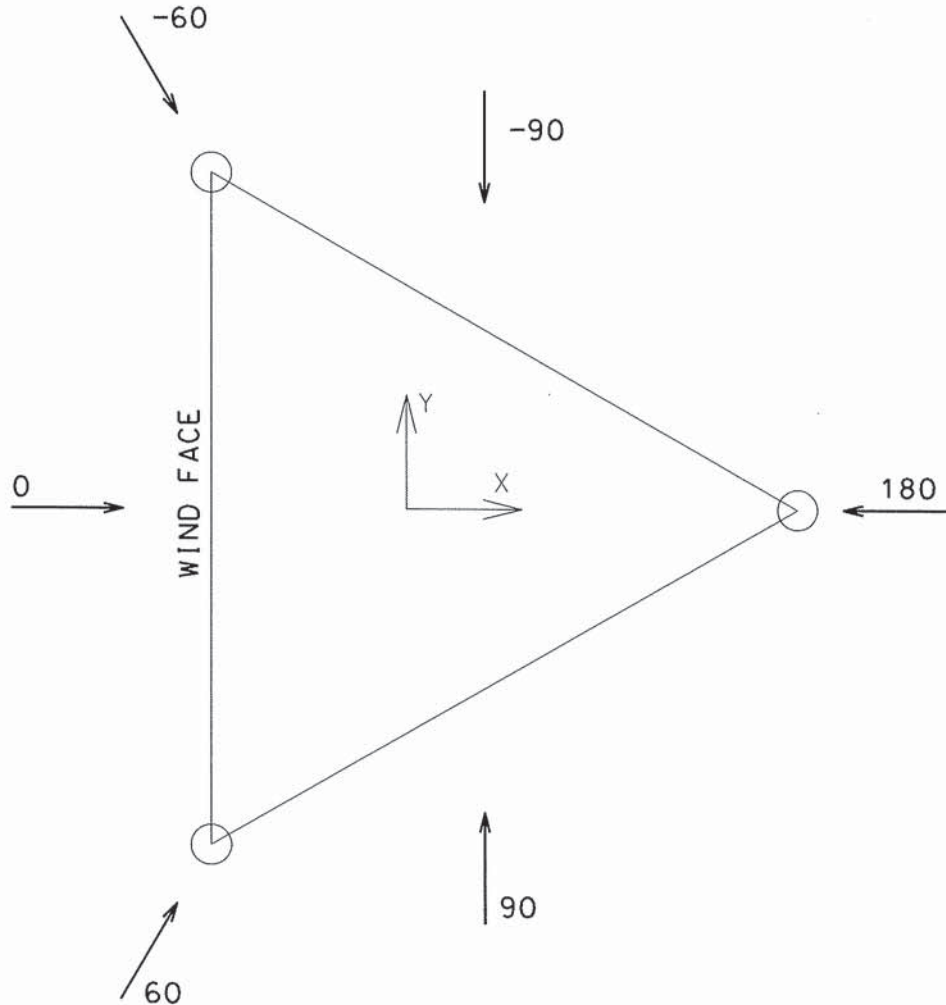
Group Summary - Tension										
Group Type	Group Description	Angle Type	Angle Size	Steel Strength (Fy), ksi	Max Usage %	Max Usage in Tension	Tension Control Member	Tension Force, (kips)	Tension Control Load Case	Net Section Capacity
Legs	Legs	SRO	5"	36	61.75	10.54	g919P	51.732	DL1 0	424.007
Typ Diag	Typ Diagonal	SRO	9/16"	36	184.55	184.55	g342P	11.494	DL2 90	5.378
Typ horz	Typ Horz	HRO	2"	36	86.93	6.33	g834P	1.165	DL2 60	15.898
L Diag	Large Diag	SRO	7/8"	36	86.36	71.98	g606P	10.82	DL2 90	12.982
Guy Horz	Guy girts	DAE	2L 3x3x1/4	36	22.3	22.3	g754P	16.007	DL2 0	61.992
Ant Horz	Antenna mount C	C	C8x18.7	36	46.17	31.13	g929P	42.906	DL2 -60	119.016
Base Hoz	Base girts	SAE	L4X4X1/2	36	45.44	45.44	g8591	42.618	DL2 90	81
Base CD	Base Cross Diag	FS	4X1/2	36	37.66	0	g8612	0		43.2
Reif Gir	Reinforcement girts	SAE	2.5x2.5x.25	36	12.6	4.12	g8631	1.227	DL2 0	25.704

## LOAD CASES

DL1 = DESIGN LOAD 1 =  $D + W_o$   
 DL2 = DESIGN LOAD 2 =  $D + 0.75W_i + I$   
 SL = SERVICE LOAD =  $D + W_s$

## LEGEND

D = DEAD LOAD  
 $W_o$  = BASIC WIND SPEED W/O ICE  
 $W_i$  = BASIC WIND SPEED W/ ICE  
 $W_s$  = SERVICE WIND SPEED  
 I = ICE WEIGHT



## WIND DIRECTION SCHEMATIC

NOT TO SCALE

DRAWING  
 TITLE: WIND DIRECTION SCHEMATIC

DRAWN BY: TJN  
 DATE: 12-20-10

PROJECT:  
 ESSEX COUNTY E911 TOWERS

CHECKED BY: JAG  
 DATE: 12-20-10

IT IS A VIOLATION OF  
 NEW YORK STATE LAW  
 FOR ANY PERSON,  
 UNLESS ACTING UNDER  
 THE SUPERVISION OF A  
 LICENSED PROFESSIONAL  
 ENGINEER, TO ALTER  
 AN ITEM IN ANY WAY.

North Woods  
 Engineering PLLC

348 Lake Street • Saranac Lake, NY 12983  
 (518) 891-4975  
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## **Appendix 5**

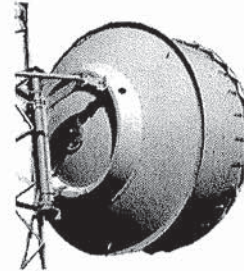
### **Proposed New Equipment Data Sheets Essex County Emergency 911 Equipment**



Microwave Antenna, High Performance, Single Polarized, 8 ft  
5.925 - 6.425 GHz

## Product Description

RFS Microwave Antennas are designed for microwave systems in all common frequency ranges from 4 GHz to 15 GHz. Different options of survival windspeeds are available. This allows the use of antennas in areas where extreme wind conditions are normal. The antennas utilise a conventional feed system and are available in three performance classes offering complete flexibility when designing a network. High Performance antennas are ideally suited for systems where a good level of side lobe suppression is required. These antennas are required for use in networks where there is a high interference potential. Antennas are available in 2 ft (0.6m) to 12 ft (3.7m) diameters. The High Performance antennas are available in dual polarised (DAX) as well as in single polarised versions (DA). All antennas include a radome which is specially shaped (2 ft) or flexible (4 to 12 ft) to minimise its impact on the antenna's electrical characteristics.



Antenna

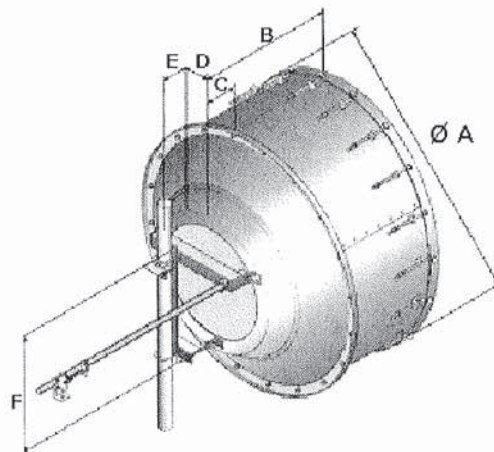
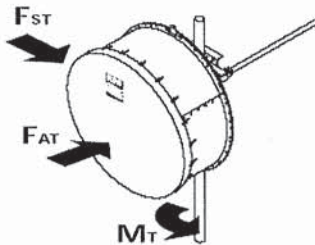
## Technical Features

Product Type	Point to point antennas
Frequency, GHz	5.925 - 6.425
Diameter, ft (m)	8 (2.4)
Profile	Standard
Performance	High
Polarization	Single
Regulatory Compliance	Standard, EN 302217, FCC
3dB beamwidth, (degrees)	1.5
Antenna Input	PDR 70
Low Band Gain, dBi	41.2
Mid Band Gain, dBi	41.6
High Band Gain, dBi	42
F/B Ratio, dB	66
XPD, dB	30
Max VSWR / R L, dB	1.06 / 30.7
FCC Standard	A
ETSI Standard	Range 1, class 2
Elevation Adjustment, degrees	± 5
Azimuth Adjustment, degrees	± 5
Polarization Adjustment, degrees	± 5
Pressure, bar (psi)	0.3 (4.3)
Radome	Included
Antenna color	White
Mounting Pipe Diameter minimum, mm (in)	114 (4.5)
Mounting Pipe Diameter maximum, mm (in)	114 (4.5)
Approximate Weight, kg (lb)	180 (396)
Survival Windspeed, km/h (mph)	200 (125)
Operational Windspeed, km/h (mph)	190 (118)

All information contained in the present datasheet is subject to confirmation at time of ordering

Microwave Antenna, High Performance, Single Polarized, 8 ft  
5.925 - 6.425 GHz

$F_{ST}$ Side force max. at 110 km/h (68 mph), N (lb)	1920 (430)
$F_{AT}$ Axial force max. at 110 km/h (68 mph), N (lb)	3880 (870)
M Torque max. at 110 km/h (68 mph), Nm (ft lb)	1800 (1340)
$F_{ST}$ Side force max. at 200 km/h (125 mph), N (lb)	6350 (1422)
$F_{AT}$ Axial force max. at 200 km/h (125 mph), N (lb)	12380 (2773)
M Torque max. at 200 km/h (125 mph), Nm (ft lb)	5960 (4400)



All dimensions in mm (in)

ØA	B	C	ØD for mounting pipe diam.				E	F
			219 (8.5)	114 (4.5)	89 (3.5)	51 (2.0)		
2616 (103.4)	1450 (57.1)	460 (18.1)		190 (7.5)			310 (12.3)	1120 (44.1)

### Notes

includes 1 sway bar (3.0 m x Ø60 mm)

### Documentation

Complete Antenna installation  
HTT81.221-12.pdf

Radiation pattern: (NSMA format)  
DA8-59A, 961234.txt  
Radiation pattern: (PDF Format)  
DA8-59A, 961234.pdf

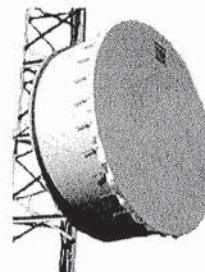
All information contained in the present datasheet is subject to confirmation at time of ordering



Microwave Antenna, High Performance, Single Polarized, 10 ft  
5.925 - 6.425 GHz

## Product Description

RFS Microwave Antennas are designed for microwave systems in all common frequency ranges from 4 GHz to 15 GHz. Different options of survival windspeeds are available. This allows the use of antennas in areas where extreme wind conditions are normal. The antennas utilise a conventional feed system and are available in three performance classes offering complete flexibility when designing a network. High Performance antennas are ideally suited for systems where a good level of side lobe suppression is required. These antennas are required for use in networks where there is a high interference potential. Antennas are available in 2 ft (0.6m) to 12 ft (3.7m) diameters. The High Performance antennas are available in dual polarised (DAX) as well as in single polarised versions (DA). All antennas include a radome which is specially shaped (2 ft) or flexible (4 to 12 ft) to minimise its impact on the antenna's electrical characteristics.



Antenna

## Technical Features

Product Type	Point to point antennas
Frequency, GHz	5.925 - 6.425
Diameter, ft (m)	10 (3.0)
Profile	Standard
Performance	High
Polarization	Single
Regulatory Compliance	Standard, EN 302217, FCC
3dB beamwidth, (degrees)	1.2
Antenna Input	PDR 70
Low Band Gain, dBi	43
Mid Band Gain, dBi	43.4
High Band Gain, dBi	43.7
F/B Ratio, dB	69
XPD, dB	30
Max VSWR / R L, dB	1.06 / 30.7
FCC Standard	A
ETSI Standard	Range 1, class 2
Elevation Adjustment, degrees	± 5
Azimuth Adjustment, degrees	± 5
Polarization Adjustment, degrees	± 5
Pressure, bar (psi)	0.3 (4.3)
Radome	Included
Antenna color	White
Mounting Pipe Diameter minimum, mm (in)	114 (4.5)
Mounting Pipe Diameter maximum, mm (in)	114 (4.5)
Approximate Weight, kg (lb)	290 (638)
Survival Windspeed, km/h (mph)	200 (125)
Operational Windspeed, km/h (mph)	190 (118)

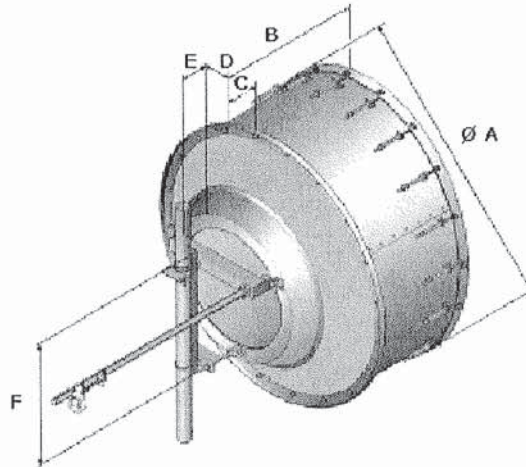
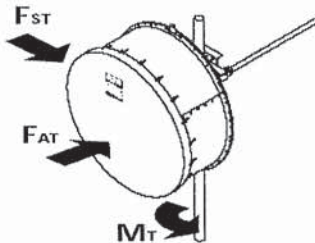
All information contained in the present datasheet is subject to confirmation at time of ordering





Microwave Antenna, High Performance, Single Polarized, 10 ft  
5.925 - 6.425 GHz

F <sub>ST</sub> Side force max. at 110 km/h (68 mph), N (lb)	2900 (650)
F <sub>AT</sub> Axial force max. at 110 km/h (68 mph), N (lb)	5860 (1312)
M Torque max. at 110 km/h (68 mph), Nm (ft lb)	3100 (2300)
F <sub>ST</sub> Side force max. at 200 km/h (125 mph), N (lb)	9590 (2148)
F <sub>AT</sub> Axial force max. at 200 km/h (125 mph), N (lb)	19370 (4340)
M Torque max. at 200 km/h (125 mph), Nm (ft lb)	10240 (7600)



All dimensions in mm (in)

ØA	B	C	ØD for mounting pipe diam.			E	F
			219 (8.5)	114 (4.5)	89 (3.5)	51 (2.0)	
3220 (126.8)	1640 (64.6)	550 (21.7)		190 (7.5)		370 (14.6)	1440 (56.9)

### Notes

includes 1 sway bar (3.0 m x Ø60 mm)

### Documentation

Complete Antenna installation  
HTT81.222-11.pdf

Radiation pattern: (NSMA format)  
DA10-59A, 990916.txt  
Radiation pattern: (PDF Format)  
DA10-59A, 990916.pdf

All information contained in the present datasheet is subject to confirmation at time of ordering



## FLEXWELL® Standard Elliptical Waveguide

## Product Description

FLEXWELL® elliptical waveguide is constructed of longitudinally continuous seam welded, highly conductive copper tube, corrugated and precision formed into an elliptical cross section. It is manufactured in continuous lengths using a special seam welding process developed by the RFS organization.

The corrugation design achieves high transverse stability, flexibility and crush strength for superior handling and forming at an installation. The inherent strength and flexibility of FLEXWELL waveguide allows on location, a continuous length of waveguide to be run directly from a tower-mounted antenna to the equipment building, eliminating flange joint discontinuities and the use of bends, twists and flex sections associated with a rigid rectangular waveguide system. Because of its flexibility, FLEXWELL elliptical waveguide can be easily transported to an installation site in coils or on reels and then uncoiled as required during installation.

FLEXWELL elliptical waveguide has set an industry standard for excellent electrical performance. Each waveguide has been carefully designed for low loss and low VSWR in specific frequency bands. For optimum system performance, there is no substitute for FLEXWELL waveguide.

As part of the RFS manufacturing process, all elliptical waveguides undergo several different electrical tests. Prior to shipping, every length is 100% tested again for input VSWR, and undergoes a twenty-four hour pressure test. This additional testing is performed to guarantee conformance with published specifications and to avoid any problems in the field.

A FLEXWELL elliptical waveguide feeder requires less planning and reduces installation costs when compared to a feeder system using a rigid rectangular waveguide. FLEXWELL waveguide is available cut to length with factory attached connectors or in continuous lengths for termination in the field.



## Features/Benefits

## Technical Specifications

Typical Operating Band, GHz	5.6 - 6.425
Performance	Standard
Dimension over Jacket, mm (in)	56 x 33 (2.2 x 1.3)
Weight, kg/m (lb/ft)	1.1 (0.74)
Minimum Bending Radius E Plane, without rebending, mm (in)	200 (8)
Minimum Bending Radius H Plane, without rebending, mm (in)	550 (22)
Minimum Bending Radius E Plane, with rebending, mm (in)	300 (12)
Minimum Bending Radius H Plane, with rebending, mm (in)	800 (31)
Maximum Twist, degree/m (degree/ft)	4 (1.2)
Max. Operating Pressure, bar (psi)	0.5 (7)
Max. Pulling Length per Hoisting Grip, m (ft)	100 (305)
Standard Hanger Spacing, m (ft)	0.9 (3)
Recommended Installation Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Max. VSWR / Return Loss, dB	1.15 / 23.1
Cut-off Frequency, GHz	3.65

## Notes

VSWR values include connectors and are valid for frequency band of connectors.

Max. Operating Band: 4.50 - 6.425 GHz

## Other Documentation



## FLEXWELL® Standard Elliptical Waveguide

## E60/EP60

## ATTENUATION, AVERAGE POWER, GROUP VELOCITY, GROUP DELAY

Frequency GHz	Attenuation dB / 100 m (ft)	Avg. Pow. kW	Group Vel. %c	Group Delay ns/100 m (ft)
5.60	4.15 (1.27)	6.89	75.8	439.8 (134.1)
5.70	4.09 (1.25)	6.99	76.8	434.3 (132.4)
5.80	4.04 (1.23)	7.08	77.7	429.2 (130.8)
5.90	3.99 (1.22)	7.16	78.6	424.6 (129.4)
6.00	3.95 (1.20)	7.24	79.4	420.3 (128.1)
6.10	3.91 (1.19)	7.31	80.1	416.3 (126.9)
6.20	3.88 (1.18)	7.38	80.8	412.7 (125.8)
6.30	3.84 (1.17)	7.44	81.5	409.2 (124.7)
6.40	3.81 (1.16)	7.50	82.1	406.1 (123.8)
6.425	3.80 (1.16)	7.52	82.3	405.3 (123.5)

For attenuation: VSWR 1.0, ambient temperature 20° C (68° F).

For average power: VSWR 1.0 and 42° C (76° F) temperature rise over 40° C (104° F) ambient.

Attenuation, Average Power, Group Velocity, Group Delay





## FLEXWELL® Standard Elliptical Waveguide

## Product Description

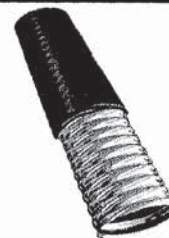
FLEXWELL® elliptical waveguide is constructed of longitudinally continuous seam welded, highly conductive copper tube, corrugated and precision formed into an elliptical cross section. It is manufactured in continuous lengths using a special seam welding process developed by the RFS organization.

The corrugation design achieves high transverse stability, flexibility and crush strength for superior handling and forming at an installation. The inherent strength and flexibility of FLEXWELL waveguide allows on location, a continuous length of waveguide to be run directly from a tower-mounted antenna to the equipment building, eliminating flange joint discontinuities and the use of bends, twists and flex sections associated with a rigid rectangular waveguide system. Because of its flexibility, FLEXWELL elliptical waveguide can be easily transported to an installation site in coils or on reels and then uncoiled as required during installation.

FLEXWELL elliptical waveguide has set an industry standard for excellent electrical performance. Each waveguide has been carefully designed for low loss and low VSWR in specific frequency bands. For optimum system performance, there is no substitute for FLEXWELL waveguide.

As part of the RFS manufacturing process, all elliptical waveguides undergo several different electrical tests. Prior to shipping, every length is 100% tested again for input VSWR, and undergoes a twenty-four hour pressure test. This additional testing is performed to guarantee conformance with published specifications and to avoid any problems in the field.

A FLEXWELL elliptical waveguide feeder requires less planning and reduces installation costs when compared to a feeder system using a rigid rectangular waveguide. FLEXWELL waveguide is available cut to length with factory attached connectors or in continuous lengths for termination in the field.



## Features/Benefits

## Technical Specifications

Typical Operating Band, GHz	5.9 - 7.125
Performance	Standard
Dimension over Jacket, mm (in)	51 x 30 (2.0 x 1.2)
Weight, kg/m (lb/ft)	0.75 (0.50)
Minimum Bending Radius E Plane, without rebending, mm (in)	200 (8)
Minimum Bending Radius H Plane, without rebending, mm (in)	500 (20)
Minimum Bending Radius E Plane, with rebending, mm (in)	300 (12)
Minimum Bending Radius H Plane, with rebending, mm (in)	600 (24)
Maximum Twist, degree/m (degree/ft)	5 (1.5)
Max. Operating Pressure, bar (psi)	0.5 (7)
Max. Pulling Length per Hoisting Grip, m (ft)	100 (305)
Standard Hanger Spacing, m (ft)	0.9 (3)
Recommended Installation Temperature Range, °C (°F)	-40 to +60 (-40 to +140)
Max. VSWR / Return Loss, dB	1.15 / 23.1
Cut-off Frequency, GHz	4.01

## Notes

VSWR values include connectors and are valid for frequency band of connectors.

Max. Operating Band: 5.00 - 7.125 GHz

## Other Documentation





## FLEXWELL® Standard Elliptical Waveguide

E65/EP65

ATTENUATION, AVERAGE POWER, GROUP VELOCITY, GROUP DELAY

Frequency GHz	Attenuation dB / 100 m (ft)	Avg. Pow. kW	Group Vel. %c	Group Delay ns/100 m (ft)
5.90	4.92 (1.50)	4.82	73.4	454.7 (138.6)
6.00	4.84 (1.47)	4.90	74.4	448.4 (136.7)
6.10	4.76 (1.45)	4.98	75.4	442.6 (134.9)
6.20	4.69 (1.43)	5.06	76.3	437.4 (133.3)
6.30	4.62 (1.41)	5.13	77.1	432.5 (131.8)
6.40	4.56 (1.39)	5.19	77.9	428.0 (130.5)
6.50	4.51 (1.37)	5.26	78.7	423.8 (129.2)
6.60	4.46 (1.36)	5.32	79.4	420.0 (128.0)
6.70	4.41 (1.34)	5.37	80.1	416.4 (126.9)
6.80	4.37 (1.33)	5.42	80.8	413.0 (125.9)
6.90	4.33 (1.32)	5.47	81.4	409.9 (124.9)
7.00	4.29 (1.31)	5.52	82.0	407.0 (124.0)
7.125	4.25 (1.30)	5.58	82.7	403.5 (123.0)

For attenuation: VSWR 1.0, ambient temperature 20° C (68° F).

For average power: VSWR 1.0 and 42° C (76° F) temperature rise over 40° C (104° F) ambient.

Attenuation, Average Power, Group Velocity, Group Delay

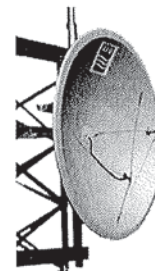


Microwave Antenna, Standard (FCC 101, Cat A) , Single Polarized, 6 ft  
6.425 - 7.125 GHz

## Product Description

(Local product. Only in North America available. For further information contact Sales in North America)

RFS Microwave Antennas are designed for microwave systems in all common frequency ranges from 4 GHz to 24 GHz. Different options of survival windspeeds are available. This allows the use of antennas in areas where extreme wind conditions are normal. The antennas utilise a conventional feed system and are available in three performance classes offering complete flexibility when designing a network. Standard Performance antennas are economical solutions for systems where side lobe suppression is of less importance. These antennas are required for use in networks where there is a low interference potential. Antennas are available in 2 ft (0.6m) to 12 ft (3.7m) diameters. The Standard Performance antennas are available in single polarised version (PAL). The PAL version offers a low VSWR value for low echo distortion. Antennas from 4ft up to 12 ft (3.7m) can be equipped with a moulded radome to reduce wind load and to protect the feed against the accumulation of ice and snow.



Antenna

## Technical Features

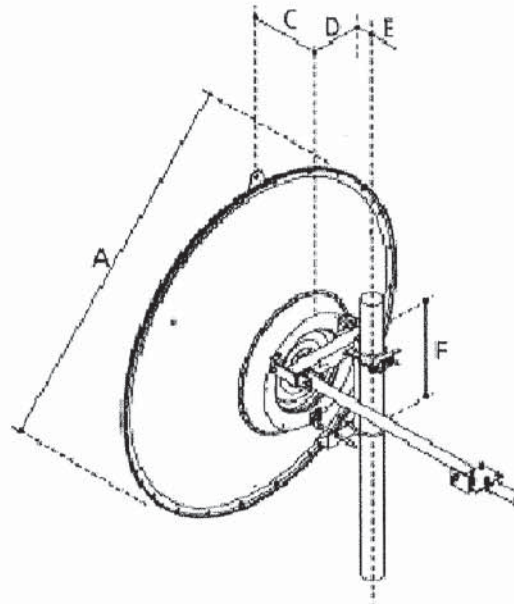
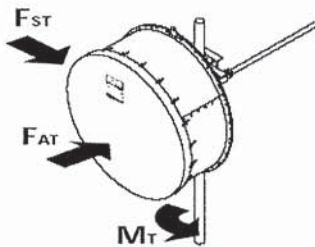
Product Type	Point to point antennas
Frequency, GHz	6.425 - 7.125
Diameter, ft (m)	6 (1.8)
Profile	Standard
Performance	Improved Performance
Polarization	Single
Regulatory Compliance	Standard, FCC
3dB beamwidth, (degrees)	1.6
Antenna Input	CPR137G
Low Band Gain, dBi	39.1
Mid Band Gain, dBi	39.6
High Band Gain, dBi	40.0
F/B Ratio, dB	57
XPD, dB	30
Max VSWR / R L, dB	1.06 / 30.7
FCC Standard	A
Elevation Adjustment, degrees	± 5
Azimuth Adjustment, degrees	± 5
Polarization Adjustment, degrees	± 5
Pressure, bar (psi)	0.3 (4.3)
Radome	Optional
Antenna color	White
Mounting Pipe Diameter minimum, mm (in)	114 (4.5)
Mounting Pipe Diameter maximum, mm (in)	114 (4.5)
Approximate Weight, kg (lb)	65 (141)
Survival Windspeed, km/h (mph)	200 (125)
Operational Windspeed, km/h (mph)	190 (118)

All information contained in the present datasheet is subject to confirmation at time of ordering



Microwave Antenna, Standard (FCC 101, Cat A) , Single Polarized, 6 ft  
6.425 - 7.125 GHz

F <sub>ST</sub> Side force max. at 110 km/h (68 mph), N (lb)	880 (197)
F <sub>AT</sub> Axial force max. at 110 km/h (68 mph), N (lb)	2995 (670)
M Torque max. at 110 km/h (68 mph), Nm (ft lb)	925 (690)
F <sub>ST</sub> Side force max. at 200 km/h (125 mph), N (lb)	2910 (651)
F <sub>AT</sub> Axial force max. at 200 km/h (125 mph), N (lb)	9900 (2217)
M Torque max. at 200 km/h (125 mph), Nm (ft lb)	3055 (2270)



All dimensions in mm (in)

ØA	B	C	ØD for mounting pipe diam.				E	F
			219 (8.5)	114 (4.5)	89 (3.5)	51 (2.0)		
2000 (79)		364 (14.3)		175 (6.9)			283 (11.1)	590 (23.2)

### Notes

includes 1 sway bar (2.0 m x Ø60 mm)

### Documentation

Complete Antenna installation  
NMT628-00.pdf

Radiation pattern: (NSMA format)  
PAD6-65B, 970703.txt  
Radiation pattern: (PDF Format)  
PAD6-65B, 970703.pdf

All information contained in the present datasheet is subject to confirmation at time of ordering

## **Appendix 6**

### **Proposed New Equipment Data Sheets Shared Microwave Network w/ NYSEG**

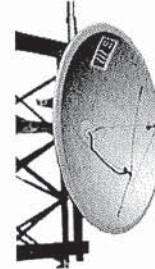


Microwave Antenna, Standard (FCC 101, Cat A) , Single Polarized, 6 ft  
5.925 - 6.875 GHz

### Product Description

(Local product. Only in North America available. For further information contact Sales in North America)

RFS Microwave Antennas are designed for microwave systems in all common frequency ranges from 4 GHz to 24 GHz. Different options of survival windspeeds are available. This allows the use of antennas in areas where extreme wind conditions are normal. The antennas utilise a conventional feed system and are available in three performance classes offering complete flexibility when designing a network. Standard Performance antennas are economical solutions for systems where side lobe suppression is of less importance. These antennas are required for use in networks where there is a low interference potential. Antennas are available in 2 ft (0.6m) to 12 ft (3.7m) diameters. The Standard Performance antennas are available in single polarised version (PAL). The PAL version offers a low VSWR value for low echo distortion. Antennas from 4ft up to 12 ft (3.7m) can be equipped with a moulded radome to reduce wind load and to protect the feed against the accumulation of ice and snow.



Antenna

### Technical Features

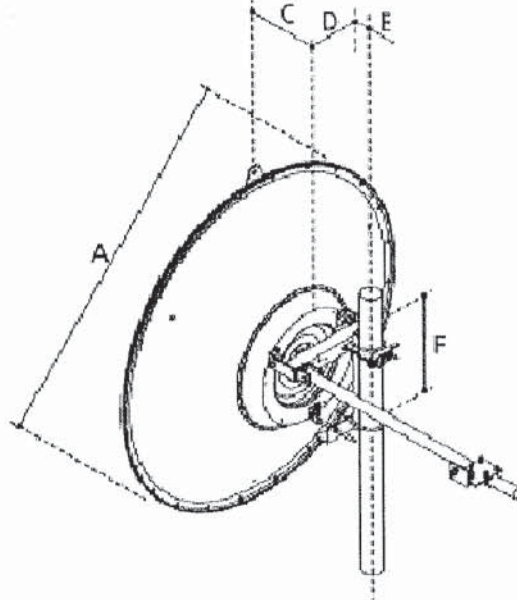
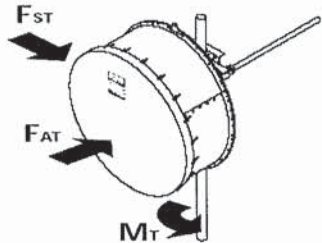
Product Type	Point to point antennas
Frequency, GHz	5.925 - 6.875
Diameter, ft (m)	6 (1.8)
Profile	Standard
Performance	Improved Performance
Polarization	Single
Regulatory Compliance	Standard, FCC
3dB beamwidth, (degrees)	1.7
Antenna Input	CPR137G
Low Band Gain, dBi	38.4
Mid Band Gain, dBi	39.1
High Band Gain, dBi	39.7
F/B Ratio, dB	55
XPD, dB	30
Max VSWR / R L, dB	1.08 / 28.3
FCC Standard	A
Elevation Adjustment, degrees	± 5
Azimuth Adjustment, degrees	± 5
Polarization Adjustment, degrees	± 5
Pressure, bar (psi)	0.3 (4.3)
Radome	Optional
Antenna color	White
Mounting Pipe Diameter minimum, mm (in)	114 (4.5)
Mounting Pipe Diameter maximum, mm (in)	114 (4.5)
Approximate Weight, kg (lb)	65 (141)
Survival Windspeed, km/h (mph)	200 (125)
Operational Windspeed, km/h (mph)	190 (118)

All information contained in the present datasheet is subject to confirmation at time of ordering



Microwave Antenna, Standard (FCC 101, Cat A) , Single Polarized, 6 ft  
5.925 - 6.875 GHz

F <sub>ST</sub> Side force max. at 110 km/h (68 mph), N (lb)	880 (197)
F <sub>AT</sub> Axial force max. at 110 km/h (68 mph), N (lb)	2995 (670)
M Torque max. at 110 km/h (68 mph), Nm (ft lb)	925 (690)
F <sub>ST</sub> Side force max. at 200 km/h (125 mph), N (lb)	2910 (651)
F <sub>AT</sub> Axial force max. at 200 km/h (125 mph), N (lb)	9900 (2217)
M Torque max. at 200 km/h (125 mph), Nm (ft lb)	3055 (2270)



All dimensions in mm (in)

ØA	B	C	ØD for mounting pipe diam.				E	F
			219 (8.5)	114 (4.5)	89 (3.5)	51 (2.0)		
2000 (79)		364 (14.3)		175 (6.9)			283 (11.1)	590 (23.2)

### Notes

includes 1 sway bar (2.0 m x Ø60 mm)

### Documentation

Complete Antenna installation  
NMT628-00.pdf

Radiation pattern: (NSMA format)  
PAD6-W59B, 970728.txt  
Radiation pattern: (PDF Format)  
PAD6-W59B, 970728.pdf




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Antenna Systems & Solutions, Inc. is pleased to provide the following specifications for Andrew EW52, HELIAX® Standard Elliptical Waveguide, designed to operate between, 5.6-6.425 GHz. If you have any questions, please do not hesitate to [contact us](#), or send us an [email](#).

Construction Materials			
Jacket Material	PE		
Conductor Material	Corrugated copper		
Jacket Color	Black		
Dimensions			
Cable Volume	1045.0 L/km		11.3 ft³ /kft
Cable Weight	0.88 kg/m		0.59 lb/ft
Diameter Over Jacket (E Plane)	57.20 mm		2.25 in
Diameter Over Jacket (H Plane)	33.30 mm		1.31 in
Electrical Specifications			
Operating Frequency Band	5.6 – 6.425 GHz		
eTE11 Mode Cutoff	3.650 GHz		
Group Delay	126 ns/100 ft @ 6.200 GHz		413 ns/100 m @ 6.200 GHz
Environmental Specifications			
Installation Temperature	-40 °C to +60 °C (-40 °F to +140 °F)		
Operating Temperature	-55 °C to +85 °C (-67 °F to +185 °F)		
Storage Temperature	-70 °C to +85 °C (-94 °F to +185 °F)		
Mechanical Specifications			
Maximum Twist	3.00 °/m		1.00 °/ft
Minimum Bend Radius, Multiple Bends (E Plane)	305.00 mm		12.00 in
Minimum Bend Radius, Multiple Bends (H Plane)	810.00 mm		32.00 in
Minimum Bend Radius, Single Bend (E Plane)	200.00 mm		8.00 in
Minimum Bend Radius, Single Bend (H Plane)	560.00 mm		22.00 in
Standard Conditions			
Attenuation, Ambient Temperature	24 °C		75 °F
Average Power, Ambient Temperature	40 °C		104 °F
Average Power, Temperature Rise	42 °C		76 °F

### Return Loss

Frequency Band	VSWR	Return Loss (dB)
----------------	------	------------------

5.6-6.425 GHz	1.15	23.10
---------------	------	-------

#### Attenuation

Frequency (GHz)	Attenuation (dB/100 ft)	Attenuation (dB/100 m)	Average Power (kW)	Group Velocity %
5.6	1.258	4.126	5.687	75.8
5.8	1.226	4.021	5.835	77.7
6	1.199	3.935	5.963	79.4
6.2	1.177	3.863	6.074	80.8
6.4	1.159	3.802	6.171	82.1

#### Regulatory Compliance/Certifications

Agency	Classification
RoHS 2002/95/EC	Compliant
China RoHS SJ/T 11364-2006	Logo 1

Price per foot

\$29.90

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If you have any questions, please do not hesitate to contact us. or send us an email.

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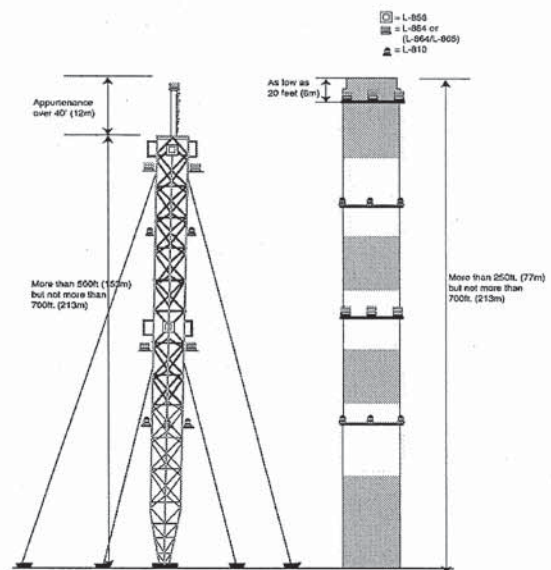
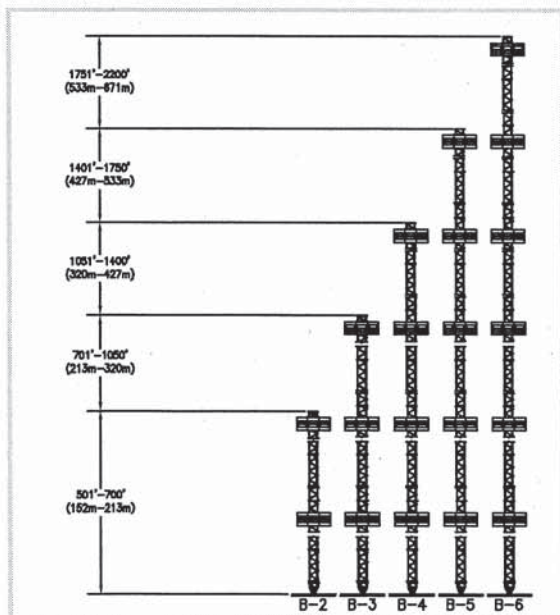
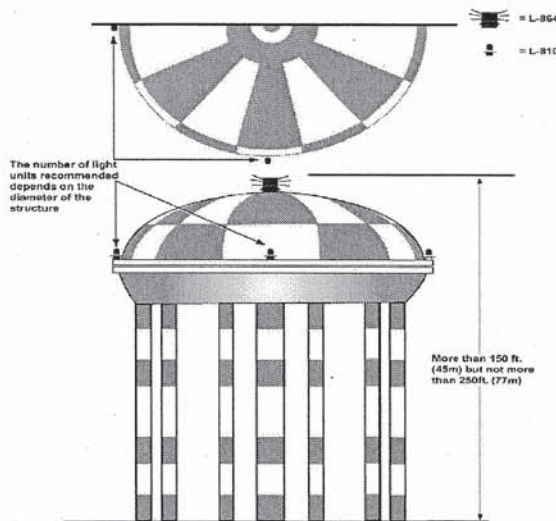
U.S. Department  
of Transportation  
Federal Aviation  
Administration

APPENDIX B

# ADVISORY CIRCULAR

AC 70/7460-1K

## Obstruction Marking and Lighting



**Subject:** CHANGE 2 TO OBSTRUCTION  
MARKING AND LIGHTING

**Date:** 2/1/07  
**Initiated by:** AJR-33

**AC No.:** 70/7460-1K  
**Change:** 2

1. PURPOSE. This change amends the Federal Aviation Administration's standards for marking and lighting structures to promote aviation safety. The change number and date of the change material are located at the top of the page.
2. EFFECTIVE DATE. This change is effective February 1, 2007.
3. EXPLANATION OF CHANGES.
  - a. Table of Contents. Change pages i through iii.
  - b. Page 1. Paragraph 1. **Reporting Requirements**. Incorporated the word "Title" in reference to the 14 Code of Federal Regulations (14 CFR part 77). FAA Regional Air Traffic Division office to read Obstruction Evaluation service (OES). FAA website to read <http://oeaaa.faa.gov>.
  - c. Page 1. Paragraph 4. **Supplemental Notice Requirement** (subpart b). FAA Regional Air Traffic Division office to read OES.
  - d. Page 1. Paragraph 5. **Modifications and Deviations** (subpart a). FAA Regional Air Traffic Division office to read OES.
  - e. Page 1. Paragraph 5. **Modifications and Deviations** (subpart c). FAA Regional office to read OES.
  - f. Page 2. Paragraph 5. **Modifications and Deviations** (subpart d). Removed period to create one sentence.
  - g. Page 2. Paragraph 7. **Metric Units**. And to read however.
  - h. Page 3. Paragraph 23. **Light Failure Notification** (subpart b). Nearest to read appropriate. FAA's website to read web. Website [www.faa.gov/ats/ata/ata400](http://www.faa.gov/ats/ata/ata400) to read <http://www.afss.com>.
  - i. Page 4. Paragraph 24. **Notification of Restoration**. Removed AFSS.
  - j. Page 5. Paragraph 32. **Paint Standards**. Removed a comma after "Since".
  - k. Page 5. Paragraph 33. **Paint Patterns** (subpart d. **Alternate Bands**). Removed number 6. Number 7 to read number 6.
  - l. Page 9. Paragraph 41. **Standards**. TASC to read OTS. SVC-121.23 to read M-30.

- m. Page 14. Paragraph 55. **Wind Turbine Structures.** Removed. The paragraph numbers that follow have been changed accordingly.
- n. Page 18. Paragraph 65. **Wind Turbine Structures.** Removed. The paragraph numbers that follow have been changed accordingly.
- o. Page 20. Paragraph 77. **Radio and Television Towers and Similar Skeletal Structures.** Excluding to read including.
- p. Page 23. Paragraph 85. **Wind Turbine Structures.** Removed. The paragraph number that follows has been changed accordingly.
- q. Page 33-34. Chapter 13. **Marking and Lighting Wind Turbine Farms.** Added.
- r. Page A1-3. Appendix 1. Verbiage removed under first structure.



Nancy B. Kalinowski

Director, System Operations Airspace and Aeronautical Information Management

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PAGE CONTROL CHART

AC 70/7460-1K CHG 2

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Remove Pages	Dated	Insert Pages	Dated
i through iii	8/1/00	i through iii	1/1/07
1-5	8/1/00	1-5	1/1/07
9	3/1/00	9	1/1/07
14	3/1/00	14	1/1/07
18-34	3/1/00	18-34	1/1/07
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## CHAPTER 1. ADMINISTRATIVE AND GENERAL PROCEDURES

### 1. REPORTING REQUIREMENTS

A sponsor proposing any type of construction or alteration of a structure that may affect the National Airspace System (NAS) is required under the provisions of Title 14 Code of Federal Regulations (14 CFR part 77) to notify the FAA by completing the Notice of Proposed Construction or Alteration form (FAA Form 7460-1). The form should be sent to the Obstruction Evaluation service (OES). Copies of FAA Form 7460-1 may be obtained from OES, Airports District Office or FAA Website at <http://oeaaa.faa.gov>.

### 2. PRECONSTRUCTION NOTICE

The notice must be submitted:

a. At least 30 days prior to the date of proposed construction or alteration is to begin.

b. On or before the date an application for a construction permit is filed with the Federal Communications Commission (FCC). (The FCC advises its applicants to file with the FAA well in advance of the 30-day period in order to expedite FCC processing.)

### 3. FAA ACKNOWLEDGEMENT

The FAA will acknowledge, in writing, receipt of each FAA Form 7460-1 notice received.

### 4. SUPPLEMENTAL NOTICE REQUIREMENT

a. If required, the FAA will include a FAA Form 7460-2, Notice of Actual Construction or Alteration, with a determination.

b. FAA Form 7460-2 Part 1 is to be completed and sent to the FAA at least 48 hours prior to starting the actual construction or alteration of a structure. Additionally, Part 2 shall be submitted no later than 5 days after the structure has reached its greatest height. The form should be sent to the OES.

c. In addition, supplemental notice shall be submitted upon abandonment of construction.

d. Letters are acceptable in cases where the construction/alteration is temporary or a proposal is abandoned. This notification process is designed to permit the FAA the necessary time to change affected procedures and/or minimum flight altitudes, and to otherwise alert airmen of the structure's presence.

*Note-*  
NOTIFICATION AS REQUIRED IN THE DETERMINATION IS  
CRITICAL TO AVIATION SAFETY.

### 5. MODIFICATIONS AND DEVIATIONS

a. Requests for modification or deviation from the standards outlined in this AC must be submitted to the OES. The sponsor is responsible for adhering to approved marking and/or lighting limitations, and/or recommendations given, and should notify the FAA and FCC (for those structures regulated by the FCC) prior to removal of marking and/or lighting. A request received after a determination is issued may require a new study and could result in a new determination.

b. **Modifications.** Modifications will be based on whether or not they impact aviation safety. Examples of modifications that may be considered:

1. **Marking and/or Lighting Only a Portion of an Object.** The object may be so located with respect to other objects or terrain that only a portion of it needs to be marked or lighted.

2. **No Marking and/or Lighting.** The object may be so located with respect to other objects or terrain, removed from the general flow of air traffic, or may be so conspicuous by its shape, size, or color that marking or lighting would serve no useful purpose.

3. **Voluntary Marking and/or Lighting.** The object may be so located with respect to other objects or terrain that the sponsor feels increased conspicuity would better serve aviation safety. Sponsors who desire to voluntarily mark and/or light their structure should request the proper marking and/or lighting from the FAA to ensure no aviation safety issues are impacted.

4. **Marking or Lighting an Object in Accordance with the Standards for an Object of Greater Height or Size.** The object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure the safety to air navigation.

c. **Deviations.** The OES conducts an aeronautical study of the proposed deviation(s) and forwards its recommendation to FAA headquarters in Washington, DC, for final approval. Examples of deviations that may be considered:

1. Colors of objects.
2. Dimensions of color bands or rectangles.
3. Colors/types of lights.
4. Basic signals and intensity of lighting.

5. Night/day lighting combinations.

6. Flash rate.

d. The FAA strongly recommends that owners become familiar with the different types of lighting systems and to specifically request the type of lighting system desired when submitting FAA Form 7460-1. (This request should be noted in "item 2.D" of the FAA form.) Information on these systems can be found in Chapter 12, Table 4 of this AC. While the FAA will make every effort to accommodate the structure sponsor's request, sponsors should also request information from system manufacturers in order to determine which system best meets their needs based on purpose, installation, and maintenance costs.

## 6. ADDITIONAL NOTIFICATION

Sponsors are reminded that any change to the submitted information on which the FAA has based its determination, including modification, deviation or optional upgrade to white lighting on structures which are regulated by the FCC, must also be filed with the FCC prior to making the change for proper

authorization and annotations of obstruction marking and lighting. These structures will be subject to inspection and enforcement of marking and lighting requirements by the FCC. FCC Forms and Bulletins can be obtained from the FCC's National Call Center at 1-888-CALL-FCC (1-888-225-5322). Upon completion of the actual change, notify the Aeronautical Charting office at:

NOAA/NOS Aeronautical Charting Division Station 5601, N/ACC113 1305 East-West Highway Silver Spring, MD 20910-3233
--

## 7. METRIC UNITS

To promote an orderly transition to metric units, sponsors should include both English and metric (SI units) dimensions. The metric conversions may not be exact equivalents, however, until there is an official changeover to the metric system, the English dimensions will govern.



## CHAPTER 2. GENERAL

### 20. STRUCTURES TO BE MARKED AND LIGHTED

Any temporary or permanent structure, including all appurtenances, that exceeds an overall height of 200 feet (61m) above ground level (AGL) or exceeds any obstruction standard contained in 14 CFR part 77, should normally be marked and/or lighted. However, an FAA aeronautical study may reveal that the absence of marking and/or lighting will not impair aviation safety. Conversely, the object may present such an extraordinary hazard potential that higher standards may be recommended for increased conspicuity to ensure safety to air navigation. Normally outside commercial lighting is not considered sufficient reason to omit recommended marking and/or lighting. Recommendations on marking and/or lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design. The FAA may also recommend marking and/or lighting a structure that does not exceed 200 (61m) feet AGL or 14 CFR part 77 standards because of its particular location.

### 21. GUYED STRUCTURES

The guys of a 2,000-foot (610m) skeletal tower are anchored from 1,600 feet (488m) to 2,000 feet (610m) from the base of the structure. This places a portion of the guys 1,500 feet (458m) from the tower at a height of between 125 feet (38m) to 500 feet (153m) AGL. 14 CFR part 91, section 119, requires pilots, when operating over other than congested areas, to remain at least 500 feet (153m) from man-made structures. Therefore, the tower must be cleared by 2,000 feet (610m) horizontally to avoid all guy wires. Properly maintained marking and lighting are important for increased conspicuity since the guys of a structure are difficult to see until aircraft are dangerously close.

### 22. MARKING AND LIGHTING EQUIPMENT

Considerable effort and research have been expended in determining the minimum marking and lighting systems or quality of materials that will produce an acceptable level of safety to air navigation. The FAA will recommend the use of only those marking and lighting systems that meet established technical standards. While additional lights may be desirable

to identify an obstruction to air navigation and may, on occasion be recommended, the FAA will recommend minimum standards in the interest of safety, economy, and related concerns. Therefore, to provide an adequate level of safety, obstruction lighting systems should be installed, operated, and maintained in accordance with the recommended standards herein.

### 23. LIGHT FAILURE NOTIFICATION

**a.** Sponsors should keep in mind that conspicuity is achieved only when all recommended lights are working. Partial equipment outages decrease the margin of safety. Any outage should be corrected as soon as possible. Failure of a steady burning side or intermediate light should be corrected as soon as possible, but notification is not required.

**b.** Any failure or malfunction that lasts more than thirty (30) minutes and affects a top light or flashing obstruction light, regardless of its position, should be reported immediately to the appropriate flight service station (FSS) so a Notice to Airmen (NOTAM) can be issued. Toll-free numbers for FSS are listed in most telephone books or on the web at <http://www.afss.com>. This report should contain the following information:

1. Name of persons or organizations reporting light failures including any title, address, and telephone number.
2. The type of structure.
3. Location of structure (including latitude and longitude, if known, prominent structures, landmarks, etc.).
4. Height of structure above ground level (AGL)/above mean sea level (AMSL), if known.
5. A return to service date.
6. FCC Antenna Registration Number (for structures that are regulated by the FCC).

#### *Note-*

*1. When the primary lamp in a double obstruction light fails, and the secondary lamp comes on, no report is required. However, when one of the lamps in an incandescent L-864 flashing red beacon fails, it should be reported.*

*2. After 15 days, the NOTAM is automatically deleted from the system. The sponsor is responsible for calling the nearest FSS to extend the outage date or to report a return to service date.*

---

**24. NOTIFICATION OF RESTORATION**

As soon as normal operation is restored, notify the same FSS that received the notification of failure. The FCC advises that noncompliance with notification procedures could subject its sponsor to penalties or monetary forfeitures.

**25. FCC REQUIREMENT**

FCC licensees are required to file an environmental assessment with the Commission when seeking authorization for the use of the high intensity flashing white lighting system on structures located in residential neighborhoods, as defined by the applicable zoning law.

## CHAPTER 3. MARKING GUIDELINES

### 30. PURPOSE

This chapter provides recommended guidelines to make certain structures conspicuous to pilots during daylight hours. One way of achieving this conspicuity is by painting and/or marking these structures. Recommendations on marking structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 31. PAINT COLORS

Alternate sections of aviation orange and white paint should be used as they provide maximum visibility of an obstruction by contrast in colors.

### 32. PAINT STANDARDS

The following standards should be followed. To be effective, the paint used should meet specific color requirements when freshly applied to a structure. Since all outdoor paints deteriorate with time and it is not practical to give a maintenance schedule for all climates, surfaces should be repainted when the color changes noticeably or its effectiveness is reduced by scaling, oxidation, chipping, or layers of contamination.

**a. Materials and Application.** Quality paint and materials should be selected to provide extra years of service. The paint should be compatible with the surfaces to be painted, including any previous coatings, and suitable for the environmental conditions. Surface preparation and paint application should be in accordance with manufacturer's recommendations.

**Note-**

*In-Service Aviation Orange Color Tolerance Charts are available from private suppliers for determining when repainting is required. The color should be sampled on the upper half of the structure, since weathering is greater there.*

**b. Surfaces Not Requiring Paint.** Ladders, decks, and walkways of steel towers and similar structures need not be painted if a smooth surface presents a potential hazard to maintenance personnel. Paint may also be omitted from precision or critical surfaces if it would have an adverse effect on the transmission or radiation characteristics of a signal. However, the overall marking effect of the structure should not be reduced.

**c. Skeletal Structures.** Complete all marking/painting prior to or immediately upon

completion of construction. This applies to catenary support structures, radio and television towers, and similar skeletal structures. To be effective, paint should be applied to all inner and outer surfaces of the framework.

### 33. PAINT PATTERNS

Paint patterns of various types are used to mark structures. The pattern to be used is determined by the size and shape of the structure. The following patterns are recommended.

**a. Solid Pattern.** Obstacles should be colored aviation orange if the structure has both horizontal and vertical dimensions not exceeding 10.5 feet (3.2m).

**b. Checkerboard Pattern.** Alternating rectangles of aviation orange and white are normally displayed on the following structures:

1. Water, gas, and grain storage tanks.
2. Buildings, as required.
3. Large structures exceeding 10.5 feet (3.2m) across having a horizontal dimension that is equal to or greater than the vertical dimension.

**c. Size of Patterns.** Sides of the checkerboard pattern should measure not less than 5 feet (1.5m) or more than 20 feet (6m) and should be as nearly square as possible. However, if it is impractical because of the size or shape of a structure, the patterns may have sides less than 5 feet (1.5m). When possible, corner surfaces should be colored orange.

**d. Alternate Bands.** Alternate bands of aviation orange and white are normally displayed on the following structures:

1. Communication towers and catenary support structures.
2. Poles.
3. Smokestacks.
4. Skeletal framework of storage tanks and similar structures.
5. Structures which appear narrow from a side view, that are 10.5 feet (3.2m) or more across and the horizontal dimension is less than the vertical dimension.
6. Coaxial cable, conduits, and other cables attached to the face of a tower.

**e. Color Band Characteristics.** Bands for structures of any height should be:

1. Equal in width, provided each band is not less than 1½ feet (0.5m) or more than 100 feet (31m) wide.

2. Perpendicular to the vertical axis with the bands at the top and bottom ends colored orange.

3. An odd number of bands on the structure.

4. Approximately one-seventh the height if the structure is 700 feet (214m) AGL or less. For each additional 200 feet (61m) or fraction thereof, add one (1) additional orange and one (1) additional white band.

5. Equal and in proportion to the structure's height AGL.

#### Structure Height to Bandwidth Ratio

Example: If a Structure is:		
Greater Than	But Not More Than	Band Width
10.5 feet (3.2m)	700 feet (214m)	1/7 of height
701 feet (214m)	900 feet (275m)	1/9 of height
901 feet (275m)	1,100 feet (336m)	1/11 of height
1,100 feet (336m)	1,300 feet (397m)	1/13 of height

TBL 1

**f. Structures With a Cover or Roof.** If the structure has a cover or roof, the highest orange band should be continued to cover the entire top of the structure.

**g. Skeletal Structures Atop Buildings.** If a flagpole, skeletal structure, or similar object is erected on top of a building, the combined height of the object and building will determine whether marking is recommended; however, only the height of the object under study determines the width of the color bands.

**h. Partial Marking.** If marking is recommended for only a portion of a structure because of shielding by other objects or terrain, the width of the bands should be determined by the overall height of the structure. A minimum of three bands should be displayed on the upper portion of the structure.

**i. Teardrop Pattern.** Spherical water storage tanks with a single circular standpipe support may be marked in a teardrop-striped pattern. The tank should show alternate stripes of aviation orange and white. The stripes should extend from the top center of the tank to its supporting standpipe. The width of the stripes should be equal, and the width of each stripe at the greatest girth of the tank should not be less than 5 feet (1.5m) nor more than 15 feet (4.6m).

**j. Community Names.** If it is desirable to paint the name of the community on the side of a tank, the stripe pattern may be broken to serve this purpose. This open area should have a maximum height of 3 feet (0.9m).

**k. Exceptions.** Structural designs not conducive to standard markings may be marked as follows:

1. If it is not practical to color the roof of a structure in a checkerboard pattern, it may be colored solid orange.

2. If a spherical structure is not suitable for an exact checkerboard pattern, the shape of the rectangles may be modified to fit the shape of the surface.

3. Storage tanks not suitable for a checkerboard pattern may be colored by alternating bands of aviation orange and white or a limited checkerboard pattern applied to the upper one-third of the structure.

4. The skeletal framework of certain water, gas, and grain storage tanks may be excluded from the checkerboard pattern.

## 34. MARKERS

Markers are used to highlight structures when it is impractical to make them conspicuous by painting. Markers may also be used in addition to aviation orange and white paint when additional conspicuity is necessary for aviation safety. They should be displayed in conspicuous positions on or adjacent to the structures so as to retain the general definition of the structure. They should be recognizable in clear air from a distance of at least 4,000 feet (1219m) and in all directions from which aircraft are likely to approach. Markers should be distinctively shaped, i.e., spherical or cylindrical, so they are not mistaken for items that are used to convey other information. They should be replaced when faded or otherwise deteriorated.



**a. Spherical Markers.** Spherical markers are used to identify overhead wires. Markers may be of another shape, i.e., cylindrical, provided the projected area of such markers will not be less than that presented by a spherical marker.

#### 1. Size and Color.

The diameter of the markers used on extensive catenary wires across canyons, lakes, rivers, etc., should be not less than 36 inches (91cm). Smaller 20-inch (51cm) spheres are permitted on less extensive power lines or on power lines below 50 feet (15m) above the ground and within 1,500 feet (458m) of an airport runway end. Each marker should be a solid color such as aviation orange, white, or yellow.

#### 2. Installations.

**(a) Spacing.** Markers should be spaced equally along the wire at intervals of approximately 200 feet (61m) or a fraction thereof. Intervals between markers should be less in critical areas near runway ends (i.e., 30 to 50 feet (10m to 15m)). They should be displayed on the highest wire or by another means at the same height as the highest wire. Where there is more than one wire at the highest point, the markers may be installed alternately along each wire if the distance between adjacent markers meets the spacing standard. This method allows the weight and wind loading factors to be distributed.

**(b) Pattern.** An alternating color scheme provides the most conspicuity against all backgrounds. Mark overhead wires by alternating solid colored markers of aviation orange, white, and yellow. Normally, an orange sphere is placed at each end of a line and the spacing is adjusted (not to exceed 200 feet (61m)) to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange.

**b. Flag Markers.** Flags are used to mark certain structures or objects when it is technically impractical to use spherical markers or painting. Some examples are temporary construction equipment, cranes, derricks, oil and other drilling rigs. Catenaries should use spherical markers.

**1. Minimum Size.** Each side of the flag marker should be at least 2 feet (0.6m) in length.

**2. Color Patterns.** Flags should be colored as follows:

**(a) Solid.** Aviation orange.

**(b) Orange and White.** Arrange two triangular sections, one aviation orange and the other white to form a rectangle.

**(c) Checkerboard.** Flags 3 feet (0.9m) or larger should be a checkerboard pattern of aviation orange and white squares, each 1 foot (0.3m) plus or minus 10 percent.

**3. Shape.** Flags should be rectangular in shape and have stiffeners to keep them from drooping in calm wind.

**4. Display.** Flag markers should be displayed around, on top, or along the highest edge of the obstruction. When flags are used to mark extensive or closely grouped obstructions, they should be displayed approximately 50 feet (15m) apart. The flag stakes should be of such strength and height that they will support the flags above all surrounding ground, structures, and/or objects of natural growth.

### 35. UNUSUAL COMPLEXITIES

The FAA may also recommend appropriate marking in an area where obstructions are so grouped as to present a common obstruction to air navigation.

### 36. OMISSION OR ALTERNATIVES TO MARKING

There are two alternatives to marking. Either alternative requires FAA review and concurrence.

**a. High Intensity Flashing White Lighting Systems.** The high intensity lighting systems are more effective than aviation orange and white paint and therefore can be recommended instead of marking. This is particularly true under certain ambient light conditions involving the position of the sun relative to the direction of flight. When high intensity lighting systems are operated during daytime and twilight, other methods of marking may be omitted. When operated 24 hours a day, other methods of marking and lighting may be omitted.

**b. Medium Intensity Flashing White Lighting Systems.** When medium intensity lighting systems are operated during daytime and twilight on structures 500 feet (153m) AGL or less, other methods of marking may be omitted. When operated 24 hours a day on structures 500 feet (153m) AGL or less, other methods of marking and lighting may be omitted.

#### Note-

SPONSORS MUST ENSURE THAT ALTERNATIVES TO MARKING ARE COORDINATED WITH THE FCC FOR STRUCTURES UNDER ITS JURISDICTION PRIOR TO MAKING THE CHANGE.



## CHAPTER 4. LIGHTING GUIDELINE

### 40. PURPOSE

This chapter describes the various obstruction lighting systems used to identify structures that an aeronautical study has determined will require added conspicuity. The lighting standards in this circular are the minimum necessary for aviation safety. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 41. STANDARDS

The standards outlined in this AC are based on the use of light units that meet specified intensities, beam patterns, color, and flash rates as specified in AC 150/5345-43.

These standards may be obtained from:

Department of Transportation  
OTS  
Subsequent Distribution Office, M-30  
Ardmore East Business Center  
3341 Q 75th Avenue  
Landover, MD 20785

### 42. LIGHTING SYSTEMS

Obstruction lighting may be displayed on structures as follows:

**a. Aviation Red Obstruction Lights.** Use flashing beacons and/or steady burning lights during nighttime.

**b. Medium Intensity Flashing White Obstruction Lights.** Medium intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation. When this system is used on structures 500 feet (153m) AGL or less in height, other methods of marking and lighting the structure may be omitted. Aviation orange and white paint is always required for daytime marking on structures exceeding 500 feet (153m) AGL. This system is not normally recommended on structures 200 feet (61m) AGL or less.

**c. High Intensity Flashing White Obstruction Lights.** Use high intensity flashing white obstruction lights during daytime with automatically selected reduced intensities for twilight and nighttime operations. When this system is used, other methods of marking and lighting the structure may be omitted.

This system should not be recommended on structures 500 feet (153m) AGL or less, unless an FAA aeronautical study shows otherwise.

**Note-**

*All flashing lights on a structure should flash simultaneously except for catenary support structures, which have a distinct sequence flashing between levels.*

**d. Dual Lighting.** This system consists of red lights for nighttime and high or medium intensity flashing white lights for daytime and twilight. When a dual lighting system incorporates medium flashing intensity lights on structures 500 feet (153m) or less, or high intensity flashing white lights on structures of any height, other methods of marking the structure may be omitted.

**e. Obstruction Lights During Construction.** As the height of the structure exceeds each level at which permanent obstruction lights would be recommended, two or more lights of the type specified in the determination should be installed at that level. Temporary high or medium intensity flashing white lights, as recommended in the determination, should be operated 24 hours a day until all permanent lights are in operation. In either case, two or more lights should be installed on the uppermost part of the structure any time it exceeds the height of the temporary construction equipment. They may be turned off for periods when they would interfere with construction personnel. If practical, permanent obstruction lights should be installed and operated at each level as construction progresses. The lights should be positioned to ensure that a pilot has an unobstructed view of at least one light at each level.

**f. Obstruction Lights in Urban Areas.** When a structure is located in an urban area where there are numerous other white lights (e.g., streetlights, etc.) red obstruction lights with painting or a medium intensity dual system is recommended. Medium intensity lighting is not normally recommended on structures less than 200 feet (61m).

**g. Temporary Construction Equipment Lighting.** Since there is such a variance in construction cranes, derricks, oil and other drilling rigs, each case should be considered individually. Lights should be installed according to the standards given in Chapters 5, 6, 7, or 8, as they would apply to permanent structures.

### 43. CATENARY LIGHTING

Lighted markers are available for increased night conspicuity of high-voltage (69KV or greater) transmission line catenary wires. These markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, etc. The lighted markers should be manufacturer certified as recognizable from a minimum distance of 4,000 feet (1219m) under nighttime conditions, minimum visual flight rules (VFR) conditions or having a minimum intensity of at least 32.5 candela. The lighting unit should emit a steady burning red light. They should be used on the highest energized line. If the lighted markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. (The maximum distance between the line energizing the lighted markers and the highest catenary above the lighted marker should be no more than 20 feet (6m).) Markers should be distinctively shaped, i.e., spherical, cylindrical, so they are not mistaken for items that are used to convey other information. They should be visible in all directions from which aircraft are likely to approach. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights. Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full coverage.

### 44. INSPECTION, REPAIR AND MAINTENANCE

To ensure the proper candela output for fixtures with incandescent lamps, the voltage provided to the lamp filament should not vary more than plus or minus 3 percent of the rated voltage of the lamp. The input voltage should be measured at the lamp socket with the lamp operating during the hours of normal operation. (For strobes, the input voltage of the power supplies should be within 10 percent of rated voltage.) Lamps should be replaced after being operated for not more than 75 percent of their rated life or immediately upon failure. Flashtubes in a light unit should be replaced immediately upon failure, when the peak effective intensity falls below specification limits or when the fixture begins skipping flashes, or at the manufacturer's recommended intervals. Due to the effects of harsh environments, beacon lenses should be visually inspected for ultraviolet damage, cracks, crazing, dirt

build up, etc., to insure that the certified light output has not deteriorated. (See paragraph 23, for reporting requirements in case of failure.)

### 45. NONSTANDARD LIGHTS

Moored balloons, chimneys, church steeples, and similar obstructions may be floodlighted by fixed search light projectors installed at three or more equidistant points around the base of each obstruction. The searchlight projectors should provide an average illumination of at least 15 foot-candles over the top one-third of the obstruction.

### 46. PLACEMENT FACTORS

The height of the structure AGL determines the number of light levels. The light levels may be adjusted slightly, but not to exceed 10 feet (3m), when necessary to accommodate guy wires and personnel who replace or repair light fixtures. Except for catenary support structures, the following factors should be considered when determining the placement of obstruction lights on a structure.

**a. Red Obstruction Lighting Systems.** The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

**b. Medium Intensity Flashing White Obstruction Lighting Systems.** The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

**c. High Intensity Flashing White Obstruction Lighting Systems.** The overall height of the main structure including all appurtenances such as rods, antennas, obstruction lights, etc., determines the number of light levels.

**d. Dual Obstruction Lighting Systems.** The overall height of the structure including all appurtenances such as rods, antennas, obstruction lights, etc., is used to determine the number of light levels for a medium intensity white obstruction light/red obstruction dual lighting system. The overall height of the structure including all appurtenances is used to determine the number of light levels for a high intensity white obstruction light/red obstruction dual lighting system.

**e. Adjacent Structures.** The elevation of the tops of adjacent buildings in congested areas may be used as the equivalent of ground level to determine the proper number of light levels required.



f. **Shielded Lights.** If an adjacent object shields any light, horizontal placement of the lights should be adjusted or additional lights should be mounted on that object to retain or contribute to the definition of the obstruction.

#### 47. MONITORING OBSTRUCTION LIGHTS

Obstruction lighting systems should be closely monitored by visual or automatic means. It is extremely important to visually inspect obstruction lighting in all operating intensities at least once every 24 hours on systems without automatic monitoring. In the event a structure is not readily accessible for visual observation, a properly maintained automatic monitor should be used. This monitor should be designed to register the malfunction of any light on the obstruction regardless of its position or color. When using remote monitoring devices, the communication status and operational status of the system should be confirmed at least once every 24 hours. The monitor (aural or visual) should be located in an area generally occupied by responsible personnel. In some cases, this may require a remote monitor in an attended location. For each structure, a log should be maintained in which daily operations status of the lighting system is recorded. Beacon

lenses should be replaced if serious cracks, crazing, dirt build up, etc., has occurred.

#### 48. ICE SHIELDS

Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units.

#### 49. DISTRACTION

a. Where obstruction lights may distract operators of vessels in the proximity of a navigable waterway, the sponsor must coordinate with the Commandant, U.S. Coast Guard, to avoid interference with marine navigation.

b. The address for marine information and coordination is:

Chief, Aids to Navigation Division (OPN) U.S. Coast Guard Headquarters 2100 2nd Street, SW., Rm. 3610 Washington, DC 20593-0001 <i>Telephone:</i> (202) 267-0980
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## CHAPTER 5. RED OBSTRUCTION LIGHT SYSTEM

### 50. PURPOSE

Red Obstruction lights are used to increase conspicuity during nighttime. Daytime and twilight marking is required. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 51. STANDARDS

The red obstruction lighting system is composed of flashing omnidirectional beacons (L-864) and/or steady burning (L-810) lights. When one or more levels is comprised of flashing beacon lighting, the lights should flash simultaneously.

**a. Single Obstruction Light.** A single (L-810) light may be used when more than one obstruction light is required either vertically or horizontally or where maintenance can be accomplished within a reasonable time.

**1. Top Level.** A single light may be used to identify low structures such as airport ILS buildings and long horizontal structures such as perimeter fences and building roof outlines.

**2. Intermediate Level.** Single lights may be used on skeletal and solid structures when more than one level of lights is installed and there are two or more single lights per level.

**b. Double Obstruction Light.** A double (L-810) light should be installed when used as a top light, at each end of a row of single obstruction lights, and in areas or locations where the failure of a single unit could cause an obstruction to be totally unlighted.

**1. Top Level. Structures 150 feet (46m) AGL or less** should have one or more double lights installed at the highest point and operating simultaneously.

**2. Intermediate Level.** Double lights should be installed at intermediate levels when a malfunction of a single light could create an unsafe condition and in remote areas where maintenance cannot be performed within a reasonable time. Both units may operate simultaneously, or a transfer relay may be used to switch to a spare unit should the active system fail.

**3. Lowest Level.** The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

### 52. CONTROL DEVICE

Red obstruction lights should be operated by a satisfactory control device (e.g., photo cell, timer, etc.) adjusted so the lights will be turned on when the northern sky illuminance reaching a vertical surface falls below a level of 60 foot-candles (645.8 lux) but before reaching a level of 35 foot-candles (367.7 lux). The control device should turn the lights off when the northern sky illuminance rises to a level of not more than 60 foot-candles (645.8 lux). The lights may also remain on continuously. The sensing device should, if practical, face the northern sky in the Northern Hemisphere. (See AC 150/5345-43.)

### 53. POLES, TOWERS, AND SIMILAR SKELETAL STRUCTURES

The following standards apply to radio and television towers, supporting structures for overhead transmission lines, and similar structures.

#### a. Top Mounted Obstruction Light.

**1. Structures 150 Feet (46m) AGL or Less.** Two or more steady burning (L-810) lights should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.

**2. Structures Exceeding 150 Feet (46m) AGL.** At least one red flashing (L-864) beacon should be installed in a manner to ensure an unobstructed view of one or more lights by a pilot.

**3. Appurtenances 40 Feet (12m) or Less.** If a rod, antenna, or other appurtenance 40 feet (12m) or less in height is incapable of supporting a red flashing beacon, then it may be placed at the base of the appurtenance. If the mounting location does not allow unobstructed viewing of the beacon by a pilot, then additional beacons should be added.

**4. Appurtenances Exceeding 40 Feet (12m).** If a rod, antenna, or other appurtenance exceeding 40 feet (12m) in height is incapable of supporting a red flashing beacon, a supporting mast with one or more beacons should be installed adjacent to the appurtenance. Adjacent installations should not exceed the height of the appurtenance and be within 40 feet (12m) of the tip to allow the pilot an unobstructed view of at least one beacon.

**b. Mounting Intermediate Levels.** The number of light levels is determined by the height of the structure, including all appurtenances, and is detailed in Appendix 1. The number of lights on each level is

determined by the shape and height of the structure. These lights should be mounted so as to ensure an unobstructed view of at least one light by a pilot.

### 1. *Steady Burning Lights (L-810).*

#### (a) *Structures 350 Feet (107m) AGL or Less.*

Two or more steady burning (L-810) lights should be installed on diagonally or diametrically opposite positions.

#### (b) *Structures Exceeding 350 Feet (107m)*

*AGL.* Install steady burning (L-810) lights on each outside corner of each level.

### 2. *Flashing Beacons (L-864).*

#### (a) *Structures 350 Feet (107m) AGL or Less.*

These structures do not require flashing (L-864) beacons at intermediate levels.

#### (b) *Structure Exceeding 350 Feet (107m)*

*AGL.* At intermediate levels, two beacons (L-864) should be mounted outside at diagonally opposite positions of intermediate levels.

## 54. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES

### a. *Number of Light Units.*

1. The number of units recommended depends on the diameter of the structure at the top. The number of lights recommended below are the minimum.

2. When the structure diameter is:

(a) *20 Feet (6m) or Less.* Three light units per level.

(b) *Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m).* Four light units per level.

(c) *Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m).* Six light units per level.

(d) *Exceeding 200 Feet (61m).* Eight light units per level.

### b. *Top Mounted Obstruction Lights.*

1. *Structures 150 Feet (46m) AGL or Less.* L-810 lights should be installed horizontally at regular intervals at or near the top.

2. *Structures Exceeding 150 Feet (46m) AGL.* At least three L-864 beacons should be installed.

3. *Chimneys, Cooling Towers, and Flare Stacks.* Lights may be displayed as low as 20 feet (6m) below the top to avoid the obscuring effect of deposits and heat generally emitted by this type of structure. It is important that these lights be readily accessible for

cleaning and lamp replacement. It is understood that with flare stacks, as well as any other structures associated with the petrol-chemical industry, normal lighting requirements may not be necessary. This could be due to the location of the flare stack/structure within a large well-lighted petrol-chemical plant or the fact that the flare, or working lights surrounding the flare stack/structure, is as conspicuous as obstruction lights.

c. *Mounting Intermediate Levels.* The number of light levels is determined by the height of the structure including all appurtenances. For cooling towers 600 feet (183m) or less, intermediate light levels are not necessary. Structures exceeding 600 feet (183m) AGL should have a second level of light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights.

1. *Steady Burning (L-810) Lights.* The recommended number of light levels may be obtained from Appendix 1. At least three lights should be installed on each level.

2. *Flashing (L-864) Beacons.* The recommended number of beacon levels may be obtained from Appendix 1. At least three lights should be installed on each level.

(a) *Structures 350 Feet (107m) AGL or Less.* These structures do not need intermediate levels of flashing beacons.

(b) *Structures Exceeding 350 Feet (107m) AGL.* At least three flashing (L-864) beacons should be installed on each level in a manner to allow an unobstructed view of at least one beacon.

## 55. GROUP OF OBSTRUCTIONS

When individual objects, except wind turbines, within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46m) apart, the prominent objects within the group should be lighted in accordance with the standards for individual obstructions of a corresponding height. If the outer structure is shorter than the prominent, the outer structure should be lighted in accordance with the standards for individual obstructions of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. In addition, at least one flashing beacon should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group.



## 56. ALTERNATE METHOD OF DISPLAYING OBSTRUCTION LIGHTS

When recommended in an FAA aeronautical study, lights may be placed on poles equal to the height of the obstruction and installed on or adjacent to the structure instead of installing lights on the obstruction.

## 57. PROMINENT BUILDINGS, BRIDGES, AND SIMILAR EXTENSIVE OBSTRUCTIONS

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. If the structure is a bridge and is over navigable water, the sponsor must obtain prior approval of the lighting installation from the Commander of the District Office of the United States Coast Guard to avoid interference with marine navigation. Steady burning lights should be displayed to indicate the extent of the obstruction as follows:

**a. Structures 150 Feet (46m) or Less in Any Horizontal Direction.** If the structure/bridge/extensive obstruction is 150 feet (46m) or less horizontally, at least one steady burning light (L-810) should be displayed on the highest point at each end of the major axis of the obstruction. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.

**b. Structures Exceeding 150 Feet (46m) in at Least One Horizontal Direction.** If the structure/bridge/extensive obstruction exceeds 150 feet (46m) horizontally, display at least one steady burning light for each 150 feet (46m), or fraction thereof, of the

overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals not to exceed 150 feet (46m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.

**c. Structures Exceeding 150 Feet (46m) AGL.** Steady burning red obstruction lights should be installed on the highest point at each end. At intermediate levels, steady burning red lights should be displayed for each 150 feet (46m) or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.

**d. Exceptions.** Flashing red beacons (L-864) may be used instead of steady burning obstruction lights if early or special warning is necessary. These beacons should be displayed on the highest points of an extensive obstruction at intervals not exceeding 3,000 feet (915m). At least three beacons should be displayed on one side of the extensive obstruction to indicate a line of lights.

**e. Ice Shields.** Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units. The light should be mounted in a manner to ensure an unobstructed view of at least one light by a pilot approaching from any direction.



## CHAPTER 6. MEDIUM INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

### 60. PURPOSE

Medium intensity flashing white (L-865) obstruction lights may provide conspicuity both day and night. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 61. STANDARDS

The medium intensity flashing white light system is normally composed of flashing omnidirectional lights. Medium intensity flashing white obstruction lights may be used during daytime and twilight with automatically selected reduced intensity for nighttime operation. When this system is used on structures 500 feet (153m) AGL or less in height, other methods of marking and lighting the structure may be omitted. Aviation orange and white paint is always required for daytime marking on structures exceeding 500 feet (153m) AGL. This system is not normally recommended on structures 200 feet (61m) AGL or less.

The use of a 24-hour medium intensity flashing white light system in urban/populated areas is not normally recommended due to their tendency to merge with background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations, i.e., med-evac, and police helicopters to see these structures. The use of this type of system in urban and rural areas often results in complaints. In addition, this system is not recommended on structures within 3 nautical miles of an airport.

### 62. RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES

**a. Mounting Lights.** The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances.

**1. Top Levels.** One or more lights should be installed at the highest point to provide 360-degree coverage ensuring an unobstructed view.

**2. Appurtenances 40 feet (12m) or less.** If a rod, antenna, or other appurtenance 40 feet (12m) or less in height is incapable of supporting the medium intensity flashing white light, then it may be placed at the base of the appurtenance. If the mounting location does not allow unobstructed viewing of the medium intensity flashing white light by a pilot, then additional lights should be added.

**3. Appurtenances Exceeding 40 feet (12m).** If a rod, antenna, or other appurtenance exceeds 40 feet (12m) above the tip of the main structure, a medium intensity flashing white light should be placed within 40 feet (12m) from the top of the appurtenance. If the appurtenance (such as a whip antenna) is incapable of supporting the light, one or more lights should be mounted on a pole adjacent to the appurtenance. Adjacent installations should not exceed the height of the appurtenance and be within 40 feet (12m) of the tip to allow the pilot an unobstructed view of at least one light.

**b. Intermediate Levels.** At intermediate levels, two beacons (L-865) should be mounted outside at diagonally or diametrically opposite positions of intermediate levels. The lowest light level should not be less than 200 feet (61m) AGL.

**c. Lowest Levels.** The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

**d. Structures 500 Feet (153m) AGL or Less.** When white lights are used during nighttime and twilight only, marking is required for daytime. When operated 24 hours a day, other methods of marking and lighting are not required.

**e. Structures Exceeding 500 Feet (153m) AGL.** The lights should be used during nighttime and twilight and may be used 24 hours a day. Marking is always required for daytime.

**f. Ice Shields.** Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units. The light should be mounted in a manner to ensure an unobstructed view of at least one light by a pilot approaching from any direction.

### 63. CONTROL DEVICE

The light intensity is controlled by a device that changes the intensity when the ambient light changes. The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

**a. Twilight-to-Night.** This should not occur before the illumination drops below five foot-candles (53.8

lux) but should occur before it drops below two foot-candles (21.5 lux).

**b. *Night-to-Day.*** The intensity changes listed in subparagraph 63a above should be reversed when changing from the night to day mode.

#### **64. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES**

**a. *Number of Light Units.*** The number of units recommended depends on the diameter of the structure at the top. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6m) below the top to minimize deposit build-up due to emissions. The number of lights recommended are the minimum. When the structure diameter is:

1. *20 Feet (6m) or Less.* Three light units per level.
2. *Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m).* Four light units per level.
3. *Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m).* Six light units per level.
4. *Exceeding 200 Feet (61m).* Eight light units per level.

#### **65. GROUP OF OBSTRUCTIONS**

When individual objects within a group of obstructions are not the same height and are spaced a maximum of 150 feet (46m) apart, the prominent objects within the group should be lighted in accordance with the standards for individual obstructions of a corresponding height. If the outer structure is shorter than the prominent, the outer structure should be lighted in accordance with the standards for individual obstructions of a corresponding height. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. In addition, at least one medium intensity flashing white light should be installed at the top of a prominent center obstruction or on a special tower located near the center of the group.

#### **66. SPECIAL CASES**

Where lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases, shielding may be necessary.

This shielding should not derogate the intended purpose of the lighting system.

#### **67. PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS**

When objects within a group of obstructions are approximately the same overall height above the surface and are located a maximum of 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed to ensure that the light is visible to a pilot approaching from **any** direction. Lights should be displayed to indicate the extent of the obstruction as follows:

**a. *Structures 150 Feet (46m) or Less in Any Horizontal Direction.*** If the structure/extensive obstruction is 150 feet (46m) or less horizontally, at least one light should be displayed on the highest point at each end of the major axis of the obstruction. If this is impractical because of the overall shape, display a double obstruction light in the center of the highest point.

**b. *Structures Exceeding 150 Feet (46m) in at Least One Horizontal Direction.*** If the structure/extensive obstruction exceeds 150 feet (46m) horizontally, display at least one light for each 150 feet (46m) or fraction thereof, of the overall length of the major axis. At least one of these lights should be displayed on the highest point at each end of the obstruction. Additional lights should be displayed at approximately equal intervals not to exceed 150 feet (46m) on the highest points along the edge between the end lights. If an obstruction is located near a landing area and two or more edges are the same height, the edge nearest the landing area should be lighted.

**c. *Structures Exceeding 150 Feet (46m) AGL.*** Lights should be installed on the highest point at each end. At intermediate levels, lights should be displayed for each 150 feet (46m), or fraction thereof. The vertical position of these lights should be equidistant between the top lights and the ground level as the shape and type of obstruction will permit. One such light should be displayed at each outside corner on each level with the remaining lights evenly spaced between the corner lights.



## CHAPTER 7. HIGH INTENSITY FLASHING WHITE OBSTRUCTION LIGHT SYSTEMS

### 70. PURPOSE

Lighting with high intensity (L-856) flashing white obstruction lights provides the highest degree of conspicuity both day and night. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 71. STANDARDS

Use high intensity flashing white obstruction lights during daytime with automatically selected reduced intensities for twilight and nighttime operations. When high intensity white lights are operated 24 hours a day, other methods of marking and lighting may be omitted. This system should not be recommended on structures 500 feet (153m) AGL or less unless an FAA aeronautical study shows otherwise.

### 72. CONTROL DEVICE

Light intensity is controlled by a device that changes the intensity when the ambient light changes. The use of a 24-hour high intensity flashing white light system in urban/populated areas is not normally recommended due to their tendency to merge with background lighting in these areas at night. This makes it extremely difficult for some types of aviation operations, i.e., med-evac, and police helicopters to see these structures. The use of this type of system in urban and rural areas often results in complaints.

The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

**a. Day-to-Twilight.** This should not occur before the illumination drops to 60 foot-candles (645.8 lux), but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

**b. Twilight-to-Night.** This should not occur before the illumination drops below five foot-candles (53.8 lux), but should occur before it drops below two foot-candles (21.5 lux).

**c. Night-to-Day.** The intensity changes listed in subparagraph 72 a and b above should be reversed when changing from the night to day mode.

### 73. UNITS PER LEVEL

One or more light units is needed to obtain the desired horizontal coverage. The number of light units recommended per level (except for the supporting structures of catenary wires and buildings) depends upon the average outside diameter of the specific structure, and the horizontal beam width of the light fixture. The light units should be installed in a manner to ensure an unobstructed view of the system by a pilot approaching from any direction. The number of lights recommended are the minimum. When the structure diameter is:

- a. 20 Feet (6m) or Less.** Three light units per level.
- b. Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m).** Four light units per level.
- c. Exceeding 100 Feet (31m).** Six light units per level.

### 74. INSTALLATION GUIDANCE

Manufacturing specifications provide for the effective peak intensity of the light beam to be adjustable from zero to 8 degrees above the horizon. Normal installation should place the top light at zero degrees to the horizontal and all other light units installed in accordance with Table 2:

Light Unit Elevation Above the Horizontal	
Height of Light Unit Above Terrain	Degrees of Elevation Above the Horizontal
Exceeding 500 feet AGL	0
401 feet to 500 feet AGL	1
301 feet to 400 feet AGL	2
300 feet AGL or less	3

TBL 2

**a. Vertical Aiming.** Where terrain, nearby residential areas, or other situations dictate, the light beam may be further elevated above the horizontal. The main beam of light at the lowest level should not strike the ground closer than 3 statute miles (5km) from the structure. If additional adjustments are necessary, the lights may be individually adjusted upward, in 1-degree increments, starting at the bottom. Excessive elevation may reduce its conspicuity by raising the beam above a collision course flight path.

**b. Special Cases.** Where lighting systems are installed on structures located near highways, waterways, airport approach areas, etc., caution should be exercised to ensure that the lights do not distract or otherwise cause a hazard to motorists, vessel operators, or pilots on an approach to an airport. In these cases,

shielding or an adjustment to the vertical or horizontal light aiming may be necessary. This adjustment should not derogate the intended purpose of the lighting system. Such adjustments may require review action as described in Chapter 1, paragraph 5.

**c. Relocation or Omission of Light Units.** Light units should not be installed in such a manner that the light pattern/output is disrupted by the structure.

**1. Lowest Level.** The lowest level of light units may be installed at a higher elevation than normal on a structure if the surrounding terrain, trees, or adjacent building(s) would obscure the lights. In certain instances, as determined by an FAA aeronautical study, the lowest level of lights may be eliminated.

**2. Two Adjacent Structures.** Where two structures are situated within 500 feet (153m) of each other and the light units are installed at the same levels, the sides of the structures facing each other need not be lighted. However, all lights on both structures must flash simultaneously, except for adjacent catenary support structures. Adjust vertical placement of the lights to either or both structures' intermediate levels to place the lights on the same horizontal plane. Where one structure is higher than the other, complete level(s) of lights should be installed on that part of the higher structure that extends above the top of the lower structure. If the structures are of such heights that the levels of lights cannot be placed in identical horizontal planes, then the light units should be placed such that the center of the horizontal beam patterns do not face toward the adjacent structure. For example, structures situated north and south of each other should have the light units on both structures installed on a northwest/southeast and northeast/southwest orientation.

**3. Three or More Adjacent Structures.** The treatment of a cluster of structures as an individual or a complex of structures will be determined by the FAA as the result of an aeronautical study, taking into consideration the location, heights, and spacing with other structures.

## **75. ANTENNA OR SIMILAR APPURTENANCE LIGHT**

When a structure lighted by a high intensity flashing light system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white light (L-865) should be placed within 40 feet (12m) from the tip of the

appurtenance. This light should operate 24 hours a day and flash simultaneously with the rest of the lighting system.

## **76. CHIMNEYS, FLARE STACKS, AND SIMILAR SOLID STRUCTURES**

The number of light levels depends on the height of the structure excluding appurtenances. Three or more lights should be installed on each level in such a manner to ensure an unobstructed view by the pilot. Normally, the top level is on the highest point of a structure. However, the top level of chimney lights may be installed as low as 20 feet (6m) below the top to minimize deposit build-up due to emissions.

## **77. RADIO AND TELEVISION TOWERS AND SIMILAR SKELETAL STRUCTURES**

**a. Mounting Lights.** The number of levels recommended depends on the height of the structure, including antennas and similar appurtenances. At least three lights should be installed on each level and mounted to ensure that the effective intensity of the full horizontal beam coverage is not impaired by the structural members.

**b. Top Level.** One level of lights should be installed at the highest point of the structure. If the highest point is a rod or antenna incapable of supporting a lighting system, then the top level of lights should be installed at the highest portion of the main skeletal structure. When guy wires come together at the top, it may be necessary to install this level of lights as low as 10 feet (3m) below the top. If the rod or antenna exceeds 40 feet (12m) above the main structure, a medium intensity flashing white light (L-865) should be mounted on the highest point. If the appurtenance (such as a whip antenna) is incapable of supporting a medium intensity light, one or more lights should be installed on a pole adjacent to the appurtenance. Adjacent installation should not exceed the height of the appurtenance and be within 40 feet (12m) of the top to allow an unobstructed view of at least one light.

**c. Ice Shields.** Where icing is likely to occur, metal grates or similar protective ice shields should be installed directly over each light unit to prevent falling ice or accumulations from damaging the light units.

## **78. HYPERBOLIC COOLING TOWERS**

Light units should be installed in a manner to ensure an unobstructed view of at least two lights by a pilot approaching from any direction.

**a. Number of Light Units.** The number of units recommended depends on the diameter of the structure

at the top. The number of lights recommended in the following table are the minimum. When the structure diameter is:

1. *20 Feet (6m) or Less.* Three light units per level.
2. *Exceeding 20 Feet (6m) But Not More Than 100 Feet (31m).* Four light units per level.
3. *Exceeding 100 Feet (31m) But Not More Than 200 Feet (61m).* Six light units per level.
4. *Exceeding 200 Feet (61m).* Eight light units per level.

**b. Structures Exceeding 600 Feet (183m) AGL.** Structures exceeding 600 feet (183m) AGL should have a second level of light units installed approximately at the midpoint of the structure and in a vertical line with the top level of lights.

#### **79. PROMINENT BUILDINGS AND SIMILAR EXTENSIVE OBSTRUCTIONS**

When objects within a group of obstructions are approximately the same overall height above the surface and are located not more than 150 feet (46m) apart, the group of obstructions may be considered an extensive obstruction. Install light units on the same horizontal plane at the highest portion or edge of prominent obstructions. Light units should be placed

to ensure that the light is visible to a pilot approaching from **any** direction. These lights may require shielding, such as louvers, to ensure minimum adverse impact on local communities. Extreme caution in the use of high intensity flashing white lights should be exercised.

**a. If the Obstruction is 200 feet (61m) or Less in Either Horizontal Dimension,** install three or more light units at the highest portion of the structure in a manner to ensure that at least one light is visible to a pilot approaching from **any** direction. Units may be mounted on a single pedestal at or near the center of the obstruction. If light units are placed more than 10 feet (3m) from the center point of the structure, use a minimum of four units.

**b. If the Obstruction Exceeds 200 Feet (61m) in One Horizontal Dimension,** but is 200 feet (61m) or less in the other, two light units should be placed on each of the shorter sides. These light units may either be installed adjacent to each other at the midpoint of the edge of the obstruction or at (near) each corner with the light unit aimed to provide 180 degrees of coverage at each edge. One or more light units should be installed along the overall length of the major axis. These lights should be installed at approximately equal intervals not to exceed a distance of 100 feet (31m) from the corners or from each other.

**c. If the Obstruction Exceeds 200 Feet (61m) in Both Horizontal Dimensions,** light units should be equally spaced along the overall perimeter of the obstruction at intervals of 100 feet (31m) or fraction thereof.





## CHAPTER 8. DUAL LIGHTING WITH RED/MEDIUM INTENSITY FLASHING WHITE SYSTEMS

### 80. PURPOSE

This dual lighting system includes red lights (L-864) for nighttime and medium intensity flashing white lights (L-865) for daytime and twilight use. This lighting system may be used in lieu of operating a medium intensity flashing white lighting system at night. There may be some populated areas where the use of medium intensity at night may cause significant environmental concerns. The use of the dual lighting system should reduce/mitigate those concerns. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

### 81. INSTALLATION

The light units should be installed as specified in the appropriate portions of Chapters 4, 5, and 6. The number of light levels needed may be obtained from Appendix 1.

### 82. OPERATION

Lighting systems should be operated as specified in Chapter 3. Both systems should not be operated at the same time; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of one of two lamps in the uppermost red beacon (L-864 incandescent unit) or outage of any uppermost red light shall cause the white obstruction light system to operate in its specified "night" step intensity.

### 83. CONTROL DEVICE

The light system is controlled by a device that changes the system when the ambient light changes. The system should automatically change steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

**a. *Twilight-to-Night.*** This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

**b. *Night-to-Day.*** The intensity changes listed in subparagraph 83 a above should be reversed when changing from the night to day mode.

### 84. ANTENNA OR SIMILAR APPURTENANCE LIGHT

When a structure utilizing this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white (L-865) and a red flashing beacon (L-864) should be placed within 40 feet (12m) from the tip of the appurtenance. The white light should operate during daytime and twilight and the red light during nighttime. These lights should flash simultaneously with the rest of the lighting system.

### 85. OMISSION OF MARKING

When medium intensity white lights are operated on structures 500 feet (153m) AGL or less during daytime and twilight, other methods of marking may be omitted.



**CHAPTER 9. DUAL LIGHTING WITH RED/HIGH INTENSITY FLASHING WHITE SYSTEMS****90. PURPOSE**

This dual lighting system includes red lights (L-864) for nighttime and high intensity flashing white lights (L-856) for daytime and twilight use. This lighting system may be used in lieu of operating a flashing white lighting system at night. There may be some populated areas where the use of high intensity lights at night may cause significant environmental concerns and complaints. The use of the dual lighting system should reduce/mitigate those concerns. Recommendations on lighting structures can vary depending on terrain features, weather patterns, geographic location, and in the case of wind turbines, number of structures and overall layout of design.

**91. INSTALLATION**

The light units should be installed as specified in the appropriate portions of Chapters 4, 5, and 7. The number of light levels needed may be obtained from Appendix 1.

**92. OPERATION**

Lighting systems should be operated as specified in Chapters 4, 5, and 7. Both systems should not be operated at the same time; however, there should be no more than a 2-second delay when changing from one system to the other. Outage of one of two lamps in the uppermost red beacon (L-864 incandescent unit) or outage of any uppermost red light shall cause the white obstruction light system to operate in its specified "night" step intensity.

**93. CONTROL DEVICE**

The light intensity is controlled by a device that changes the intensity when the ambient light changes.

The system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

**a. Day-to-Twilight.** This should not occur before the illumination drops to 60 foot-candles (645.8 lux) but should occur before it drops below 35 foot-candles (376.7 lux). The illuminance-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

**b. Twilight-to-Night.** This should not occur before the illumination drops below 5 foot-candles (53.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

**c. Night-to-Day.** The intensity changes listed in subparagraph 93 a and b above should be reversed when changing from the night to day mode.

**94. ANTENNA OR SIMILAR APPURTENANCE LIGHT**

When a structure utilizing this dual lighting system is topped with an antenna or similar appurtenance exceeding 40 feet (12m) in height, a medium intensity flashing white light (L-865) and a red flashing beacon (L-864) should be placed within 40 feet (12m) from the tip of the appurtenance. The white light should operate during daytime and twilight and the red light during nighttime.

**95. OMISSION OF MARKING**

When high intensity white lights are operated during daytime and twilight, other methods of marking may be omitted.





## CHAPTER 10. MARKING AND LIGHTING OF CATENARY AND CATENARY SUPPORT STRUCTURES

### 100. PURPOSE

This chapter provides guidelines for marking and lighting catenary and catenary support structures. The recommended marking and lighting of these structures is intended to provide day and night conspicuity and to assist pilots in identifying and avoiding catenary wires and associated support structures.

### 101. CATENARY MARKING STANDARDS

Lighted markers are available for increased night conspicuity of high-voltage (69KV or greater) transmission line catenary wires. These markers should be used on transmission line catenary wires near airports, heliports, across rivers, canyons, lakes, etc. The lighted markers should be manufacturer certified as recognizable from a minimum distance of 4,000 feet (1219m) under nighttime conditions, minimum VFR conditions or having a minimum intensity of at least 32.5 candela. The lighting unit should emit a steady burning red light. They should be used on the highest energized line. If the lighted markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. (The maximum distance between the line energizing the lighted markers and the highest catenary above the lighted marker should be no more than 20 feet (6m).) Markers should be distinctively shaped, i.e., spherical, cylindrical, so they are not mistaken for items that are used to convey other information. They should be visible in all directions from which aircraft are likely to approach. The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights. Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full coverage.

**a. Size and Color.** The diameter of the markers used on extensive catenary wires across canyons, lakes, rivers, etc., should be not less than 36 inches (91cm). Smaller 20-inch (51cm) markers are permitted on less extensive power lines or on power lines below 50 feet (15m) above the ground and within 1,500 feet (458m) of an airport runway end. Each marker should be a solid color such as aviation orange, white, or yellow.

#### **b. Installation.**

**1. Spacing.** Lighted markers should be spaced equally along the wire at intervals of approximately 200 feet (61m) or a fraction thereof. Intervals between

markers should be less in critical areas near runway ends, i.e., 30 to 50 feet (10m to 15m). If the markers are installed on a line other than the highest catenary, then markers specified in paragraph 34 should be used in addition to the lighted markers. The maximum distance between the line energizing the lighted markers and the highest catenary above the markers can be no more than 20 feet (6m). The lighted markers may be installed alternately along each wire if the distance between adjacent markers meets the spacing standard. This method allows the weight and wind loading factors to be distributed.

**2. Pattern.** An alternating color scheme provides the most conspicuity against all backgrounds. Mark overhead wires by alternating solid colored markers of aviation orange, white, and yellow. Normally, an orange marker is placed at each end of a line and the spacing is adjusted (not to exceed 200 feet (61m)) to accommodate the rest of the markers. When less than four markers are used, they should all be aviation orange.

### 102. CATENARY LIGHTING STANDARDS

When using medium intensity flashing white (L-866), high intensity flashing white (L-857), dual medium intensity (L-866/L-885) or dual high intensity (L-857/885) lighting systems, operated 24 hours a day, other marking of the support structure is not necessary.

**a. Levels.** A system of three levels of sequentially flashing light units should be installed on each supporting structure or adjacent terrain. Install one level at the top of the structure, one at the height of the lowest point in the catenary and one level approximately midway between the other two light levels. The middle level should normally be at least 50 feet (15m) from the other two levels. The middle light unit may be deleted when the distance between the top and the bottom light levels is less than 100 feet (30m).

**1. Top Levels.** One or more lights should be installed at the top of the structure to provide 360-degree coverage ensuring an unobstructed view. If the installation presents a potential danger to maintenance personnel, or when necessary for lightning protection, the top level of lights may be mounted as low as 20 feet (6m) below the highest point of the structure.

**2. Horizontal Coverage.** The light units at the middle level and bottom level should be installed so as to provide a minimum of 180-degree coverage centered perpendicular to the flyway. Where a catenary crossing is situated near a bend in a river, canyon, etc., or is not perpendicular to the flyway, the

horizontal beam should be directed to provide the most effective light coverage to warn pilots approaching from either direction of the catenary wires.

**3. Variation.** The vertical and horizontal arrangements of the lights may be subject to the structural limits of the towers and/or adjacent terrain. A tolerance of 20 percent from uniform spacing of the bottom and middle light is allowed. If the base of the supporting structure(s) is higher than the lowest point in the catenary, such as a canyon crossing, one or more lights should be installed on the adjacent terrain at the level of the lowest point in the span. These lights should be installed on the structure or terrain at the height of the lowest point in the catenary.

**b. Flash Sequence.** The flash sequence should be middle, top, and bottom with all lights on the same level flashing simultaneously. The time delay between flashes of levels is designed to present a unique system display. The time delay between the start of each level of flash duration is outlined in FAA AC 150/5345-43, Specification for Obstruction Lighting Equipment.

**c. Synchronization.** Although desirable, the corresponding light levels on associated supporting towers of a catenary crossing need not flash simultaneously.

**d. Structures 500 feet (153m) AGL or Less.** When medium intensity white lights (L-866) are operated 24 hours a day, or when a dual red/medium intensity system (L-866 daytime & twilight/L-885 nighttime) is used, marking can be omitted. When using a medium intensity white light (L-866) or a flashing red light (L-885) during twilight or nighttime only, painting should be used for daytime marking.

**e. Structures Exceeding 500 Feet (153m) AGL.** When high intensity white lights (L-857) are operated 24 hours a day, or when a dual red/high intensity system (L-857 daytime and twilight/L-885 nighttime) is used, marking can be omitted. This system should not be recommended on structures 500 feet (153m) or less unless an FAA aeronautical study shows otherwise. When a flashing red obstruction light (L-885), a medium intensity (L-866) flashing white lighting system or a high intensity white lighting system (L-857) is used for nighttime and twilight only, painting should be used for daytime marking.

### 103. CONTROL DEVICE

The light intensity is controlled by a device (photocell) that changes the intensity when the ambient light changes. The lighting system should automatically change intensity steps when the northern sky illumination in the Northern Hemisphere on a vertical surface is as follows:

**a. Day-to-Twilight (L-857 System).** This should not occur before the illumination drops to 60 foot-candles (645.8 lux), but should occur before it drops below 35 foot-candles (376.7 lux). The illuminant-sensing device should, if practical, face the northern sky in the Northern Hemisphere.

**b. Twilight-to-Night (L-857 System).** This should not occur before the illumination drops below 5 foot-candles (53.8 lux), but should occur before it drops below 2 foot-candles (21.5 lux).

**c. Night-to-Day.** The intensity changes listed in subparagraph 103 a. and b. above should be reversed when changing from the night to day mode.

**d. Day-to-Night (L-866 or L-885/L-866).** This should not occur before the illumination drops below 5 foot-candles (563.8 lux) but should occur before it drops below 2 foot-candles (21.5 lux).

**e. Night-to-Day.** The intensity changes listed in subparagraph d. above should be reversed when changing from the night to day mode.

**f. Red Obstruction (L-885).** The red lights should not turn on until the illumination drops below 60 foot-candles (645.8 lux) but should occur before reaching a level of 35 foot-candles (367.7 lux). Lights should not turn off before the illuminance rises above 35 foot-candles (367.7 lux), but should occur before reaching 60 foot-candles (645.8 lux).

### 104. AREA SURROUNDING CATENARY SUPPORT STRUCTURES

The area in the immediate vicinity of the supporting structure's base should be clear of all items and/or objects of natural growth that could interfere with the line-of-sight between a pilot and the structure's lights.

### 105. THREE OR MORE CATENARY SUPPORT STRUCTURES

Where a catenary wire crossing requires three or more supporting structures, the inner structures should be equipped with enough light units per level to provide a full 360-degree coverage.

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**CHAPTER 11. MARKING AND LIGHTING MOORED BALLOONS AND KITES****110. PURPOSE**

The purpose of marking and lighting moored balloons, kites, and their cables or mooring lines is to indicate the presence and general definition of these objects to pilots when converging from any normal angle of approach.

**111. STANDARDS**

These marking and lighting standards pertain to all moored balloons and kites that require marking and lighting under 14 CFR, part 101.

**112. MARKING**

Flag markers should be used on mooring lines to warn pilots of their presence during daylight hours.

**a. Display.** Markers should be displayed at no more than 50-foot (15m) intervals and should be visible for at least 1 statute mile.

**b. Shape.** Markers should be rectangular in shape and not less than 2 feet (0.6m) on a side. Stiffeners should be used in the borders so as to expose a large area, prevent drooping in calm wind, or wrapping around the cable.

**c. Color Patterns.** One of the following color patterns should be used:

**1. Solid Color.** Aviation orange.

**2. Orange and White.** Two triangular sections, one of aviation orange and the other white, combined to form a rectangle.

**113. PURPOSE**

Flashing obstruction lights should be used on moored balloons or kites and their mooring lines to warn pilots of their presence during the hours between sunset and sunrise and during periods of reduced visibility. These lights may be operated 24 hours a day.

**a. Systems.** Flashing red (L-864) or white beacons (L-865) may be used to light moored balloons or kites. High intensity lights (L-856) are not recommended.

**b. Display.** Flashing lights should be displayed on the top, nose section, tail section, and on the tether cable approximately 15 feet (4.6m) below the craft so as to define the extremes of size and shape. Additional lights should be equally spaced along the cable's overall length for each 350 feet (107m) or fraction thereof.

**c. Exceptions.** When the requirements of this paragraph cannot be met, floodlighting may be used.

**114. OPERATIONAL CHARACTERISTICS**

The light intensity is controlled by a device that changes the intensity when the ambient light changes. The system should automatically turn the lights on and change intensities as ambient light condition change. The reverse order should apply in changing from nighttime to daytime operation. The lights should flash simultaneously.





## CHAPTER 12. MARKING AND LIGHTING EQUIPMENT AND INFORMATION

### 120. PURPOSE

This chapter lists documents relating to obstruction marking and lighting systems and where they may be obtained.

### 121. PAINT STANDARD

Paint and aviation colors/gloss, referred to in this publication should conform to Federal Standard FED-STD-595. Approved colors shall be formulated without the use of Lead, Zinc Chromate or other heavy metals to match International Orange, White and Yellow. All coatings shall be manufactured and labeled to meet Federal Environmental Protection Act Volatile Organic Compound(s) guidelines, including the National Volatile Organic Compound Emission Standards for architectural coatings.

**a. Exterior Acrylic Waterborne Paint.** Coating should be a ready mixed, 100% acrylic, exterior latex formulated for application directly to galvanized surfaces. Ferrous iron and steel or non-galvanized surfaces shall be primed with a manufacturer recommended primer compatible with the finish coat.

**b. Exterior Solventborne Alkyd Based Paint.** Coating should be ready mixed, alkyd-based, exterior enamel for application directly to non-galvanized surfaces such as ferrous iron and steel. Galvanized surfaces shall be primed with a manufacturer primer compatible with the finish coat.

Paint Standards Color Table

COLOR	NUMBER
Orange	12197
White	17875
Yellow	13538

TBL 3

**Note-**

1. Federal specification T1-P-59, aviation surface paint, ready mixed international orange.

2. Federal specification T1-102, aviation surface paint, oil titanium zinc.

3. Federal specification T1-102, aviation surface paint, oil, exterior, ready mixed, white and light tints.

### 122. AVAILABILITY OF SPECIFICATIONS

Federal specifications describing the technical characteristics of various paints and their application techniques may be obtained from:

GSA- Specification Branch  
470 L'Enfant Plaza  
Suite 8214  
Washington, DC 20407  
Telephone: (202) 619-8925

### 123. LIGHTS AND ASSOCIATED EQUIPMENT

The lighting equipment referred to in this publication should conform to the latest edition of one of the following specifications, as applicable:

**a. Obstruction Lighting Equipment.**

1. AC 150/5345-43, FAA Specification for Obstruction Lighting Equipment.

2. Military Specifications MIL-L-6273, Light, Navigational, Beacon, Obstacle or Code, Type G-1.

3. Military Specifications MIL-L-7830, Light Assembly, Markers, Aircraft Obstruction.

**b. Certified Equipment.**

1. AC 150/5345-53, Airport Lighting Certification Program, lists the manufacturers that have demonstrated compliance with the specification requirements of AC 150/5345-43.

2. Other manufacturers' equipment may be used provided that equipment meets the specification requirements of AC 150/5345-43.

**c. Airport Lighting Installation and Maintenance.**

1. AC 150/5340-21, Airport Miscellaneous Lighting Visual Aids, provides guidance for the installation, maintenance, testing, and inspection of obstruction lighting for airport visual aids such as airport beacons, wind cones, etc.

2. AC 150/5340-26, Maintenance of Airport Visual Aid Facilities, provides guidance on the maintenance of airport visual aid facilities.

**d. Vehicles.**

1. AC 150/5210-5, Painting, Marking, and Lighting of Vehicles Used on an Airport, contains provisions for marking vehicles principally used on airports.

2. FAA Facilities. Obstruction marking for FAA facilities shall conform to FAA Drawing Number D-5480, referenced in FAA Standard FAA-STD-003, Paint Systems for Structures.

**124. AVAILABILITY**

The standards and specifications listed above may be obtained free of charge from the below-indicated office:

**a. Military Specifications:**

Standardization Document Order Desk  
700 Robbins Avenue  
Building #4, Section D  
Philadelphia, PA 19111-5094

**b. FAA Specifications:**

Manager, ASD-110  
Department of Transportation  
Document Control Center  
Martin Marietta/Air Traffic Systems  
475 School St., SW.  
Washington, DC 20024  
Telephone: (202) 646-2047  
FAA Contractors Only

**c. FAA Advisory Circulars:**

Department of Transportation  
TASC  
Subsequent Distribution Office, SVC-121.23  
Ardmore East Business Center  
3341 Q 75th Avenue  
Landover, MD 20785  
Telephone: (301) 322-4961

## CHAPTER 13. MARKING AND LIGHTING WIND TURBINE FARMS

### 130. PURPOSE

This chapter provides guidelines for the marking and lighting of wind turbine farms. For the purposes of this advisory circular, wind turbine farms are defined as a wind turbine development that contains more than three (3) turbines of heights over 200 feet above ground level. The recommended marking and lighting of these structures is intended to provide day and night conspicuity and to assist pilots in identifying and avoiding these obstacles.

### 131. GENERAL STANDARDS

The development of wind turbine farms is a very dynamic process, which constantly changes based on the differing terrain they are built on. Each wind turbine farm is unique; therefore it is important to work closely with the sponsor to determine a lighting scheme that provides for the safety of air traffic. The following are guidelines that are recommended for wind turbine farms. Consider the proximity to airports and VFR routes, extreme terrain where heights may widely vary, and local flight activity when making the recommendation.

a. Not all wind turbine units within an installation or farm need to be lighted. Definition of the periphery of the installation is essential; however, lighting of interior wind turbines is of lesser importance unless they are taller than the peripheral units.

b. Obstruction lights within a group of wind turbines should have unlighted separations or gaps of no more than  $\frac{1}{2}$  statute mile if the integrity of the group appearance is to be maintained. This is especially critical if the arrangement of objects is essentially linear.

c. Any array of flashing or pulsed obstruction lighting should be synchronized or flash simultaneously.

d. Nighttime wind turbine obstruction lighting should consist of the preferred FAA L-864 aviation red-colored flashing lights.

e. White strobe fixtures (FAA L-865) may be used in lieu of the preferred L-864 red flashing lights, but must be used alone without any red lights, and must be positioned in the same manner as the red flashing lights.

f. The white paint most often found on wind turbine units is the most effective daytime early warning device. Other colors, such as light gray or blue, appear to be significantly less effective in

providing daytime warning. Daytime lighting of wind turbine farms is not required, as long as the turbine structures are painted in a bright white color or light off-white color most often found on wind turbines.

**132. WIND TURBINE CONFIGURATIONS** – Prior to recommending marking and lighting, determine the configuration and the terrain of the wind turbine farm. The following is a description of the most common configurations.

a. Linear – wind turbine farms in a line-like arrangement, often located along a ridge line, the face of a mountain or along borders of a mesa or field. The line may be ragged in shape or be periodically broke, and may vary in size from just a few turbines up to 20 miles long.

b. Cluster – turbine farms where the turbines are placed in circles like groups on top of a mesa, or within a large field. A cluster is typically characterized by having a pronounced perimeter, with various turbines placed inside the circle at various, erratic distances throughout the center of the circle.

c. Grid – turbine farms arranged in a geographical shape such as a square or a rectangle, where each turbine is set a consistent distance from each other in rows, giving the appearance that they are part of a square like pattern.

### 133. MARKING STANDARDS

The bright white or light off-white paint most often found on wind turbines has been shown to be most effective, and if used, no lights are required during the daytime. However, if darker paint is used, wind turbine marking should be supplemented with daytime lighting, as required.

### 134. LIGHTING STANDARDS

a. Flashing red (L864), or white (L-865) lights may be used to light wind turbines. Studies have shown that red lights are most effective, and should be the first consideration for lighting recommendations of wind turbines.

b. Obstruction lights should have unlighted separations or gaps of no more than  $\frac{1}{2}$  mile. Lights should flash simultaneously. Should the synchronization of the lighting system fail, a lighting outage report should be made in accordance with paragraph 23 of this advisory circular. Light fixtures should be placed as high as possible on the turbine nacelle, so as to be visible from 360 degrees.

c. Linear Turbine Configuration. Place a light on each turbine positioned at each end of the line or string of turbines. Lights should be no more than  $\frac{1}{2}$  statute mile, or 2640 feet from the last lit turbine. In the event the last segment is significantly short, push the lit turbines back towards the starting point to present a well balanced string of lights. High concentrations of lights should be avoided.

d. Cluster Turbine Configuration. Select a starting point among the outer perimeter of the cluster. This turbine should be lit, and a light should be placed on the next turbine so that no more than a  $\frac{1}{2}$  statute mile gap exists. Continue this pattern around the perimeter. If the distance across the cluster is greater than 1 mile, and/or the terrain varies by more than 100 feet, place one or more lit turbines at locations throughout the center of the cluster.

e. Grid Turbine Configuration. Select each of the defined corners of the layout to be lit, and then utilize the same concept of the cluster configuration as outlined in paragraph d.

f. Special Considerations. On occasion, one or two turbines may be located apart from the main grouping of turbines. If one or two turbines protrude from the general limits of the turbine farm, these turbines should be lit.



## APPENDIX 1: Specifications for Obstruction Lighting Equipment Classification

### APPENDIX

Type	Description
L-810	Steady-burning Red Obstruction Light
L-856	High Intensity Flashing White Obstruction Light (40 FPM)
L-857	High Intensity Flashing White Obstruction Light (60 FPM)
L-864	Flashing Red Obstruction Light (20-40 FPM)
L-865	Medium Intensity Flashing White Obstruction Light (40-FPM)
L-866	Medium Intensity Flashing White Obstruction Light (60-FPM)
L-864/L-865	Dual: Flashing Red Obstruction Light (20-40 FPM) and Medium Intensity Flashing White Obstruction Light (40 FPM)
L-885	Red Catenary 60 FPM
FPM = Flashes Per Minute	

*TBL 4*

## PAINTING AND/OR DUAL LIGHTING OF CHIMNEYS, POLES, TOWERS, AND SIMILAR STRUCTURES

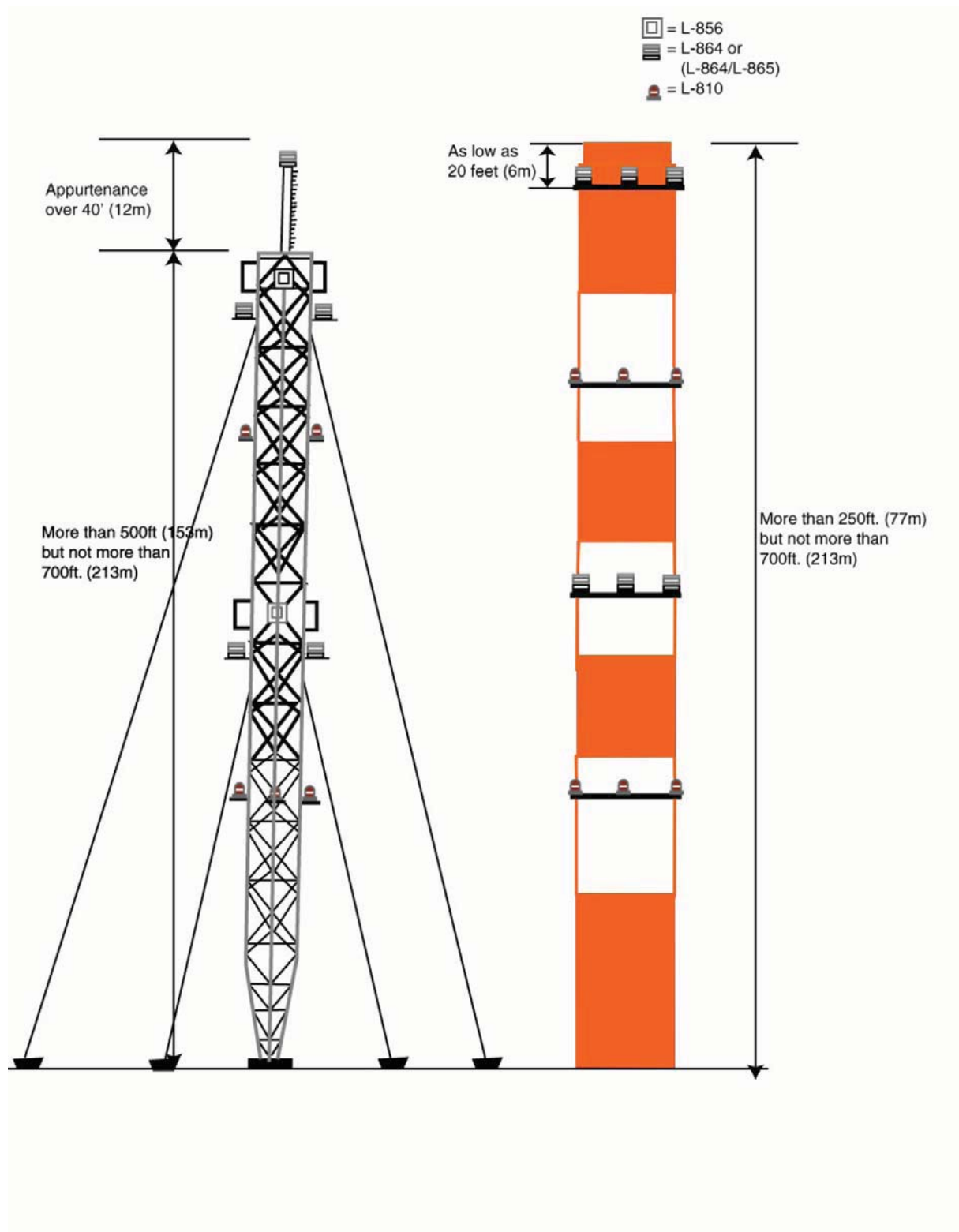
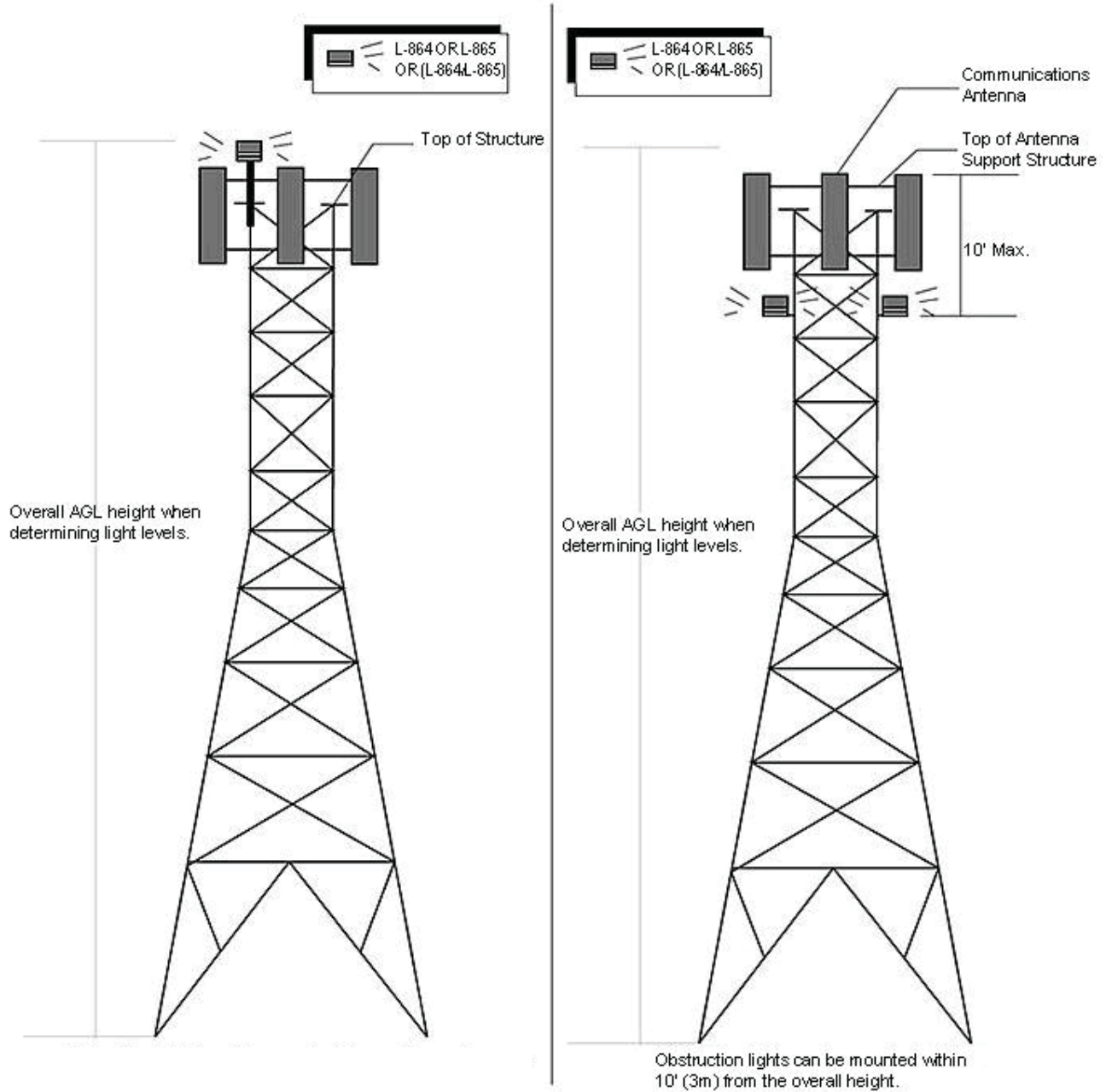


FIG 1



Intermediate lighting not shown. Overall AGL height if more than 200' (61m), but not more than 500' (153m).

FIG 2

## PAINTING AND LIGHTING OF WATER TOWERS, STORAGE TANKS, AND SIMILAR STRUCTURES

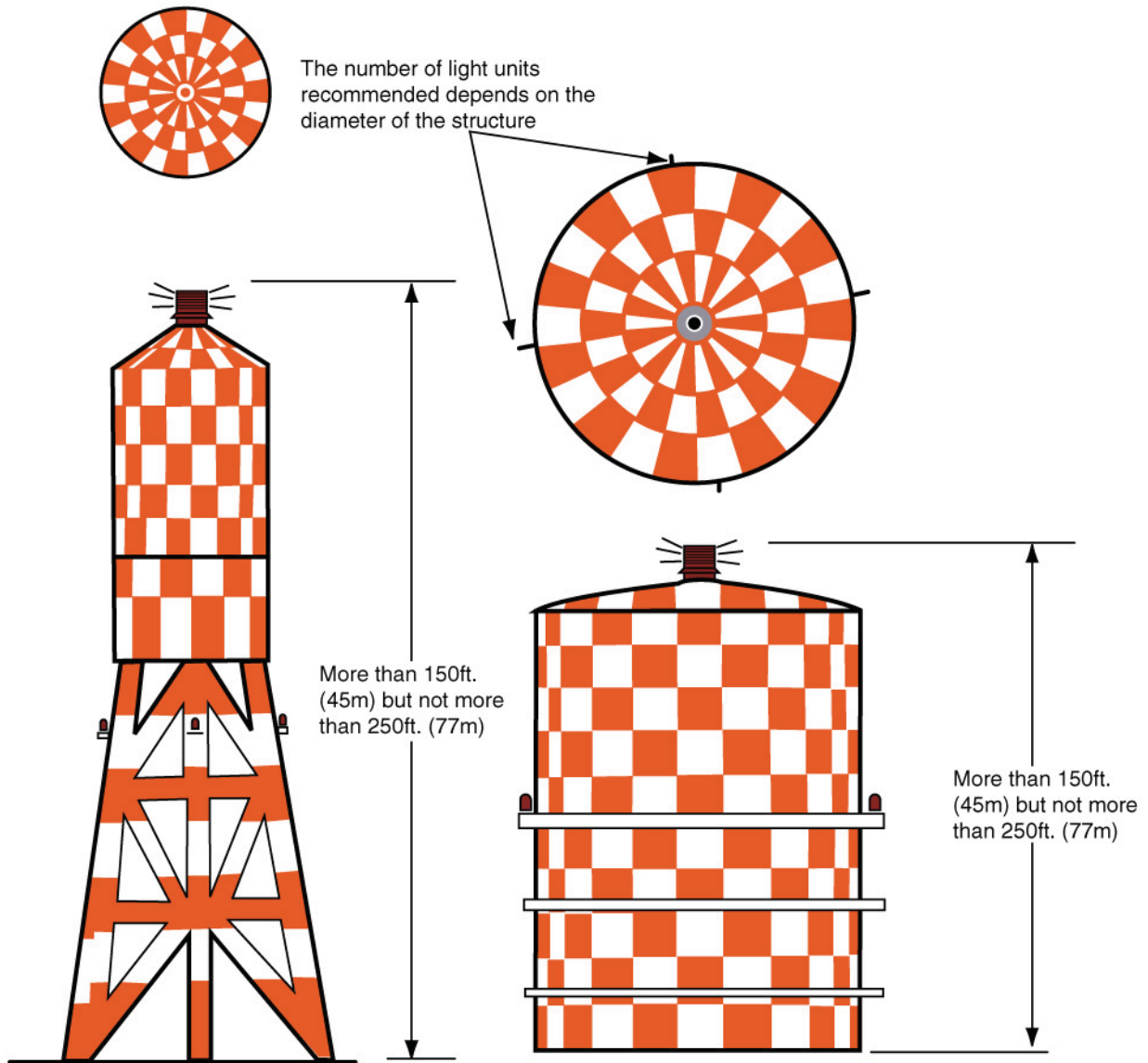


FIG 3



## PAINTING AND LIGHTING OF WATER TOWERS AND SIMILAR STRUCTURES

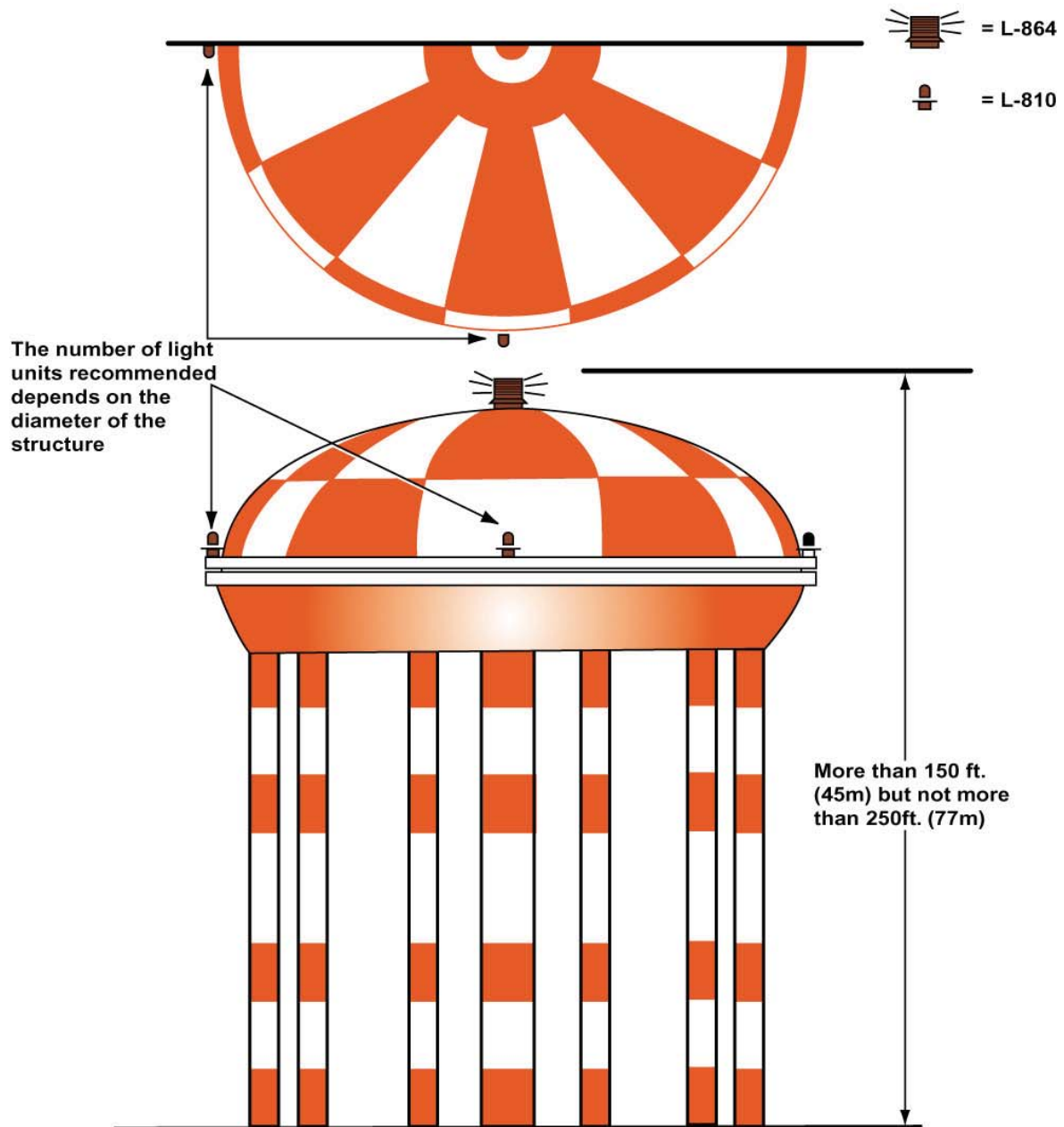


FIG 4

## PAINTING OF SINGLE PEDESTAL WATER TOWER BY TEARDROP PATTERN

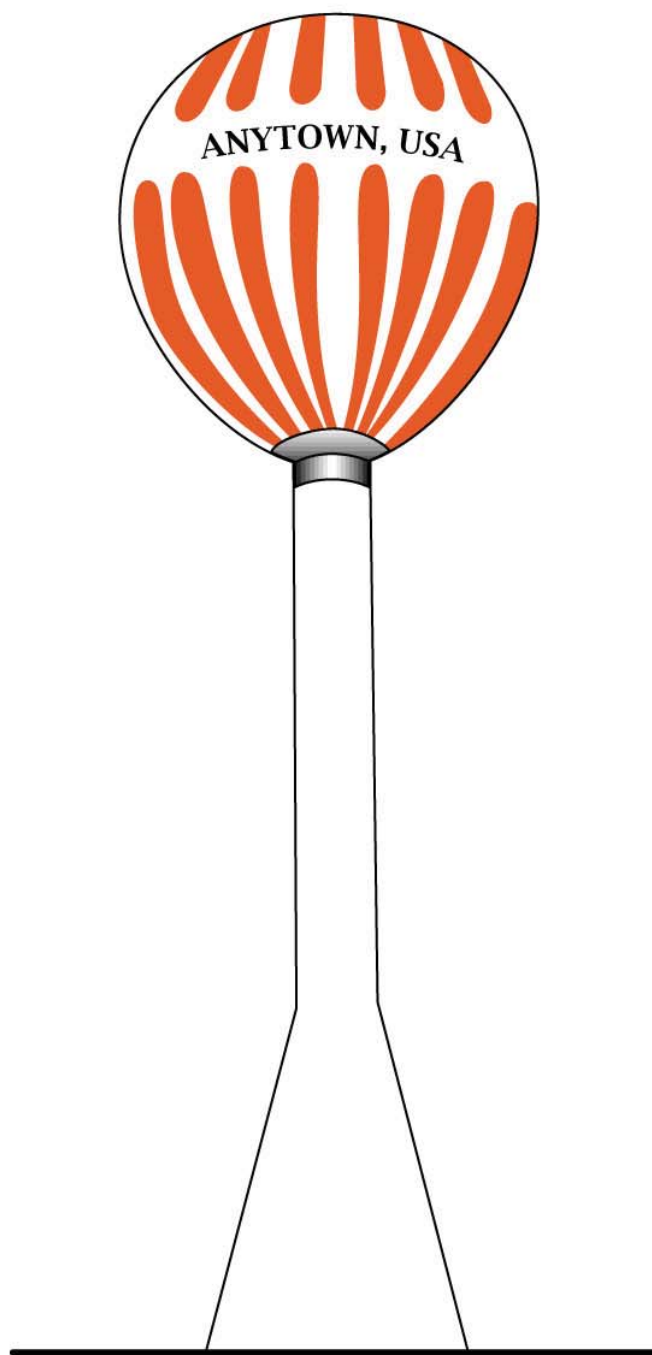


FIG 5

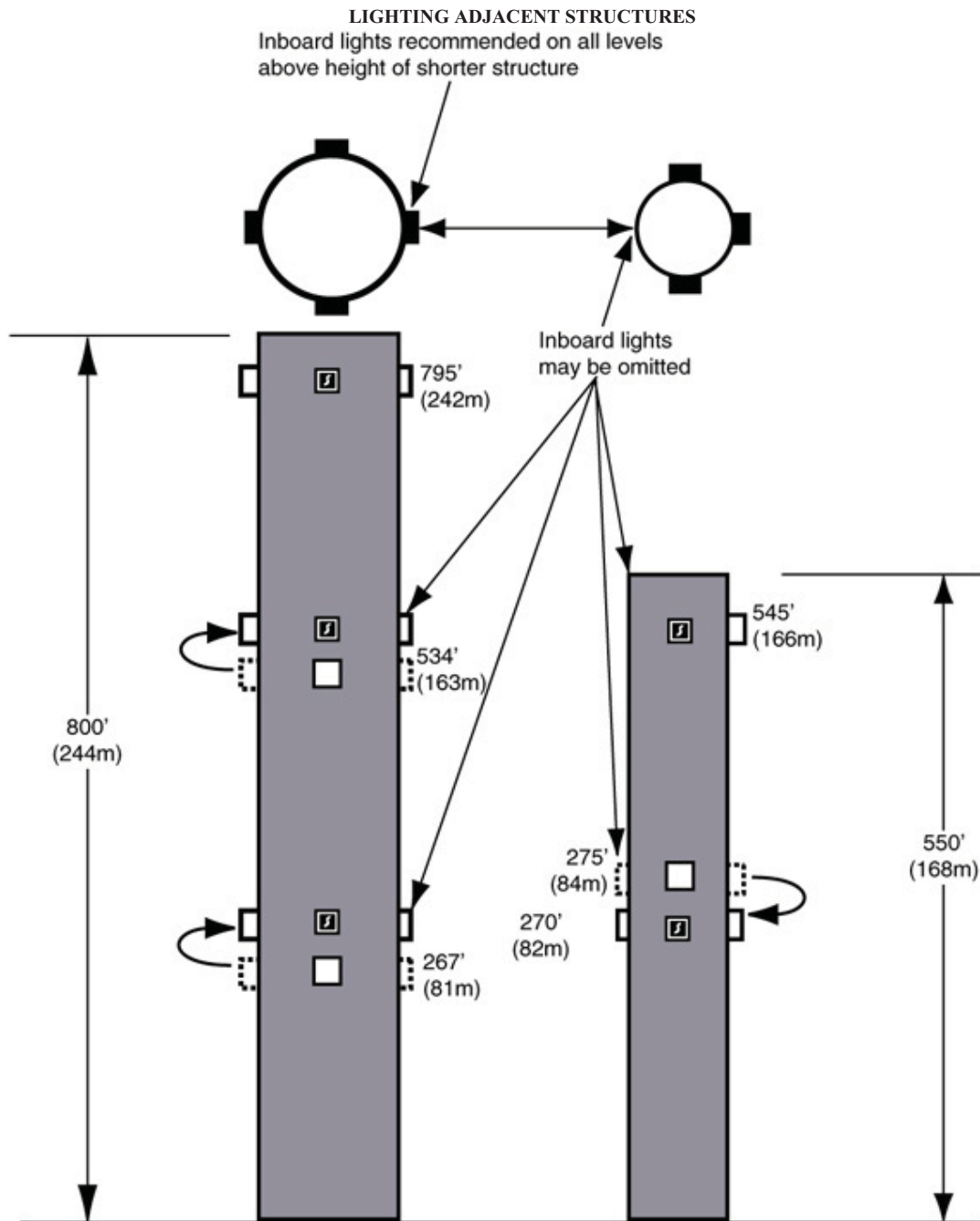


FIG 6

## Lighting Adjacent Structure

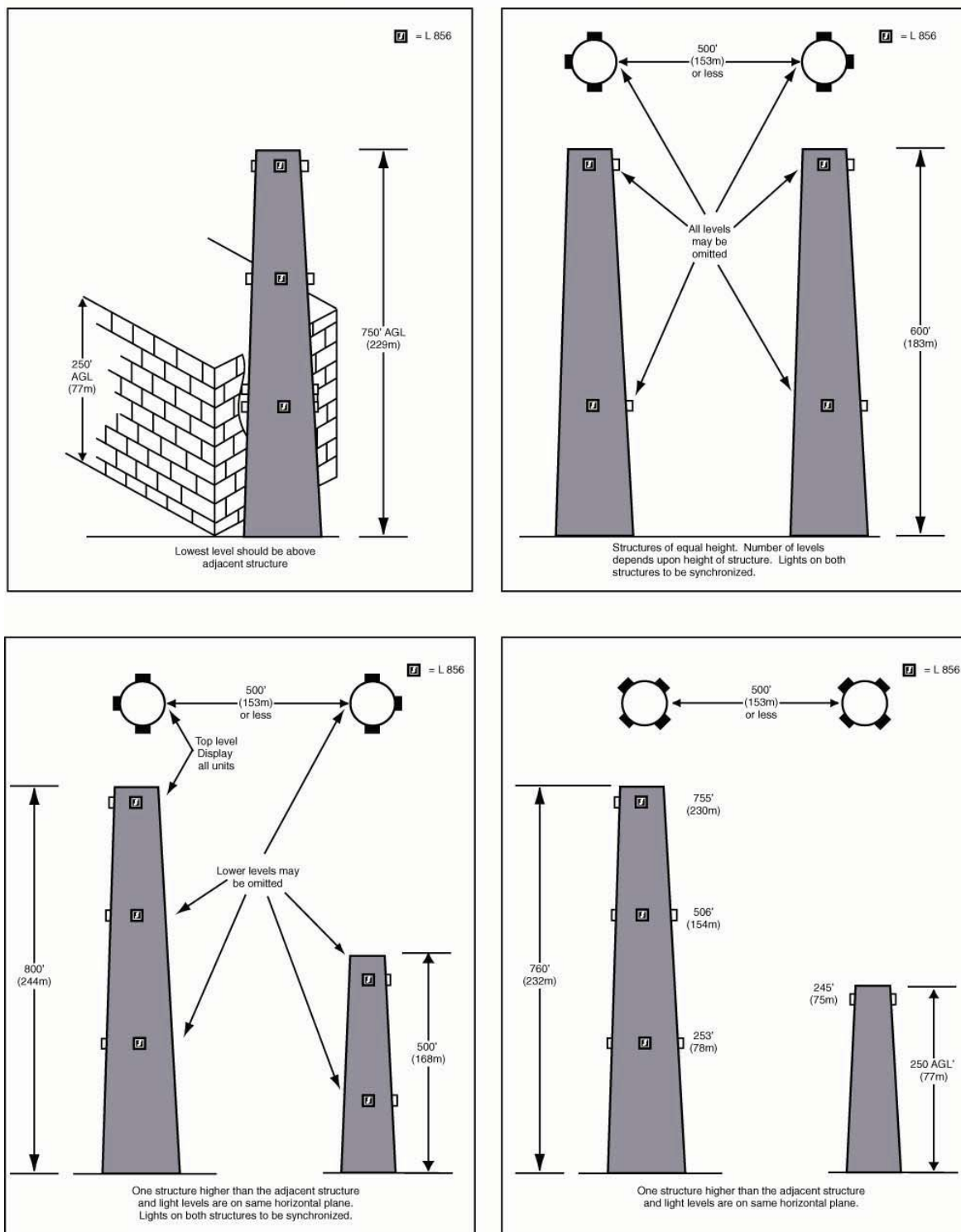


FIG 7



## Lighting Adjacent Structure

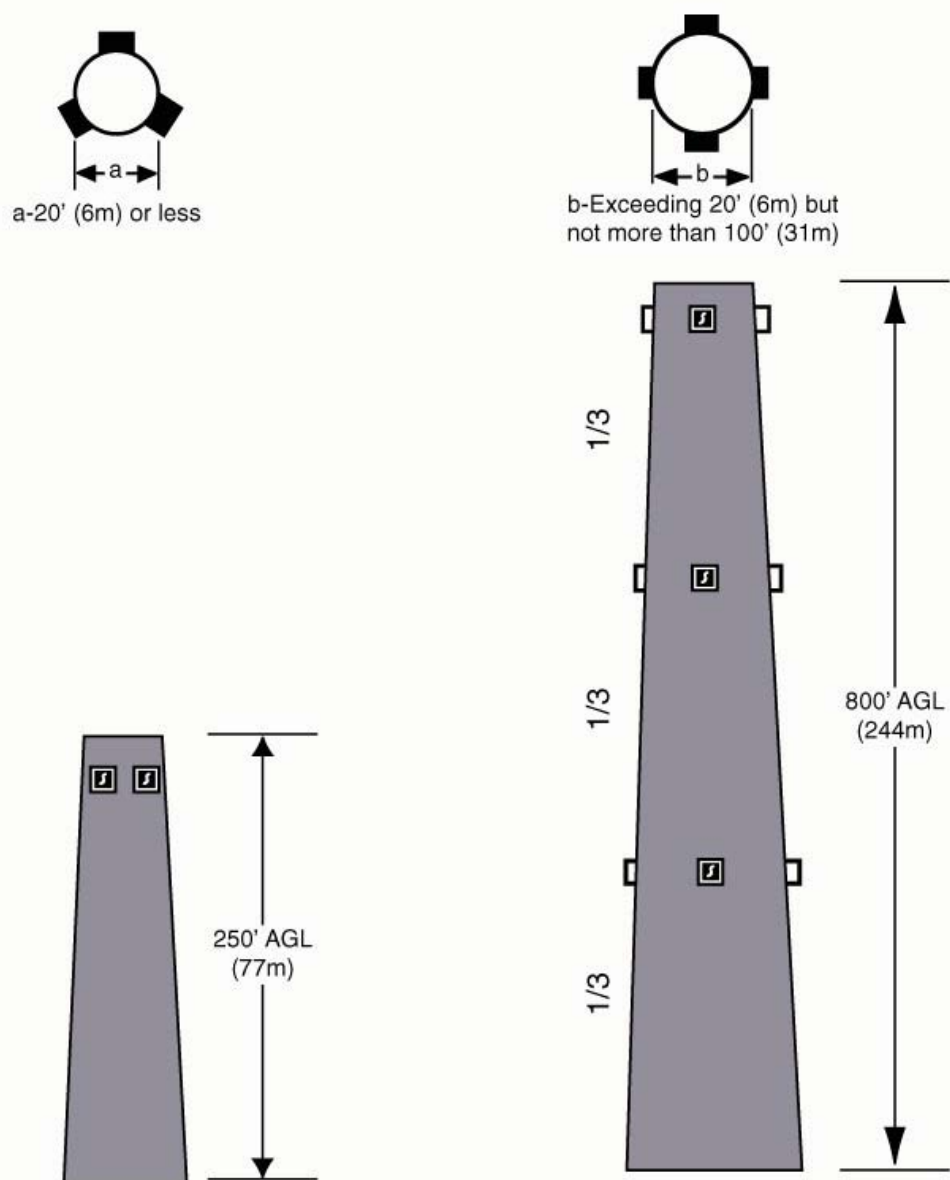


FIG 8

---

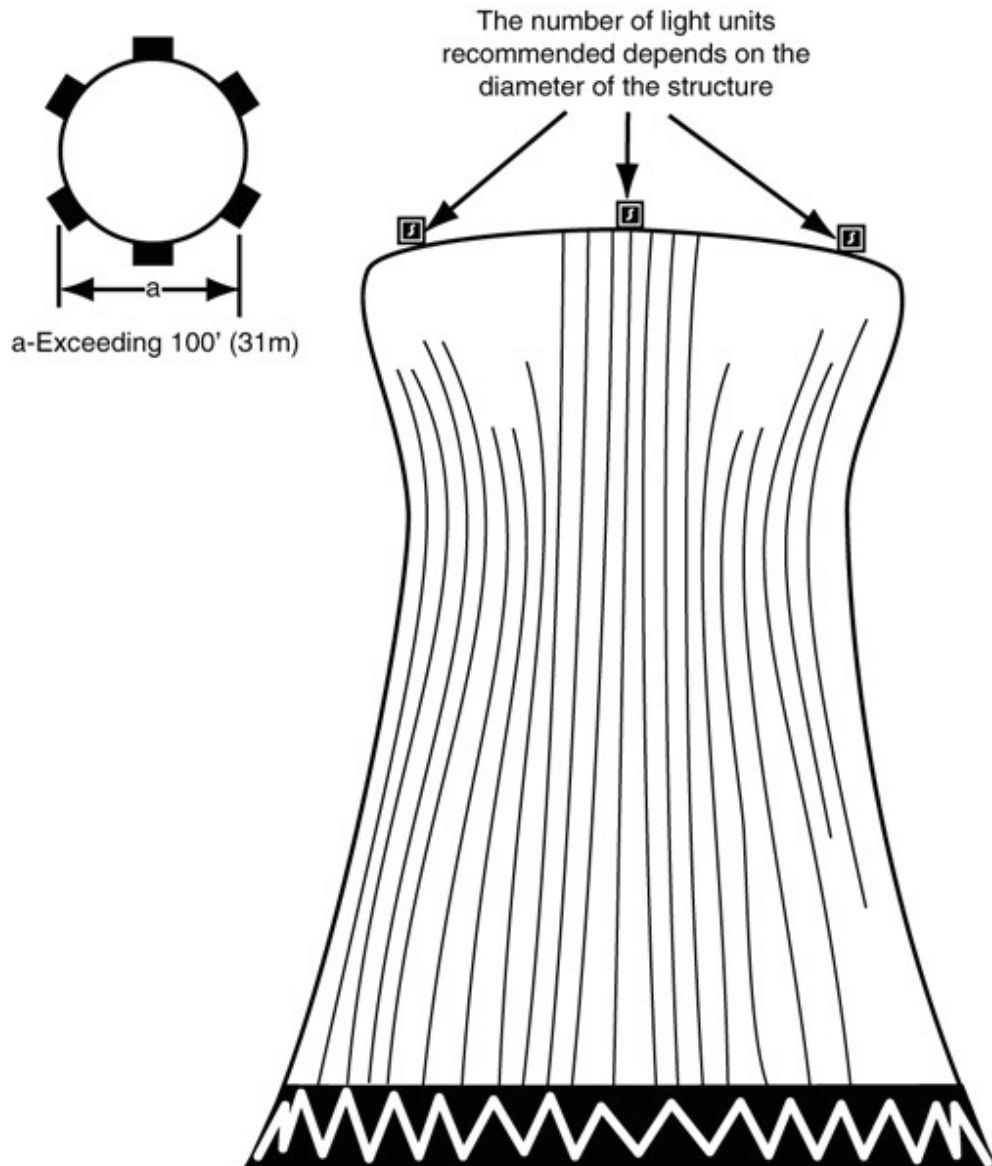
**HYPERBOLIC COOLING TOWER**

FIG 9

## BRIDGE LIGHTING

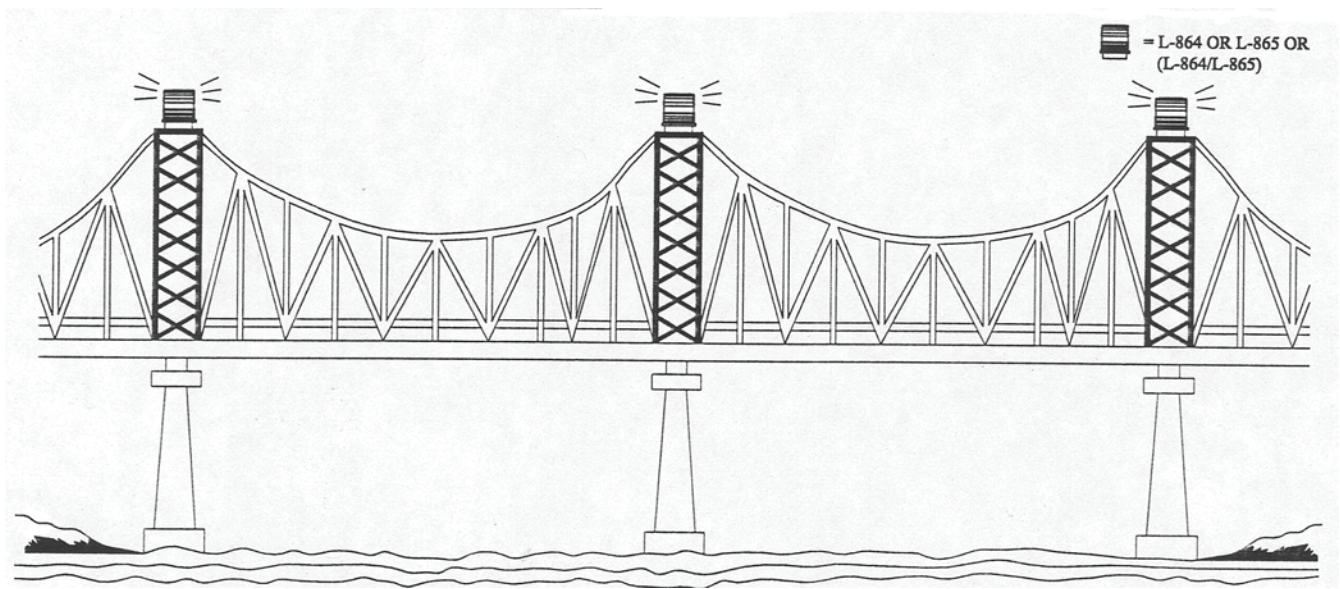


FIG 10

TYPICAL LIGHTING OF A STAND ALONE WIND TURBINE

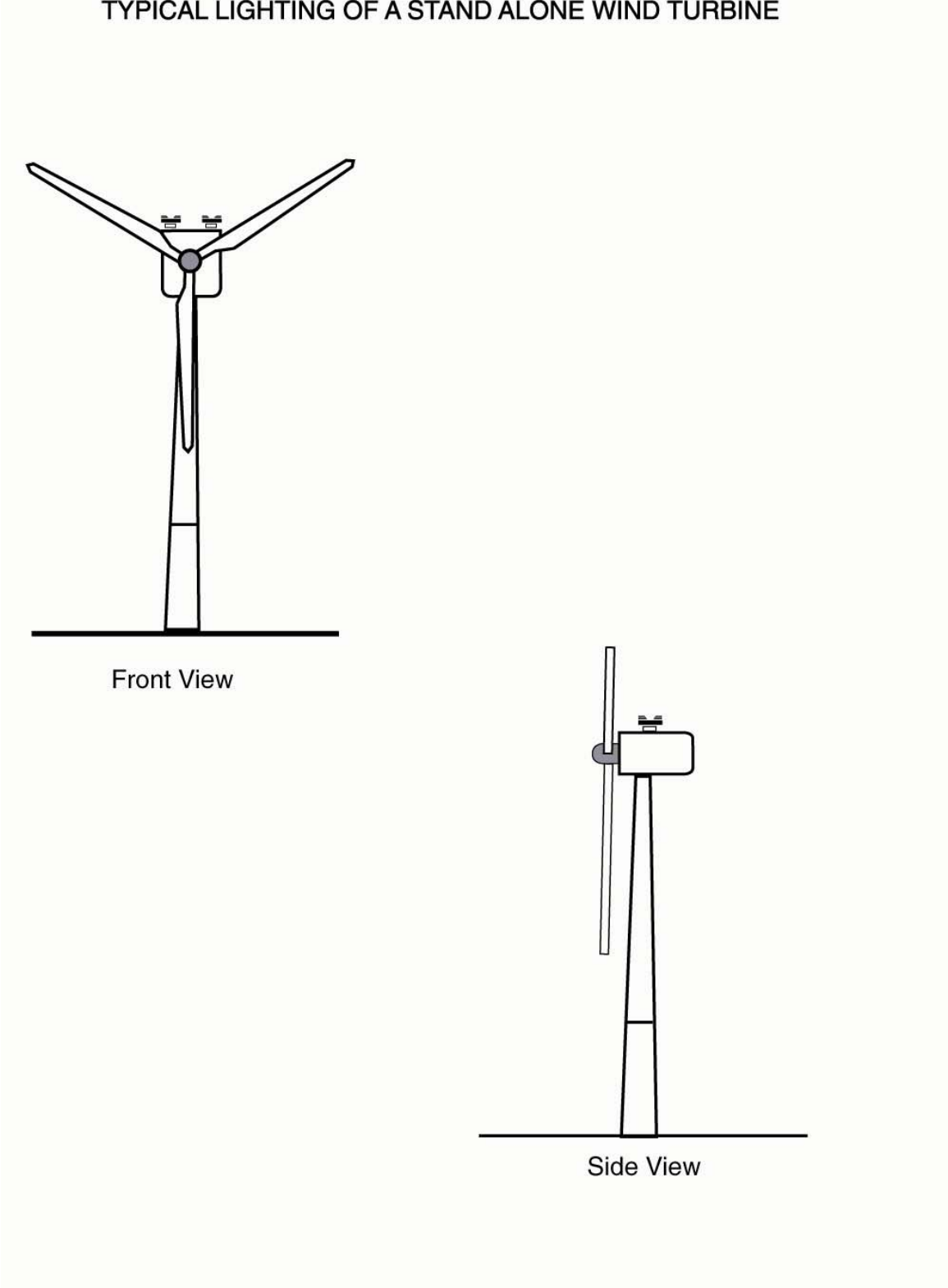


FIG 11



## WIND TURBINE GENERATOR

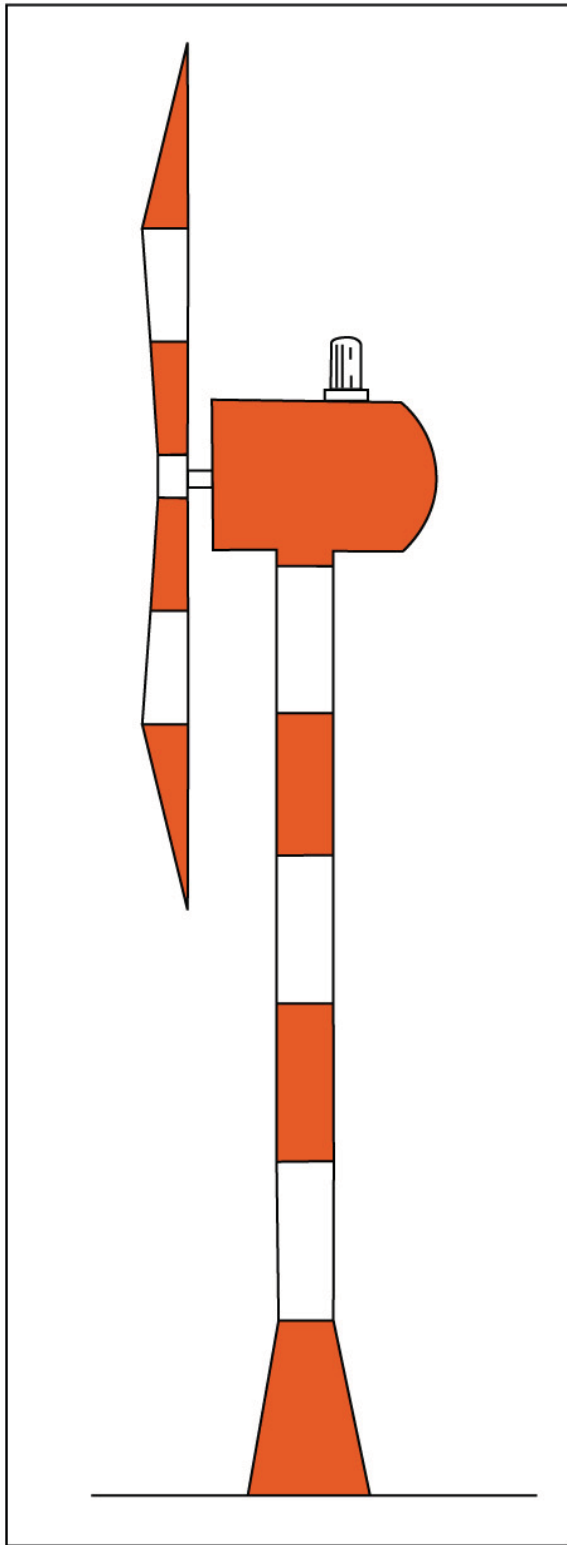


FIG 12

## RED OBSTRUCTION LIGHTING STANDARDS (FAA Style A)

Day Protection = Aviation Orange/White Paint  
Night Protection = 2,000cd Red Beacon and sidelights

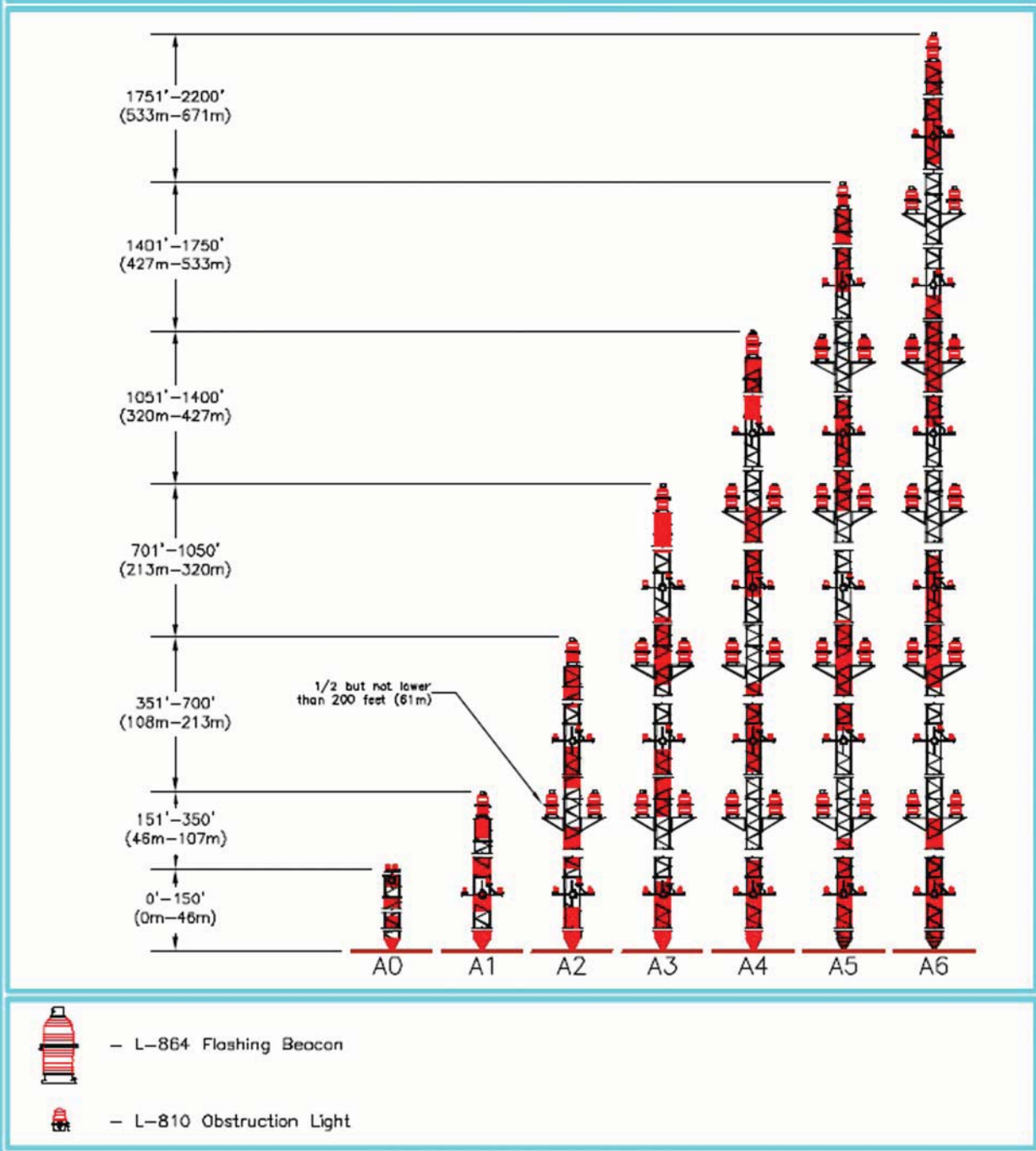


FIG 13

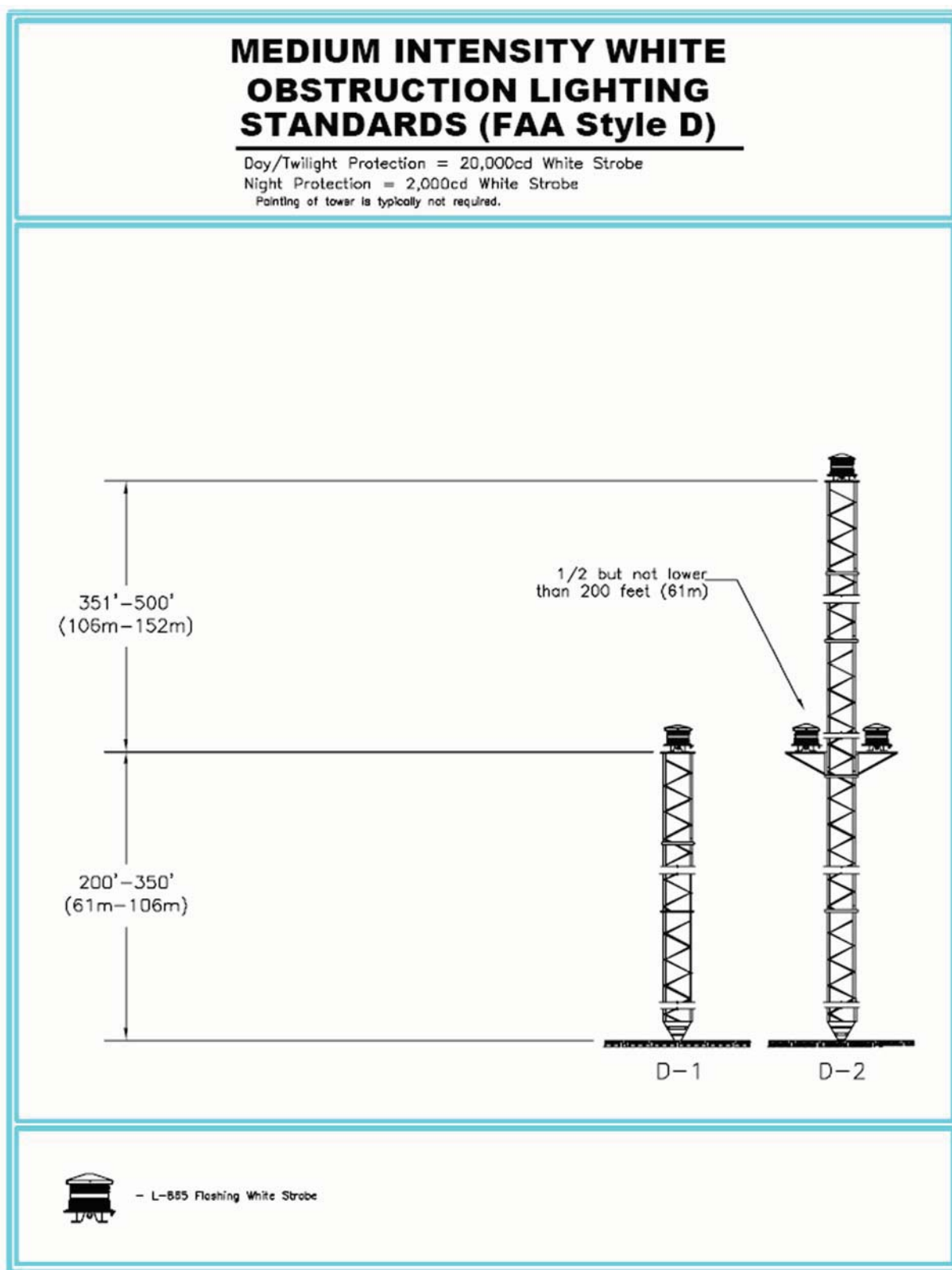


FIG 14

## HIGH INTENSITY OBSTRUCTION LIGHTING STANDARDS (FAA Style B)

Day Protection = 200,000cd White Strobe  
Twilight Protection = 20,000cd White Strobe  
Night Protection = 2,000cd White Strobe

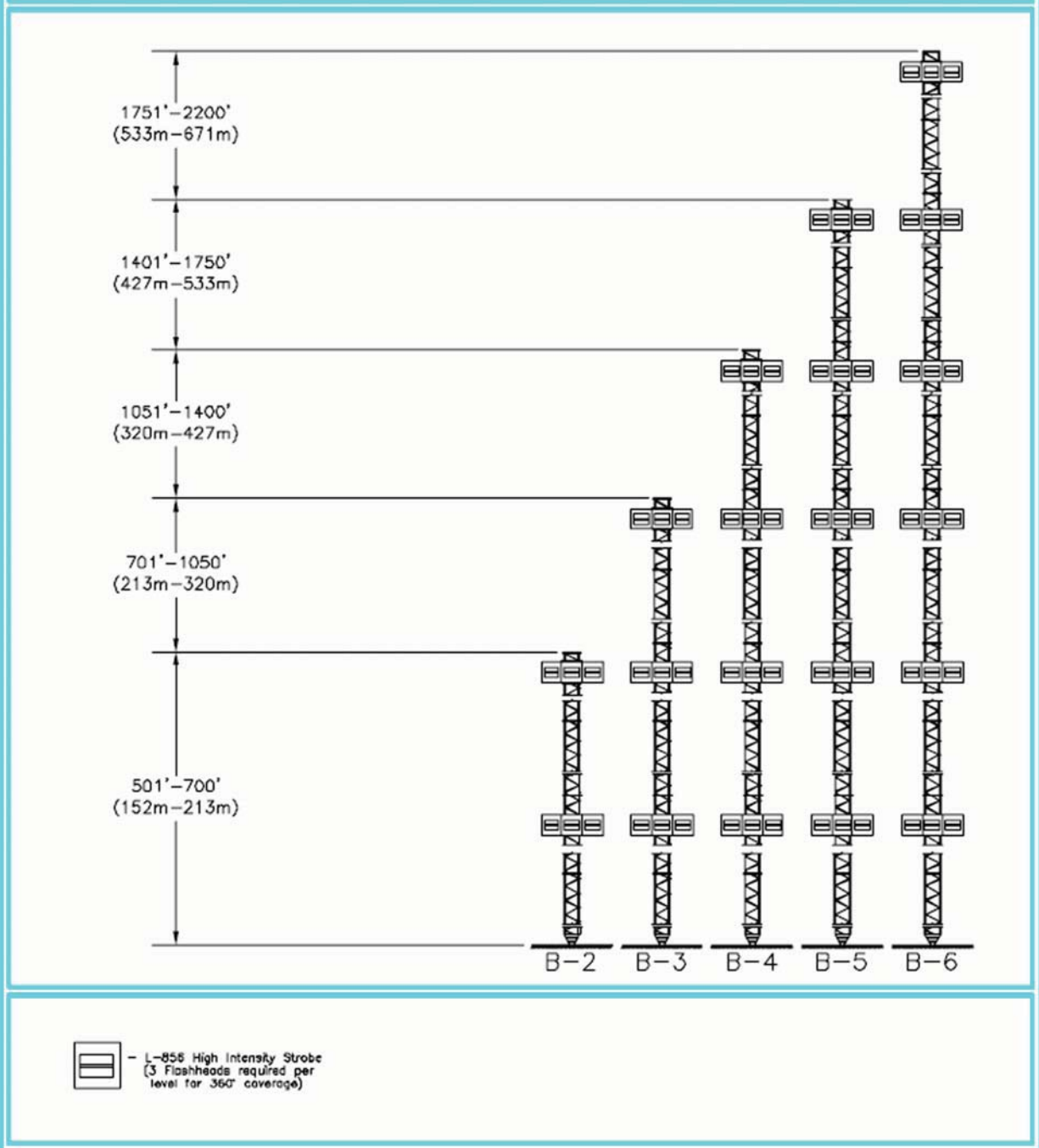
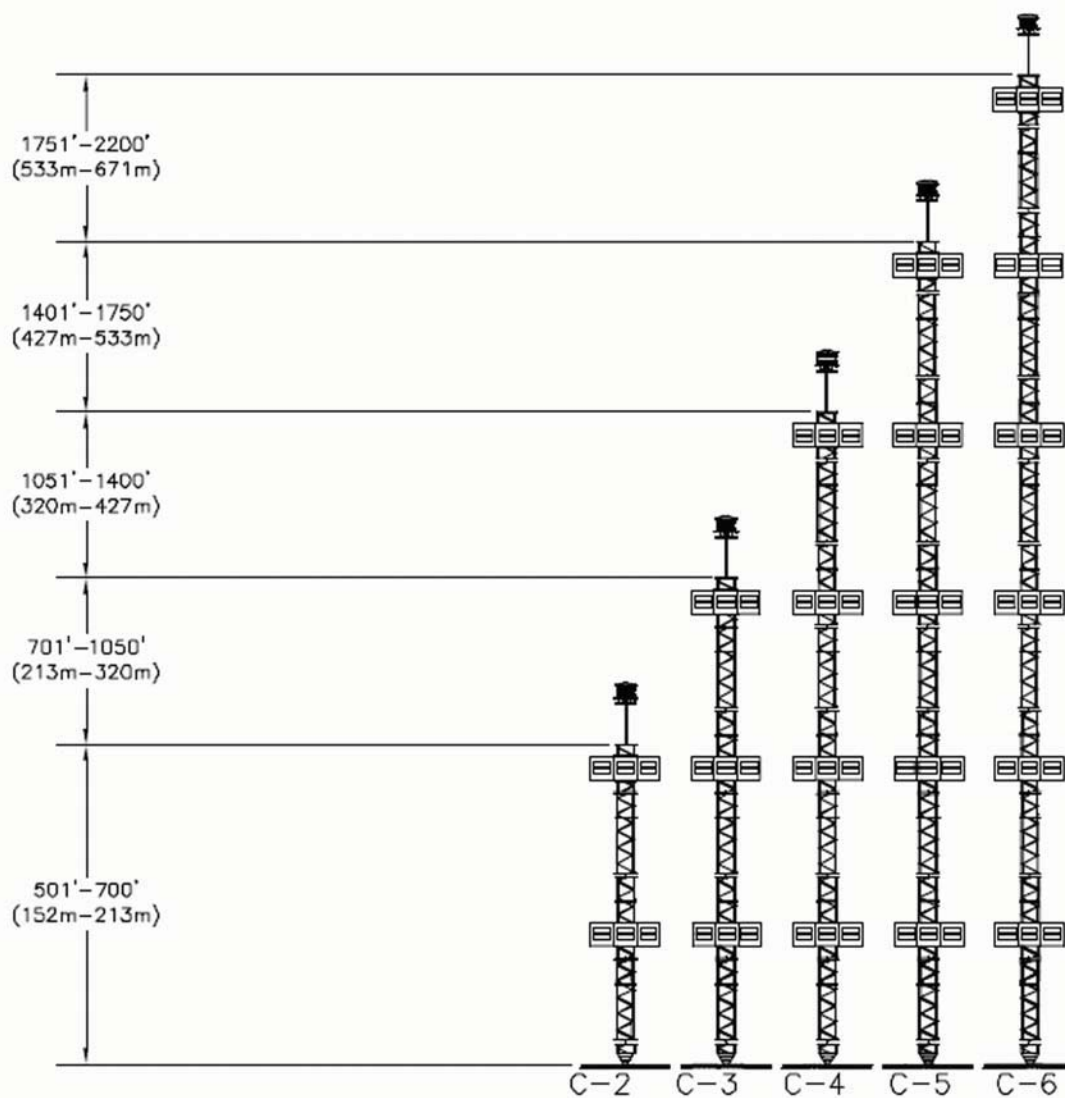


FIG 15



## HIGH INTENSITY OBSTRUCTION LIGHTING STANDARDS (FAA Style C)

Day Protection = 200,000cd White Strobe  
Twilight Protection = 20,000cd White Strobe  
Night Protection = 2,000cd White Strobe





-  - L-856 High Intensity Strobe  
(3 Flashheads required per level for 360° coverage)
-  - L-885 Medium Intensity Strobe  
required for appurtenances of 40 feet or greater.

FIG 16

## MEDIUM INTENSITY DUAL OBSTRUCTION LIGHTING STANDARDS (FAA Style E)

Day/Twilight Protection = 20,000cd White Strobe  
 Night Protection = 2,000cd Red Strobe and sidelights  
 Painting of tower is typically not required.

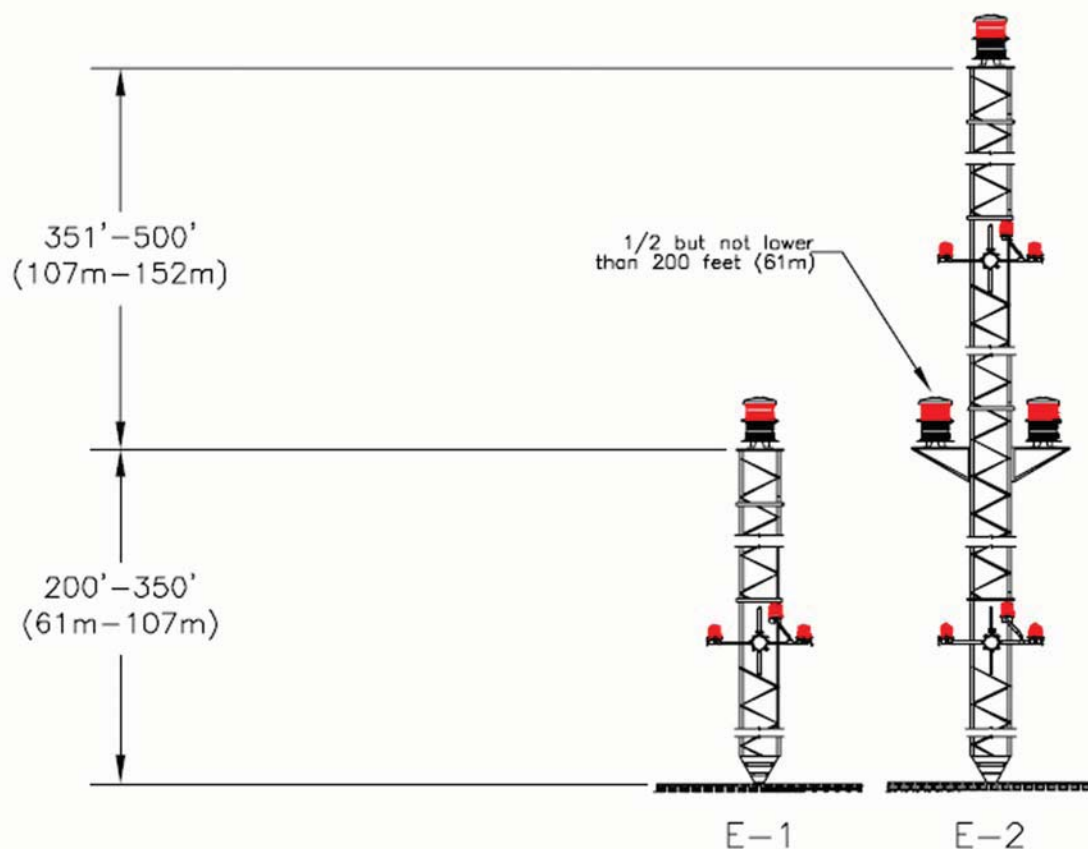


FIG 17

## DUAL HIGH INTENSITY OBSTRUCTION LIGHTING STANDARDS (FAA Style F)

Day Protection = 200,000cd White Strobe  
 Twilight Protection = 20,000cd White Strobe  
 Night Protection = 2,000cd Red Beacon and sidelights

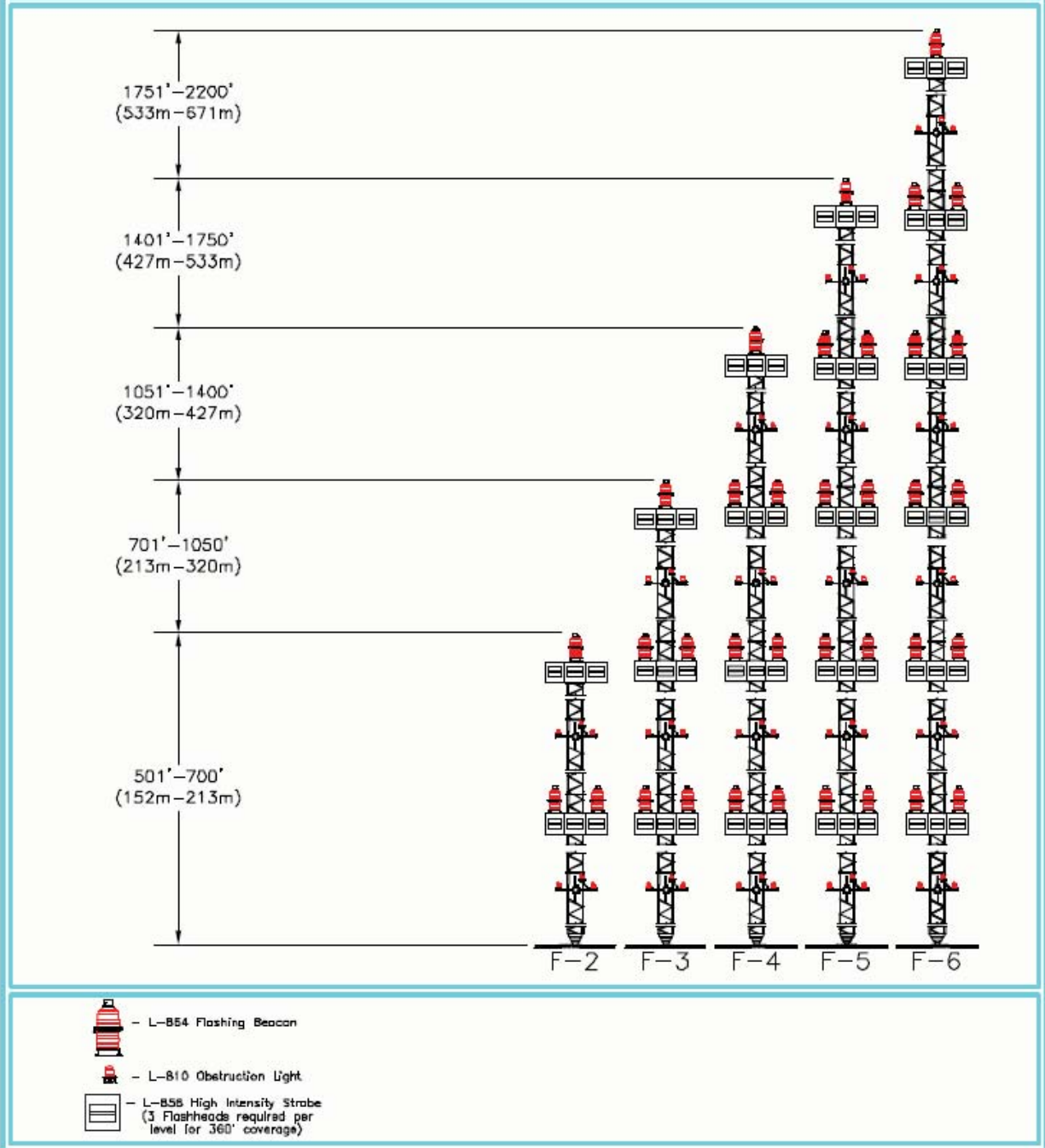


FIG 18



## APPENDIX 2. Miscellaneous

### 1. RATIONALE FOR OBSTRUCTION LIGHT INTENSITIES.

Sections 91.117, 91.119 and 91.155 of the FAR Part 91, General Operating and Flight Rules, prescribe aircraft speed restrictions, minimum safe altitudes, and basic visual flight rules (VFR) weather minimums for

governing the operation of aircraft, including helicopters, within the United States.

### 2. DISTANCE VERSUS INTENSITIES.

TBL 5 depicts the distance the various intensities can be seen under 1 and 3 statute miles meteorological visibilities:

Distance/Intensity Table

<i>Time Period</i>	<i>Meteorological Visibility Statute Miles</i>	<i>Distance Statute Miles</i>	<i>Intensity Candelas</i>
<b>Night</b>		<b>2.9 (4.7km)</b>	<b>1,500 (+/- 25%)</b>
	<b>3 (4.8km)</b>	<b>3.1 (4.9km)</b>	<b>2,000 (+/- 25%)</b>
		<b>1.4 (2.2km)</b>	<b>32</b>
<b>Day</b>		<b>1.5 (2.4km)</b>	<b>200,000</b>
	<b>1 (1.6km)</b>	<b>1.4 (2.2km)</b>	<b>100,000</b>
		<b>1.0 (1.6km)</b>	<b>20,000 (+/- 25%)</b>
<b>Day</b>		<b>3.0 (4.8km)</b>	<b>200,000</b>
	<b>3 (4.8km)</b>	<b>2.7 (4.3km)</b>	<b>100,000</b>
		<b>1.8 (2.9km)</b>	<b>20,000 (+/- 25%)</b>
<b>Twilight</b>	<b>1 (1.6km)</b>	<b>1.0 (1.6km) to 1.5 (2.4km)</b>	<b>20,000 (+/- 25%)?</b>
<b>Twilight</b>	<b>3 (4.8km)</b>	<b>1.8 (2.9km) to 4.2 (6.7km)</b>	<b>20,000 (+/- 25%)?</b>

*Note-*

1. DISTANCE CALCULATED FOR NORTH SKY ILLUMINANCE.

TBL 5

### 3. CONCLUSION.

Pilots of aircraft travelling at 165 knots (190 mph/306kph) or less should be able to see obstruction lights in sufficient time to avoid the structure by at least 2,000 feet (610m) horizontally under all conditions of operation, provided the pilot is operating in accordance with FAR Part 91. Pilots operating between 165 knots (190 mph/303 km/h) and 250 knots (288 mph/463 kph) should be able to see the obstruction lights unless the weather deteriorates to 3 statute miles (4.8 kilometers) visibility at night, during which time period 2,000 candelas would be required to see the lights at 1.2 statute miles (1.9km). A higher intensity, with 3 statute miles (4.8 kilometers) visibility at night, could generate a residential annoyance factor. In addition, aircraft in these speed ranges can normally be expected to operate under instrument flight rules (IFR) at night when the visibility is 1 statute mile (1.6 kilometers).

### 4. DEFINITIONS.

a. Flight Visibility. The average forward horizontal distance, from the cockpit of an aircraft in flight, at which prominent unlighted objects may be seen and identified by day and prominent lighted objects may be seen and identified by night.

*Reference-*

AIRMAN'S INFORMATION MANUAL  
PILOT/CONTROLLER GLOSSARY.

b. Meteorological Visibility. A term that denotes the greatest distance, expressed in statute miles, that selected objects (visibility markers) or lights of moderate intensity (25 candelas) can be seen and identified under specified conditions of observation.



**5. LIGHTING SYSTEM CONFIGURATION.**

- a. *Configuration A.* Red lighting system.
- b. *Configuration B.* High Intensity White Obstruction Lights (including appurtenance lighting).
- c. *Configuration C.* Dual Lighting System - High Intensity White & Red (including appurtenance lighting).

d. *Configuration D.* Medium Intensity White Lights (including appurtenance lighting).

e. *Configuration E.* Dual Lighting Systems - Medium Intensity White & Red (including appurtenance lighting).

*Example-*

*“CONFIGURATION B 3” DENOTES A HIGH INTENSITY LIGHTING SYSTEM WITH THREE LEVELS OF LIGHT.*

## **APPENDIX C**

### **INSURANCE REQUIREMENTS - PUBLIC WORKS CONTRACTORS**

- I. The Contractor and each of its subcontractors shall procure and maintain during the entire term of the contract the following required insurance:
  - = **Commercial General Liability Insurance**  
\$1,000,000 per occurrence/ \$2,000,000 aggregate, including coverage for liability assumed by contract, completed operations, explosion, collapse, underground hazard and products liability.
  - = **Automobile Liability**  
\$1,000,000 combined single limit for owned, hired and borrowed and non-owned motor vehicles.
  - = **Workers' Compensation**  
Statutory Workers' Compensation and Employers' Liability Insurance for all employees.
  - = **Owners & Contractors Protective Liability Insurance**  
\$2,000,000 per occurrence / \$2,000,000 aggregate.
  - = **Excess/Umbrella Liability Insurance**  
\$1,000,000 per occurrence / \$2,000,000 aggregate.
- II. Notwithstanding any terms, conditions or provisions, in any other writing between the parties, the Contractor hereby agrees to name the County as:
  - = an additional insured on the Contractor's Commercial General Liability, Automobile Liability and Excess/Umbrella Liability insurance policies on a primary non-contributory basis; and
  - = a named insured on the Owners & Contractors Protective Liability Insurance policy.
- III. The policy/policies of insurance furnished by the Contractor shall:
  - = be from an A.M. Best rated "A" New York State licensed insurer; and
  - = contain a 30-day notice of cancellation
- IV. The Contractor agrees to indemnify the County for any applicable deductibles.
- V. Contractor acknowledges that failure to obtain such insurance on behalf of the County constitutes a material breach of contract and subjects it to liability for damages, indemnification and all other legal remedies available to the County. Prior to commencement of work or use of facilities, the Contractor shall provide to the County proof that such requirements have been met by furnishing certificate(s) of such insurance, and the declarations pages from the policies of such insurance. The failure of the County to object to the contents of the certificate(s) and/or declarations pages, or the absence of same, shall not be deemed a waiver of any and all rights held by the County.
- VI. All certificates of insurance will provide 30 days notice to the County of cancellation or non-renewal.
- VII. Contractor and subcontractor waives all rights of subrogation against the owner and will have the General Liability, Umbrella Liability Workers' Compensation policies endorsed setting forth this Waiver of Subrogation.

## **APPENDIX D - STANDARD CLAUSES FOR ESSEX COUNTY CONTRACTS**

### **1. Independent Contractor Status**

The parties each acknowledge, covenant and agree that the relationship of the Contractor to the County shall be that of an independent contractor. The Contractor, in accordance with its status as an independent contractor, further covenants and agrees that it:

- (a) will conduct itself in accordance with its status as an independent contractor;
- (b) will neither hold itself out as nor claim to be an officer or employee of the County; and
- (c) will not make any claim, demand or application for any right or privilege applicable to an officer or employee of the County, including but not limited to workers' compensation benefits, unemployment insurance benefits, social security coverage or retirement membership or credits.

### **2. Contractor To Comply With Laws/Regulations**

The Contractor shall at all times comply with all applicable state and federal laws, rules and regulations governing the performance and rendition of the services to be furnished under this agreement.

### **3. Licenses, Permits, Etc.**

The Contractor shall, during the term of this agreement, obtain and keep in full force and effect any and all licenses, permits and certificates required by any governmental authority having jurisdiction over the rendition and performance of the services to be furnished by the Contractor under this agreement.

### **4. Termination**

This agreement may be terminated without cause by either party upon 30 days prior written notice, and upon such termination neither party shall have any claim or cause of action against the other except for services actually performed and mileage expenses actually incurred prior to such termination. Notwithstanding the foregoing, this agreement may be immediately terminated by the County:

- (a) for the Contractor's breach of this agreement, by serving written notice of such termination stating the nature of the breach upon the Contractor by personal delivery or by certified mail, return receipt requested, and upon such termination either party shall have such rights and remedies against the other as provided by law; or
- (b) upon the reduction or discontinuance of funding by the State or Federal governments to be used in furnishing some or all of the work, labor and/or services provided for under this agreement, and upon such termination neither party shall have any claim or cause of action against the other except for services actually performed and expenses (if the same are to be paid under this agreement) actually incurred prior to such termination.

### **5. Defense & Indemnification**

The Contractor shall defend, indemnify and hold harmless the County to the fullest extent allowed by law, and notwithstanding any insurance requirements, from and against any and all liability, losses, claims, actions, demands, damages, expenses, suits, judgments, orders, causes of action and claims, including but not limited to attorney's fees and all other costs of defense, by reason of any liability whatsoever imposed by law or otherwise upon the County for damages to person, property or of any other kind in nature, including but not limited to those for bodily injury, property damage, death arising out of or in connection with its officers, employees, agents, contractors, sub-contractors, guests or invitees negligence or its/their performance or failure to perform this agreement.

### **6. Discrimination Prohibited**

The services to be furnished and rendered under this agreement by the Contractor shall be available to any and all residents of Essex County without regard to race, color, creed, sex, religion,



national or ethnic origin, handicap, or source of payment; and under no circumstances shall a resident's financial ability to pay for the services provided be considered unless such consideration is allowed by State and/or Federal law, rule or regulation.

7. **Non-Discrimination In Employment**

The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, disability or marital status. In the event that this is a contract to be performed in whole or in part within the State of New York for (a) the construction, alteration or repair of any public building or public work, (b) for the manufacture, sale or distribution of materials, equipment or supplies, (c) for building service, the Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex or national origin:

- (1) discriminate in hiring against any citizen who is qualified and available to perform the work; or
- (2) discriminate against or intimidate any employee hired for the performance of work under this contract.

The Contractor agrees to be subject to fines of \$50.00 per person per day for any violation of this paragraph, as well as to possible termination of this contract or forfeiture of all moneys due hereunder for a second or subsequent violation.

8. **Damage/Injury To Persons & Property**

The Contractor shall promptly advise the County of all damages to property of the County or of others, or of injuries incurred by persons other than employees of the Contractor, in any manner relating, either directly or indirectly, to the performance of this agreement.

9. **Records**

The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter collectively "the Records") in accordance with the following requirements:

- (a) the Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter;
- (b) the County Auditor, State Comptroller, the Attorney General or any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the Records during normal business hours at an office of the Contractor within the State of New York, or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying.

The County shall take reasonable steps to protect from public disclosure any of the records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate County official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified and designation of said records as exempt under the statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the County's right to discovery in any pending or future litigation.

10. **Claims For Payment**

All invoices or claims for which payment is sought from the County must be submitted in accordance with the following:

- (a) each claim for payment must include
  - (1) an invoice detailing the claim,
  - (2) copies of all documentation supporting the claim,
  - (3) a properly completed County standard voucher, which includes



- (i) the County contract number under which payment is being claimed, **AND**
  - (ii) the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. *[Failure to include this number or numbers will prevent and preclude payment by the County; except that where the payee does not have such number or numbers, the payee, on the invoice or County voucher, must give the reason or reasons why the payee does not have such number or numbers and such reasons constitute a valid excuse under law.]*
- (b) Unless otherwise provided in this agreement, each claim for payment must be submitted to the County no later than 30 days after the work, labor, materials, and/or services for which payment is claimed were rendered or furnished.
- (c) Notwithstanding any other provision of this agreement, no claim for payment shall be valid, and the County shall not be liable for payment thereof, unless it is submitted to the County within 30 days of the close of the calendar year in which the work, labor, materials, and/or services for which payment is claimed were rendered or furnished.
- (d) Unless otherwise provided in this agreement, the requirements of this paragraph 10, and/or of any other provisions of this agreement which supersede the same, shall constitute conditions precedent to the County's payment obligation, and failure to comply with any or all of said requirements shall entitle the County to deny payment.
- (e) As a further condition of payment, each claim of payment shall be accompanied by a Contractor and Sub-Contractor Progress Payment Waiver, Release and Discharge, and each Final Payment shall be accompanied by a Contractor and Sub-Contractor Final Payment, Waiver and Release form. As well as a Contractor Affidavit relative to Final Payment. Copies of these forms are attached and made a part hereof.

11. **Consent**

In the event that State or Federal law requires the recipient of services to be furnished and rendered under this agreement to give his/her prior consent thereto, the contractor shall obtain such person's consent and furnish proof thereof to the County.

12. **Executory Clause**

The County shall have no liability under this contract to the Contractor or to anyone else beyond the funds appropriated and available for this contract.

13. **Public Work & Building Service Contract Requirements**

If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof:

- (a) neither the Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department; and
- (b) the Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

14. **Public Work Contracts – Hazardous Substances**

If this is a contract for public work, the Contractor agrees as follows:

- (a) the Contractor acknowledges that the County uses and/or produces various substances which may be classified as hazardous under OSHA's Hazard Communication Standard;
- (b) the Contractor recognizes the use of said substances by the County and acknowledges that the County has provided, or upon request will provide, the Contractor with a description of such substances which may be present in the area of the County's facility/facilities to which the



- Contractor may have accessed during the performance of this contract;
- (c) the Contractor acknowledges that the County has provided, or upon request will provide, suggestions for appropriate protective measures which should be observed when the Contractor is in the area of any such hazardous substances;
  - (d) the Contractor agrees to be solely responsible for providing training and information to its employees regarding any such hazardous substances, as well as of any protective measures suggested by the County;
  - (e) the Contractor agrees to be solely responsible to ensure that the Contractor's employees observe protective measures during the performance of their duties in the performance of the contract, and that all such protective measures will be at least as stringent as those suggested or which would have been suggested by the County;
  - (f) in the event that the Contractor's performance of the work under this contract requires the use of any hazardous substances, the Contractor shall notify the County in advance of bringing in and/or using such substances in or upon County property and suggest to the County appropriate measures to be observed by the County, its officers and employees, and/or the public; and
  - (g) in the event the Contractor fails in whole or in part to comply with the terms of this paragraph, the County shall have the right to interrupt the Contractor's work and/or terminate this contract, and the Contractor shall be prohibited from renewing such work until all applicable safety and health procedures and practices are implemented by the Contractor.

15. **Disputes**

Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration, but must, instead, be heard in a court of competent jurisdiction within the State of New York.

16. **Non-Assignment**

This agreement may not be assigned, subcontracted, transferred, conveyed, sublet or otherwise disposed of in whole or in part, by the Contractor, without the prior written consent of the County, and any attempts to assign the contract without the County's written consent are null and void.

17. **No Collusion**

If this contract was awarded based upon the submission of bids, the Contractor warrants, under penalty of perjury, that:

- (a) its bid was arrived at independently and without collusion aimed at restricting competition; and
- (b) at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the County a non-collusive bidding certification on Contractor's behalf.

18. **International Boycott**

In accordance with Section 220-f of the Labor Law, if this contract exceeds \$5,000.00, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation, has participated, is participating, or shall participate in an International boycott in violation of the federal Export Administration Act of 1979, or regulations thereunder. If such contractor, or any of the aforesaid affiliates of Contractor, is convicted, or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the County Manager within five (5) business days of such conviction, determination or disposition of appeal.

19. **County's Rights of Set-Off**

The County shall have all of its common law, equitable and statutory rights of set-off. These



rights shall include, but not be limited to, the County's option to withhold for the purposes of set-off any moneys due to the Contractor under this agreement up to any amounts due and owing to the County with regard to this contract, any other contract with any County department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the County for any other reason, including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The County shall exercise its set-off rights in accordance with normal County practices, including, in cases of set-off pursuant to an audit, the acceptance of such audit by the County Board of Supervisors or its designated representative.

20. **Contractor Defined**

Whenever the term "Contractor" is used in this agreement, such term shall include and apply to all employees, all officers, directors and agents, if any, of the Contractor.

21. **Amendment**

This agreement may not be amended, modified or renewed except by written agreement signed by the Contractor and the County.

22. **Ownership Of Work Products**

All final and written or tangible work products completed by the Contractor shall belong to the County. In the event of premature discontinuance of performance, the Contractor agrees to deliver all existing products and data files to the County.

23. **Executive Order Debarment/Suspension**

In the event that this contract involves the Contractor furnishing goods and services in excess of \$100,000.00, or constitutes a subaward to subrecipients, under any Federal program, grant or other funding source, then by executing this agreement the Contractor certifies that neither it nor any of its principals are suspended or debarred within the scope or meaning of Executive Orders 12549 and 12689, any Federal or State regulation implementing or codifying the same, or any other Federal or State law, rule or regulation.

24. **Health Insurance Portability and Accountability Act of 1996 (HIPAA)**

In the event that this contract involves the use or disclosure of protected health information within the meaning or application of the Health Insurance Portability and Accountability Act of 1996 (HIPAA), and the regulations thereunder, the following provisions of this paragraph shall apply.

(a) **Definitions.** The terms used, but not otherwise defined, in this Agreement shall have the same meaning as given such terms in 45 CFR §160.103 and §164.501, as the same may be amended from time to time, including but not limited to the following.

(1) "Business Associate" shall mean the Contractor, its officers, employees, agents and subcontractors.

(2) "Covered Entity" shall mean Essex County (the "County"), its departments, agencies, officers and employees.

(3) "Individual" shall have the same meaning as given such term in 45 CFR §164.501 and shall also include a person who qualifies as a personal representative in accordance with 45 CFR §164.502(g).

(4) "Privacy Rule" shall mean the Standards for Privacy of Individually Identifiable Health Information at 45 CFR Part 160 and Part 164, subparts A and E.

(5) "Protected Health Information" shall have the same meaning as given such term in 45 CFR §164.501, limited to the information created or received by Contractor from or on behalf of the County.

(6) "Required by law" shall have the same meaning as given such term in 45 CFR §164.501.



(7) "Secretary" shall mean the Secretary of the Department of Health and Human Services or his/her designee.

(b) Obligations and Activities of Contractor.

Contractor agrees to:

- (1) not use or disclose Protected Health Information other than as permitted or required by this Agreement or as required by law;
- (2) use appropriate safeguards to prevent use or disclosure of the Protected Health Information other than as provided for by this Agreement;
- (3) mitigate, to the extent practicable, any harmful effect that is known, should have been known, and/or discovered to/by Contractor of a use or disclosure of Protected Health Information by Contractor in violation of the requirements of this Agreement;
- (4) report to the County any use or disclosure of the Protected Health Information not provided for by this Agreement of which it becomes aware;
- (5) ensure that any agent, including a subcontractor, to whom it provides Protected Health Information received from, or created or received by Contractor on behalf of the County agrees to the same restrictions and conditions that apply through this Agreement to Contractor with respect to such information;
- (6) provide access, at the request of the County, and in the time and manner designated by the County or the Secretary, to Protected Health Information in a Designated Record Set, to the County or, as directed by the County, to an Individual in order to meet the requirements under 45 CFR §164.524;
- (7) make any amendment(s) to Protected Health Information in a Designated Record Set that the County directs or agrees to pursuant to 45 CFR §164.526 at the request of the County or an Individual, and in the time and manner designated by the County or the Secretary;
- (8) make internal practices, books, and records, including policies and procedures and Protected Health Information, relating to the use and disclosure of Protected Health Information received from, or created or received by Contractor on behalf of, the County available to the County, and/or to the Secretary, in a time and manner designated by the County or by the Secretary, for purposes of the Secretary determining the County's compliance with the Privacy Rule;
- (9) document such disclosures of Protected Health Information and information related to such disclosures as would be required for the County to respond to a request by an Individual for an accounting of disclosures of Protected Health Information in accordance with 45 CFR §164.528;
- (10) provide to the County or an Individual, in time and manner designated by the County or the Secretary, information collected in accordance with the above subparagraph (b)(9) of this Agreement, to permit the County to respond to a request by an Individual for an accounting of disclosures of Protected Health Information in accordance with 45 CFR §164.528.

(c) Permitted Uses and Disclosures by Contractor.

Except as otherwise limited in this Agreement, Contractor may use or disclose Protected Health Information on behalf of, or to provide services to, the persons entitled to services under this Agreement:

- (1) solely for the purposes of performing Contractor's obligations under this Agreement, if such use or disclosure of Protected Health Information would not violate the Privacy Rule if done by the County or the minimum necessary policies and procedures of the County; or
- (2) provided that such use or disclosures are required by law; or
- (3) Contractor
  - (A) obtains written authorization(s) from the individual to which the information pertains permitting the specific uses or disclosures of such information to third persons,



(B) represents and agrees in writing with such individual that the information to be used and/or disclosed will remain confidential and used or further disclosed only as required by law or for the purposes specified in the written authorization(s), and

(C) such third persons agree in writing to notify the County as soon as practicable and in writing of any instances of which such third person(s) is/are aware in which the confidentiality of the information has been breached; or

(4) provide Data Aggregation services to the County as permitted by 42 CFR §164.504(e)(2)(i)(B); or

(5) report violations of law to appropriate Federal and State authorities, consistent with §164.502(j)(1).

(d) County To Inform Contractor of Privacy Practices and Restrictions.

The County agrees to notify the Contractor of any

(1) limitation(s) in its notice of privacy practices of the County in accordance with 45 CFR §164.520, to the extent that such limitation may affect the Contractor's use or disclosure of Protected Health Information;

(2) changes in, or revocation of, permission by Individual to use or disclose Protected Health Information, to the extent that such changes may affect the Contractor's use or disclosure of Protected Health Information; and/or

(3) restriction to the use or disclosure of Protected Health Information that the County has agreed to in accordance with 45 CFR §164.522, to the extent that such restriction may affect Contractor's use or disclosure of Protected Health Information.

(e) Permissible Requests by County.

The County shall not request Contractor to use or disclose Protected Health Information in any manner that would not be permissible under the Privacy Rule if done by the County; except that in the event that the services to be furnished by the Contractor under this Agreement requires data aggregation by the Contractor, the Contractor may use or disclose protected health information for such data aggregation or management and administrative activities of Contractor.

(f) Survival of Provisions.

The obligations of the Contractor under this paragraph 24 shall survive the expiration of the term of this Agreement and/or the termination of this Agreement, and said obligations shall remain effective and shall not terminate until all of the Protected Health Information provided by the County to Contractor, or created or received by Contractor on behalf of the County, is destroyed or returned to the County, or, if it is infeasible to return or destroy Protected Health Information, protections are extended to such information, in accordance with the termination provisions in subparagraph (g) below.

(g) Return or Destruction of Protected Health Information.

Except as otherwise provided below, upon termination of this Agreement for any reason, Contractor shall return or destroy all Protected Health Information received from the County, or created or received by Contractor on behalf of the County. This provision shall apply to Protected Health Information that is in the possession of subcontractors or agents of Contractor. Contractor shall retain no copies of the Protected Health Information.

In the event that Contractor determines that returning or destroying the Protected Health Information is infeasible, Contractor shall provide to the County notification of the conditions that make return or destruction infeasible. Upon determination by the County that return or destruction of Protected Health Information is infeasible, Contractor shall extend the protections of this Agreement to such Protected Health Information and limit further uses and disclosures of such Protected Health Information to those purposes that make the return or destruction infeasible, for so long as Contractor maintains such Protected Health Information.



(h) Termination for Cause.

Upon the County's knowledge of a material breach of this paragraph by Contractor, the County shall:

- (1) either:
  - (A) provide an opportunity for Contractor to cure the breach or end the violation and terminate this Agreement within the time specified by the County, or
  - (B) immediately terminate this Agreement if cure is not possible; and
- (2) report the violation to the Secretary.

(I) Miscellaneous.

- (1) Regulatory References. A reference in this Agreement to a section in the Privacy Rule means the section as in effect or as amended.
- (2) Amendment. The Parties agree to take such action as is necessary to amend this Agreement from time to time as is necessary for the County to comply with the requirements of the Privacy Rule and the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191.
- (3) Survival. The respective rights and obligations of Contractor under this paragraph 24 of this Agreement shall survive the termination of this Agreement.
- (4) Interpretation. Any ambiguity in this Agreement shall be resolved to permit the County to comply with the Privacy Rule.

25. Severability

If any term or provision of this agreement or the application thereof to any person or circumstance shall to any extent be held invalid or unenforceable, the remainder of this agreement or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and every other term and provision of this agreement shall be valid and be enforced to the fullest extent permitted by law.

26. Entire Agreement

This agreement is the entire agreement between the parties, and the same shall be construed in accordance with the laws of the State of New York.

27. For Medicaid/Federal Health Care Related Work

**Excluded/Debarred Party Clause**

The Vendor/Contractor represents and warrants that it, nor its employees or contractors, are not excluded from participation, and is not otherwise ineligible to participate, in a "federal health care program" as defined in 42 U.S.C. § 1320a-7b(f) or in any other government payment program.

In the event Vendor/Contractor, or one of its employees or contractors, is excluded from participation, or becomes otherwise ineligible to participate in any such program during the Term, Vendor/Contractor will notify Essex County in writing within three (3) days after such event. Upon the occurrence of such event, whether or not such notice is given to the Vendor/Contractor, Essex County reserves the right to immediately cease contracting with the Vendor/Contractor.

If Vendor/Contractor is an Employment Agency, the Vendor/Contractor represents and warrants that its employees and contractors are not excluded from participation in a "federal health care program" as defined in 42 U.S.C. § 1320a-7b(f) or debarred from participation in any federal or other program. The Vendor/Contractor further represents and warrants it will, at a minimum, check monthly all of its employees and subcontractors against:

- The General Services Administration's Federal Excluded Party List System (or any successor



system,

- The United States Department of Health and Human Service's Office of the Inspector General's Lists of Excluded Individuals and Entities or any successor list,
- The New York State Department of Health's Office of the Medicaid Inspector General's list of Restricted, Terminated or Excluded Individuals or Entities.

In the event an excluded party is discovered the Vendor/Contractor will notify Essex County in writing within three (3) days after such event.

Upon the occurrence of such event, whether or not such notice is given to the Vendor/Contractor, Essex County reserves the right to immediately cease contracting with the Vendor/Contractor.

CONTRACTOR PROGRESS PAYMENT WAIVER, RELEASE AND DISCHARGE

PROJECT: \_\_\_\_\_

OWNER: ESSEX COUNTY

CONTRACTOR: \_\_\_\_\_

WITNESSETH:

The above-named Contractor, hereinafter referred to as the "Releasor", does, for and on behalf of itself, its' successors, assigns and all parties claiming any interest or right through the Releasor, hereby warrant, covenant and agree as follows:

1. Releasor is/was a Contractor relative to the above-referenced Project pursuant to a contract or other relationship for the performing and/or furnishing of work, labor, services, materials and/or equipment at the Project site or to be incorporated in said Project.

2 Whenever the term "Releasor" is used in this instrument such term shall mean: (a) the above-named Contractor, its, successors and assigns; (b) any and all sureties and all other guarantors of the Releasor on any payment, performance, labor and/or material bond or other undertaking; (c) all parties claiming any interest or right through the Releasor, including but not limited to subcontractors and suppliers; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

3. Whenever the term "Releasees" is used in this instrument such term shall mean: (a) the above-named Owner, its' successors and assigns; (b) the Project Architect/Engineer; and (c) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a) and (b).

4. For and in consideration of the sum of \$\_\_\_\_\_, and other good and valuable consideration, which sum is acknowledged as being the full and total amount due or allegedly due or owing from the Releasees to the Releasor as of the date hereof, and the receipt of such payment being hereby acknowledged, the Releasor does waive, release and discharge the Releasees from any and all causes of action, suits, debts, claims, liens, accounts, bonds, contracts, damages, encumbrances, judgments and demands whatsoever and of every kind and nature, in law or in equity, which against the Releasees, jointly and/or severally, the Releasor ever had, now has, or might hereafter have, relating directly or indirectly to the work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or incorporated or to be incorporated in said Project, as of the date hereof, including but not in any manner limited to the right of the Releasor to assert, file or claim any lien or other security interest in or upon the real and/or personal property of the Releasees.

5. The Releasor hereby agree to defend, indemnify, and hold harmless the Releasees from any and all damages, costs, expenses, demands, suits, liens and legal fees, directly or indirectly relating to any claim for compensation by any other party for work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or which

should have been so furnished or performed, or incorporated or to be incorporated in said Project, as of the date hereof, by the Releasor or by any other party claiming any interest or right through the Releasor.

6. The Releasor hereby certifies and warrants that it has fully paid for all work, labor, services, materials and/or equipment provided to it in connection with the Project and/or any contract relating thereto.

7. The Releasor hereby grants to the Releasees the right to review and audit any and books and records of the Releasor at any time for verification.

**IN WITNESS WHEREOF** this instrument has been executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Releasor

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

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

STATE OF NEW YORK     )  
  ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, being duly sworn, depose and say that: I reside at \_\_\_\_\_, and I hereby sign this instrument under penalty of perjury; I am the of the Releasor identified herein; I am fully authorized to execute this instrument on behalf of the Releasor; and I hereby affirm that the statements contained in this instrument are true and correct.

\_\_\_\_\_

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public



CONTRACTOR FINAL PAYMENT WAIVER, RELEASE AND DISCHARGE

PROJECT: \_\_\_\_\_

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

WITNESSETH:

The above-named Contractor, hereinafter referred to as the "Releasor", does, for and on behalf of itself, its' successors, assigns and all parties claiming any interest or right through the Releasor, hereby warrants, covenants and agrees as follows:

1. Releasor is/was a Contractor relative to the above-referenced Project pursuant to a contract or other relationship for the performing and/or furnishing of work, labor, services, materials and/or equipment at the Project site or to be incorporated in said Project.

2 Whenever the term "Releasor" is used in this instrument such term shall mean: (a) the above-named Contractor, its, successors and assigns; (b) any and all sureties and all other guarantors of the Releasor on any payment, performance, labor and/or material bond or other undertaking; (c) all parties claiming any interest or right through the Releasor, including but not limited to subcontractors and suppliers; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

3. Whenever the term "Releasees" is used in this instrument such term shall mean: (a) the above-named Owner, its' successors and assigns; (b) Essex County, its agencies and departments (including but not limited to its Office for the Aging); and (c) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a) and (b).

4. For and in consideration of the sum of \$\_\_\_\_\_, and other good and valuable consideration, which sum is acknowledged as being the full, final and total amount due or allegedly due or owing from the Releasees to the Releasor as of the date hereof, and the receipt of such payment being hereby acknowledged, the Releasor does waive, release and discharge the Releasees from any and all causes of action, suits, debts, claims, liens, accounts, bonds, contracts, damages, encumbrances, judgments and demands whatsoever and of every kind and nature, in law or in equity, which against the Releasees, jointly and/or severally, the Releasor ever had, now has, or might hereafter have, relating directly or indirectly to the work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or incorporated or to be incorporated in said Project, as of the date hereof, including but not in any manner limited to the right of the Releasor to assert, file or claim any lien or other security interest in or upon the real and/or personal property of the Releasees.

5. The Releasor hereby agree to defend, indemnify, and hold harmless the Releasees from any and all damages, costs, expenses, demands, suits, liens and legal fees, directly or indirectly relating to any claim for compensation by any other party for work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or which

should have been so furnished or performed, or incorporated or to be incorporated in said Project, as of the date hereof, by the Releasor or by any other party claiming any interest or right through the Releasor.

6. The Releasor hereby certifies and warrants that it has fully paid for all work, labor, services, materials and/or equipment provided to it in connection with the Project and/or any contract relating thereto.

7. The Releasor hereby grants to the Releasees the right to review and audit any and books and records of the Releasor at any time for verification.

**IN WITNESS WHEREOF** this instrument has been executed this \_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By \_\_\_\_\_

STATE OF NEW YORK, COUNTY OF ESSEX)ss:

I, \_\_\_\_\_, being duly sworn, depose and say that: I reside at \_\_\_\_\_, and I hereby sign this instrument under penalty of perjury; I am the of the Releasor identified herein; I am fully authorized to execute this instrument on behalf of the Releasor; and I hereby affirm that the statements contained in this instrument are true and correct.

\_\_\_\_\_

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public



**CONTRACTORS AFFIDAVIT RELATIVE TO FINAL PAYMENT**

PROJECT: \_\_\_\_\_

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

**WITNESSETH:**

The herein below designated representative of the Contractor being duly sworn deposes and states:

1. He is duly authorized to sign this Affidavit on behalf of the Contractor.
2. That all payrolls, bills for materials and equipment, and other indebtedness connection with the work for which the County or the County's property might be responsible or encumbered have been paid or otherwise satisfied and there remain no further indebtedness or bills outstanding.
3. Attached hereto and made a part hereof is a valid certificate of insurance evidencing that insurance required by the contract documents will remain in full force after final payment is currently in effect and will not be cancelled or allowed to expire until at least 30 days prior written notice has been given to the owner.
4. Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the contract documents.
5. Attached hereto and made a part hereof at Schedule B is a detailed list of all sub-contractors and material suppliers.
6. Contractor warrants and represents that all sub-contractors, material suppliers and fringe benefit trust funds for employees of contractor and sub-contractors on the portion of the project encompassed by the work, as well as all workers and persons employed in connection therewith have been paid in full for all labor and work and materials furnished.
7. Contractor releases and waives any and all public improvement lien rights which contractor has against the County.

**IN WITNESS WHEREOF**, deponent has executed this document on \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Contractor

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

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

STATE OF NEW YORK        )  
  ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, being duly sworn, depose and say that: I reside at \_\_\_\_\_  
\_\_\_\_\_, and I hereby sign this instrument under penalty of perjury; I am the  
of the Releasor identified herein; I am fully authorized to execute this instrument on behalf of the  
Releasor; and I hereby affirm that the statements contained in this instrument are true and correct.

\_\_\_\_\_  
Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public

SUBCONTRACTOR/SUPPLIER PROGRESS PAYMENT  
WAIVER, RELEASE AND DISCHARGE

PROJECT: \_\_\_\_\_

OWNER:        ESSEX COUNTY

CONTRACTOR: \_\_\_\_\_

SUBCONTRACTOR/SUPPLIER: \_\_\_\_\_

W I T N E S S E T H :

The above-named Subcontractor/Supplier, hereinafter referred to as the "Releasor", does, for and on behalf of itself, its, successors, assigns and all parties claiming any interest or right through the Releasor, hereby warrants, covenants and agrees as follows:

1.        Releasor is/was a subcontractor/supplier to the Contractor above-named relative to the above-referenced Project pursuant to a contract or other relationship for the performing and/or furnishing of work, labor, services, materials and/or equipment at the Project site or to be incorporated in said Project.

2.        Whenever the term "Releasor" is used in this instrument such term shall mean: (a) the above-named Subcontractor/Supplier, its' successors and assigns; (b) any and all sureties and all other guarantors of the Releasor on any payment, performance, labor and/or material bond or other undertaking; (c) all parties claiming any interest or right through the Releasor; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

3.        Whenever the term "Releasees" is used in this instrument such term shall mean: (a) the above-named Contractor and all of its, sureties and other guarantors on any payment, performance, labor and/or material bond or other undertaking; (b) the abovenamed Owner, its, successors and assigns; (c) the Project Architect/Engineer; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

4.        For and in consideration of the sum of \$ \_\_\_\_\_, and other good and valuable consideration, which sum is acknowledged as being the full and total amount due or allegedly due or owing from the Releasees to the Releasor as of the date hereof, and the receipt of such payment being hereby acknowledged, the Releasor does waive, release and discharge the Releasees from any and all causes of action, suits, debts, claims, liens, accounts, bonds, contracts, damages, encumbrances, judgments and demands whatsoever and of every kind and nature, in law or in equity, which against the Releasees, jointly and/or severally, the Releasor ever had, now has, or might hereafter have, relating directly or indirectly to the work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or incorporated or to be incorporated in said Project, as of the date hereof, including but not in any manner limited to the right of the Releasor to assert, file or claim any lien or other security interest in or upon the real and/or personal property of the Releasees.

5.        The Releasor hereby agree to defend, indemnify, and hold harmless the Releasees from any and all damages, costs, expenses, demands, suits, liens and legal fees, directly or indirectly relating to any claim for compensation by any other party for work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or which should have been so furnished or performed, or incorporated or to be incorporated in said Project, as of the date hereof, by the Releasor or by any other party claiming any interest or right through the Releasor.



6. The Releasor hereby certifies and warrants that it has fully paid for all work, labor, services, materials and/or equipment provided to it in connection with the Project and/or any contract relating thereto.

7. The Releasor hereby grants to the Releasees the right to review and audit any and books and records of the Releasor at any time for verification.

IN WITNESS WHEREOF this instrument has been executed this \_\_\_\_ day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Releasor

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

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

STATE OF NEW YORK        )  
                                      ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, being duly sworn, depose and say that: I reside at \_\_\_\_\_, and I hereby sign this instrument under penalty of perjury; I am the of the Releasor identified herein; I am fully authorized to execute this instrument on behalf of the Releasor; and I hereby affirm that the statements contained in this instrument are true and correct.

\_\_\_\_\_  
Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 2006.

\_\_\_\_\_  
Notary Public

SUBCONTRACTOR/SUPPLIER FINAL WAIVER, RELEASE AND DISCHARGE

PROJECT: \_\_\_\_\_

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

SUBCONTRACTOR/SUPPLIER: \_\_\_\_\_

W I T N E S S E T H :

The above-named Subcontractor/Supplier, hereinafter referred to as the "Releasor", does, for and on behalf of itself, its, successors, assigns and all parties claiming any interest or right through the Releasor, hereby warrants, covenants and agrees as follows:

1. Releasor is/was a subcontractor/supplier to the Contractor above-named relative to the above-referenced Project pursuant to a contract or other relationship for the performing and/or furnishing of work, labor, services, materials and/or equipment at the Project site or to be incorporated in said Project.

2. Whenever the term "Releasor" is used in this instrument such term shall mean: (a) the above-named Subcontractor/Supplier, its' successors and assigns; (b) any and all sureties and all other guarantors of the Releasor on any payment, performance, labor and/or material bond or other undertaking; (c) all parties claiming any interest or right through the Releasor; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

3. Whenever the term "Releasees" is used in this instrument such term shall mean: (a) the above-named Contractor and all of its, sureties and other guarantors on any payment, performance, labor and/or material bond or other undertaking; (b) the abovenamed Owner, its, successors and assigns; (c) the Project Architect/Engineer; and (d) the respective officers, directors, principals, shareholders, agents, employees and attorneys of (a), (b) and (c).

4. For and in consideration of the sum of \$ \_\_\_\_\_, and other good and valuable consideration, which sum is acknowledged as being the full, final and total amount due or allegedly due or owing from the Releasees to the Releasor as of the date hereof, and the receipt of such payment being hereby acknowledged, the Releasor does waive, release and discharge the Releasees from any and all causes of action, suits, debts, claims, liens, accounts, bonds, contracts, damages, encumbrances, judgments and demands whatsoever and of every kind and nature, in law or in equity, which against the Releasees, jointly and/or severally, the Releasor ever had, now has, or might hereafter have, relating directly or indirectly to the work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or incorporated or to be incorporated in said Project, as of the date hereof, including but not in any manner limited to the right of the Releasor to assert, file or claim any lien or other security interest in or upon the real and/or personal property of the Releasees.

5. The Releasor hereby agree to defend, indemnify, and hold harmless the Releasees from any and all damages, costs, expenses, demands, suits, liens and legal fees, directly or indirectly relating to any claim for compensation by any other party for work, labor, services, materials and/or equipment furnished and/or performed at the Project site, or which should have been so furnished



or performed, or incorporated or to be incorporated in said Project, as of the date hereof, by the Releasor or by any other party claiming any interest or right through the Releasor.

6. The Releasor hereby certifies and warrants that it has fully paid for all work, labor, services, materials and/or equipment provided to it in connection with the Project and/or any contract relating thereto.

7. The Releasor hereby grants to the Releasees the right to review and audit any and books and records of the Releasor at any time for verification.

**IN WITNESS WHEREOF** this instrument has been executed this \_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Releasor

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

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

STATE OF NEW YORK        )  
  ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, being duly sworn, depose and say that: I reside at \_\_\_\_\_, and I hereby sign this instrument under penalty of perjury; I am the \_\_\_\_\_ of the Releasor identified herein; I am fully authorized to execute this instrument on behalf of the Releasor; and I hereby affirm that the statements contained in this instrument are true and correct.

Sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Notary Public



## ***ESSEX COUNTY***

### ***Office of the Purchasing Agent***

100 Court Street, P.O. Box 217  
Elizabethtown, NY 12932  
518-873-3330/Fax 518-873-3339

## **GENERAL SPECIFICATIONS FOR PROCUREMENT CONTRACTS**

Adopted May 20, 1999.

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**PART I**  
***General Provisions***

**1. APPLICABILITY** The terms and conditions set forth herein are expressly incorporated in and applicable to all procurements and resulting procurement contracts let by the Office of the Essex County Purchasing Agent where incorporated by reference in its Bid Documents. The provisions herein shall govern such procurement or contract unless expressly modified or amended by the terms of a Bid Specifications, or a negotiated Contract/Clarification document, if any. Captions are intended as descriptive and are not intended to limit or otherwise restrict the terms and conditions set forth herein.

**2. GOVERNING LAW** The laws of the State of New York shall govern and apply to the procurement, any resulting contract and for determinations in a court of competent jurisdiction in New York of any and all disputes, litigation or interpretations arising from or connected with the procurement or contract, except where expressly superseded in a specific contract letting or where the Federal supremacy clause requires otherwise. These specifications are modeled after and upon the specifications developed and used by the New York State Office of General Services for procurements by New York State.

**3. APPENDIX A / INSURANCE** The mandatory terms for all Essex County contracts are expressly incorporated herein and in all bid documents and/or resulting contracts, such terms being set forth in Appendix A (*Standard Clauses for Essex County Contracts*). Insurance requirements are also attached and incorporated herein.

**4. ETHICS COMPLIANCE** All Bidders/Contractors and their employees must comply with the requirements of the *General Municipal Law*, the *Public Officers Law*, and other State codes, rules and regulations establishing ethical standards for the conduct of business with New York State and/or municipalities. In signing the bid, Bidder certifies full compliance with those provisions for any present or future dealings, transactions, sales, contracts, services, offers, relationships, etc., involving Essex County and/or its employees. Failure to comply with those provisions may result in disqualification from the bidding process, termination of contract, and/or other civil or criminal proceedings as required by law.

**5. CONFLICT OF CLAUSES** Conflicts between procurement or contract documents shall be resolved in the following order of precedence:

(a) **Appendix A** (*Standard Clauses for Essex County Contracts*)

(b) **Contract/Clarification Documents** Writing(s) setting forth the final agreements, clarifications, terms, statement of work and/or modifications between the Bid Documents and Contractors Bid or Mini-bid.

(c) **Bid Documents** - Bid Specifications prepared by Essex County

(d) **Contractors Bid or Proposal**

## 6. DEFINITIONS

Terms used in this document shall have the following meanings:

**AGENCY OR AGENCIES** Essex County, New York, acting by or through one or more departments, boards, commissions, offices or institutions of Essex County.

**ANCILLARY PRODUCT:** Product which is purchased or licensed on a restricted use basis in conjunction with the principal manufacturers Product being acquired (e.g. may be used only in combination, or by educational institutions for research use).

**AUTHORIZED USER(S)** Agencies, or any other entity authorized by Essex County to participate in Essex County procurement contracts (including but not limited to political subdivisions, public authorities, school districts and public benefit corporations), provided that each such Agency or other entity shall be held solely responsible for liabilities or payments due as a result of its participation. The term "Authorized User" shall include "Licensees."

**BID OR BID PROPOSAL** An offer or proposal submitted by a Bidder to furnish a described product or a solution or means of achieving a practical end, at a stated price for the stated contract term.

**BIDDER** Any individual or other legal entity, (including but not limited to partnership, firm or corporation) which submits a bid in response to a Bid Solicitation. The term Bidder shall also include "offeror" and/or "contractor".

**BID DOCUMENTS** Writings setting forth the scope, terms, conditions and technical specifications for a procurement of Product. Such writings typically include, but are not limited to: Invitation for Bids (IFB), Request for Quotation (RFQ), Request for Proposals (RFP), addenda or amendments thereto, and terms and conditions which are incorporated by reference, e.g. Appendix A (*Standard Clauses for NYS Contracts*), Appendix B, (*General Specifications*). Where these General Specifications are incorporated in negotiated contracts which have not been competitively bid, the term "Bid Documents" shall be deemed to refer to the terms and conditions set forth in the negotiated contract.

**BID SOLICITATION** The notice or advertisement of an intent to purchase a specified Product by or on behalf of Authorized User(s).

**BID SPECIFICATION** A written description drafted by Essex County or an authorized user setting forth the specific terms of the intended procurement, which may include: physical or functional characteristics, the nature of a commodity or construction item, any description of the work to be performed, Products to be provided, the necessary qualifications of the Bidder, the capacity and capability of the Bidder to successfully carry out the proposed contract, or the process for achieving specific results and/or anticipated outcomes or any other requirement necessary to perform work. Where these *General Specifications* are incorporated in negotiated contracts which have not been

competitively bid, the term "Bid Specifications" shall be deemed to refer to the terms and conditions set forth in the negotiated contract.

**CONTRACT** The writing(s) which contain the agreement of the Commissioner and the Bidder/Contractor setting forth the total legal obligation between the parties as determined by applicable rules of law.

**CONTRACT AWARD NOTIFICATION** An announcement to Authorized Users that a contract has been established.

**CONTRACTOR** Any successful Bidder(s) to whom a contract has been awarded by the Purchasing Agent. The term "Contractor" includes Licensors.

**COUNTY** Essex County, New York.

**EMERGENCY** An urgent and unexpected requirement where health and public safety or the conservation of public resources is at risk.

**ERROR CORRECTIONS** Machine executable software code furnished by Contractor which corrects the Product so as to conform to the applicable warranties, performance standards and/or obligations of the Contractor.

**GROUP** A classification of Product (commodities, services or technology).

**INVITATION FOR BIDS (IFB)** A type of Bid Document which is most typically used where requirements can be stated and award will be made to the lowest responsive bid submitted by the most responsible Bidder(s).

**LATE BID** For purposes of bid openings held and conducted by the Essex County Purchasing Agent, a bid not received in such place as may be designated on the Bid Specifications or in the Office of the Essex County Purchasing Agent, at or before the date and time established in the Bid Specifications for the bid opening.

**LETTER OF ACCEPTANCE** A letter to the successful Bidder(s) indicating acceptance of its bid in response to a solicitation. Unless otherwise specified, the issuance of a Letter of Acceptance forms a contract but is not an order for Product, and Contractor should not take any action with respect to actual contract deliveries except on the basis of Purchase Orders sent from Authorized User(s).

**LICENSED SOFTWARE** Software transferred upon the terms and conditions set forth in the Contract. "Licensed Software" includes ancillary products, error corrections, upgrades, enhancements or new releases, and any deliverables due under a maintenance or service contract (e.g. patches, fixes, PTFs, programs, code or data conversion, or custom programming).

**LICENSEE** The County, or one or more Agencies or Authorized Users who acquire



Product from Contractor by execution of a license in accordance with the terms and conditions of the Contract; provided that, for purposes of compliance with an individual license, the term "Licensee" shall be deemed to refer separately to the individual Authorized User(s) on whose behalf the license was executed who took receipt of the Product, and who shall be solely responsible for performance and liabilities incurred.

**LICENSOR** A Contractor who transfers rights in proprietary Product to Authorized Users in accordance with the rights and obligations specified in the Contract.

**MULTIPLE AWARD** A determination and award of a contract in the discretion of the Purchasing Agent to more than one responsive and responsible Bidder who meets the requirements of a specification, where the multiple award is made on the grounds set forth in the Bid Document in order to satisfy multiple factors and needs of Authorized Users (e.g., complexity of items, various manufacturers, differences in performance required to accomplish or produce required end results, production and distribution facilities, price, compliance with delivery requirements, geographic location or other pertinent factors).

**NEW PRODUCT RELEASES (Product Revisions)** Any commercially released revisions to the version of a Product as may be generally offered and available to Authorized Users. New releases involve a substantial revision of functionality from a previously released version of the Product.

**PROCUREMENT RECORD** Documentation by the Essex County Purchasing Agent of the decisions made and approach taken during the procurement process.

**PRODUCT** A deliverable under any Bid or Contract which may include commodities (including printing), services and/or technology. The term "Product" includes Licensed Software.

**PURCHASE ORDER** The County's fiscal form or format which is used when making a purchase.

**REQUEST FOR PROPOSALS (RFP)** A type of Bid Document which is used for procurements where factors in addition to cost are considered and weighted in awarding the contract and where the method of award is "best value", as defined by the County's Procurement Policy and New York Law.

**REQUEST FOR QUOTATION (RFQ)** A type of Bid Document which can be used when a formal bid opening is not required (e.g. discretionary, sole source, single source or emergency purchases).

**RESPONSIBLE BIDDER** A Bidder that is determined to have skill, judgment and integrity, and that is found to be competent, reliable, experienced and qualified financially, as determined by the Purchasing Agent.

**RESPONSIVE BIDDER** A Bidder meeting the specifications or requirements prescribed in the Bid Document or solicitation, as determined by the Purchasing Agent.

**SINGLE SOURCE** A procurement where two or more offerors can supply the required Product, and the Purchasing Agent may award the contract to one Bidder over the other.

**SOLE SOURCE** A procurement where only one offeror is capable of supplying the required Product.

### ***Bid Submission***

**7. BID LANGUAGE & CURRENCY** All offers (tenders), and all information and Product documentation required by the solicitation or provided as explanation thereof, shall be submitted in English. All prices shall be expressed, and all payments shall be made, in United States Dollars (\$ US). Any offers (tenders) submitted which do not meet the above criteria will be rejected.

**8. BID OPENING** Bids may, as applicable, be opened publicly. The Purchasing Agent reserves the right at any time to postpone or cancel a scheduled bid opening.

**9. BID SUBMISSION** The submission of a bid will be construed to mean that the bidder is fully informed as to the extent and character of the supplies, material, or equipment required and a representation that the bidder can furnish the supplies, materials, or equipment satisfactorily in complete compliance with the specifications.

All bids shall comply with the following:

(a) Bids are to be packaged, sealed and submitted to the location stated in the Bid Specifications. Bidders are solely responsible for timely delivery of their bids to the location set forth in the Bid Specifications prior to the stated bid opening date/time.

(b) A bid return envelope, if provided with the Bid Specifications, should be used with the bid sealed inside. If the bid response does not fit into the envelope, the bid envelope should be taped onto the outside of the sealed box or package with the bid inside. If using a commercial delivery company which requires use of their shipping package or envelope, Bidders sealed bid, labeled as detailed below, should be placed within the shippers sealed envelope to ensure that the bid is not prematurely opened. All bids must have a label on the outside of the package or shipping container outlining the following information:

- ! **"BID ENCLOSED"** (bold print, all capitals)
- ! IFB or RFP Number
- ! Bid Submission date and time

In the event that a Bidder fails to provide such information on the return bid envelope or shipping material, the County reserves the right to open the shipping

package or envelope to determine the proper bid number or Product group, and the date and time of bid opening. Bidder shall have no claim against the receiving entity arising from such opening and such opening shall not affect the validity of the bid or the procurement. Notwithstanding the County's right to open a bid to ascertain the foregoing information, Bidder assumes all risk of late delivery associated with the bid not being identified, packaged or labeled in accordance with the foregoing requirements.

**10. FACSIMILE SUBMISSIONS** Unless specifically authorized by the terms of the Bid Specifications, facsimile bids ARE PROHIBITED AND SHALL NOT BE ACCEPTED. Where the bid specifications are silent as to the submission of bids by facsimile, no fax bids shall be permitted or accepted. Where specifically authorized, the following rules and conditions apply:

- (a) FAX number(s) indicated in the Bid Specifications must be used
- (b) Access to the facsimile machine(s) is on a "first come, first serve" basis, and the Purchasing Agent bears no liability or responsibility and makes no guarantee whatsoever with respect to the Bidders access to such equipment at any specific time
- (c) Bidders are solely responsible for submission and receipt of the entire facsimile bid by the Essex County Purchasing Agent prior to bid opening and must include on the first page of the transmission the total number of pages transmitted in the bid, including the cover page. Incomplete, ambiguous or unreadable transmissions in whole or in part may be rejected at the sole discretion of the Purchasing Agent
- (d) Facsimile bids are fully governed by all conditions outlined in the Bid Documents and must be submitted on forms or in the format required in the Bid Specifications, including the executed signature page and acknowledgment.

**11. AUTHENTICATION OF FACSIMILE BIDS** The act of submitting a bid by facsimile transmission, when, as and if specifically authorized, including an executed signature page, shall be deemed a confirming act by Bidder which authenticates the signing of the bid.

**12. LATE BIDS** Any bid received at the specified location after the time specified will be considered a late bid. A late bid shall not be considered for award unless acceptance of the late bid is in the best interests of Essex County and either (a) no timely bids meeting the requirements of the Bid Documents are received, or (b) in the case of a multiple award, an insufficient number of timely bids were received to satisfy the multiple award. Delays in United States mail deliveries or any other means of transmittal, including couriers or agents of Essex County, shall not excuse late bid submissions. Otherwise, all late bids will not be considered and will be returned unopened to the bidder. The bidder assumes the risk of any delay in the mail or in the handling of the mail by employees of the County. Whether sent by mail or by means of personal delivery, the bidder assumes responsibility for having his bid deposited on time at the place specified.

**13. BID CONTENTS** Bids must be complete and legible. All bids must be signed. All information required by the Bid Specifications must be supplied by the Bidder on the forms or in the format specified in the Bid Specifications. No alteration, erasure or addition is to be made to the Bid Documents. Changes may be ignored by the Purchasing Agent or may be grounds for rejection of the bid. Changes, corrections and/or use of white-out in the bid or Bidders response portion of the Bid Document must be initialed by an authorized representative of the Bidder. Bidders are cautioned to verify their bids before submission, as amendments to bids or requests for withdrawal of bids received by the Purchasing Agent after the time specified for the bid opening, may not be considered. All lines must have an indication of bidders response whether it be "o", "N/A" or a dollar figure. All lines must be filled in to indicate bidder acknowledgment of the request. Bids that do not have all applicable lines filled in on bid sheet may be disqualified as a non-responsive bid. The Purchasing Agent shall not assume there is "no charge" when lines are left empty.

Bidders must submit with bid detailed specifications, circulars, warranties and all necessary data on items he proposes to furnish. This information must show clearly that the item offered meets all detailed specifications herein. The Purchasing Agent reserves the right to reject any bid if its compliance with the specifications is not clearly evident. If item offered differs from the provisions contained in these specifications such differences must be explained in detail, and bid will receive careful consideration if such deviations do not depart from the intent of these specifications and are to the best interests of Essex County as interpreted by the Purchasing Agent of Essex County.

It is the responsibility of the bidder to offer a product that meets the specifications of the manufacturer model as listed.

All stock electrical items must be listed and approved by Underwriters' Laboratories, Inc.

**14. EXTRANEIOUS TERMS** Bids must conform to the terms set forth in the Bid Documents, as extraneous terms or material deviations (including additional, inconsistent, conflicting or alternative terms) may render the bid non-responsive and may result in rejection of the bid.

**Extraneous term(s) submitted on standard, pre-printed forms (including but not limited to: product literature, order forms, license agreements, contracts or other documents) which are attached or referenced with the submission shall not be considered part of the bid, but shall be deemed included for informational or promotional purposes only.**

Only those extraneous terms which meet all the following requirements will be considered as having been submitted as part of the Bid:

- a. Each proposed extraneous term (addition, counter-offer, deviation, or modification) must be specifically enumerated in a writing which is not part of a



- pre-printed form; and
- b. The writing must identify the particular specification requirement (if any) which Bidder rejects or proposes to modify by inclusion of the extraneous term; and
- c. The Bidder shall enumerate the proposed addition, counter offer, modification or deviation from the Bid Document, and the reasons therefore.

No extraneous term(s), whether or not deemed "material," shall be incorporated into a contract unless the Purchasing Agent expressly accepts each such term(s) in writing. Acceptance and/or processing of the Bid shall not constitute such written acceptance of Extraneous Term(s).

**15. CONFIDENTIAL / TRADE SECRET MATERIALS** Confidential, trade secret or proprietary materials as defined by the laws of the State of New York must be clearly marked and identified as such upon submission. Bidders/Contractors intending to seek an exemption from disclosure of these materials under the *Freedom of Information Law* must request the exemption in writing, setting forth the reasons for the claimed exemption, at the time of submission. Acceptance of the claimed materials does not constitute a determination on the exemption request, which determination will be made in accordance with statutory procedures.

**16. PREVAILING WAGE RATES - Public Works and Building Services Contracts**

If any portion of work being bid is subject to the prevailing wage rate provisions of Labor Law, the following shall apply:

**a. "Public Works" and "Building Services" - Definitions**

**i. Public Works** *Labor Law* Article 8 applies to contracts for public improvement in which laborers, workers or mechanics are employed on a "public works" project (distinguished from public "procurement" or "service" contracts). The State, a public benefit corporation, a municipal corporation (including a school district), or a commission appointed by law must be a party to the contract. The wage and hours provision applies to any work performed by contractor or subcontractors.

**ii. Building Services** *Labor Law* Article 9 applies to contracts for building service work over \$1,500 with a public agency, which 1) involve the care or maintenance of an existing building, or 2) involve the transportation of office furniture or equipment to or from such building, or 3) involve the transportation and delivery of fossil fuel to such building, and 4) the principal purpose of which is to furnish services through use of building service employees.

**b. Prevailing Wage Rate Applicable to Bid Submissions** A copy of the applicable prevailing wage rates to be paid or provided are attached to this solicitation. Bidders must submit bids which are based upon the prevailing hourly wages, and supplements in cash or equivalent benefits (i.e., fringe benefits and any cash or non-cash compensation which are not wages, as defined by law) that equal or exceed the applicable prevailing wage rate(s) for the location where the work is to be performed. Where the Bid Documents require the Bidder to enumerate hourly wage rates in the bid, Bidders may not submit bids based upon hourly wage rates and supplements below the

applicable prevailing wage rates as established by the New York State Department of Labor. **Bids which fail to comply with this requirement will be disqualified.**

**c. Wage Rate Payments / Changes During Contract Term** The wages to be paid under any resulting contract shall not be less than the prevailing rate of wages and supplements as set forth by law. It is required that the Contractor keep informed of all changes in the Prevailing Wage Rates during the contract term that apply to the classes of individuals supplied by the contractor on any projects which result from this contract which are subject to the provisions of the *Labor Law*. Contractor is solely liable for and must pay such required prevailing wage adjustments during the contract term as required by law.

**d. Public Posting & Certified Payroll Records** In compliance with Article 8, Section 220 of the *Labor Law*, as amended by Chapter 565 of the Laws of 1997:

**i. Posting** The Contractor must publicly post on the work site, in a prominent and accessible place, a legible schedule of the prevailing wage rates and supplements.

**ii. Payroll Records** Contractors and sub-contractors must keep original payrolls or transcripts subscribed and affirmed as true under the penalties of perjury as required by law. For public works contracts over \$25,000 where the contractor maintains no regular place of business in New York State, such records must be kept at the work site. For building services contracts, such records must be kept at the work site while work is being performed.

**iii. Submission of Certified Payroll Transcripts for Public Works Contracts**  
**Only** Contractors and sub-contractors on public works projects must submit monthly payroll transcripts to Essex County which has prepared or directs the preparation of the plans and specifications for a public works project, as set forth in the Bid Specifications. For mini-bid solicitations, the payroll records must be submitted to the entity preparing the agency mini-bid project specification. For "agency specific" bids, the payroll records should be submitted to the entity issuing the purchase order. For all other Essex County procurement contracts, such records should be submitted to the individual agency issuing the purchase order(s) for the work. Upon mutual agreement of the Contractor and Essex County, the form of submission may be submitted in a specified disk format acceptable to the Department of Labor so long as: 1) the contractor/subcontractor retains the original records; and, (2) an original signed letter by a duly authorized individual of the contractor or subcontractor attesting to the truth and accuracy of the records accompanies the disk. **This provision does not apply to building services contracts.**

**iv. Records Retention** Contractors and subcontractors must preserve such certified transcripts for a period of three years from the date of completion of work on the awarded contract.

**e. Days Labor - Defined for Article 8, Public Works (For Purposes of**

**Article 8 of the *Labor Law*)** No laborer, worker or mechanic in the employ of the contractor, subcontractor or other person doing or contracting to do all or part of the work contemplated by the contract shall be permitted or required to work more than eight hours in any one calendar day or more than five days in any one week except in cases of extraordinary emergency including fire, flood or danger to life or property. "Extraordinary emergency" shall be deemed to include situations in which sufficient laborers, workers and mechanics cannot be employed to carry on public work expeditiously as a result of such restrictions upon the number of hours and days of labor and the immediate commencement or prosecution or completion without undue delay of the public work is necessary in the judgment of the Essex County Purchasing Agent for the preservation of the contract site or for the protection of the life and limb of the persons using the contract site.

## **17. TAXES**

- a. Unless otherwise specified in the Bid Specifications or set forth in this clause, the quoted bid price includes all taxes applicable to the transaction.
- b. Purchases made by Essex County and certain non-County Authorized Users are exempt from New York State and local sales taxes and, with certain exceptions, federal excise taxes. To satisfy the requirements of the New York State Sales tax exemption, either the Purchase Order issued by a County Agency or the invoice forwarded to authorize payment for such items will be sufficient evidence that the sale by the Contractor was made to the County, an exempt organization under Section 1116 (a) (1) of the *Tax Law*. Non-County Authorized Users must offer their own proof of exemption where required. No person, firm or corporation is, however, exempt from paying the State Truck Mileage and Unemployment Insurance or Federal Social Security taxes, which remain the sole responsibility of the Bidder/Contractor. For tax free transactions under the Internal Revenue Code, the Essex County Registration Number is 14 6002889.
- c. Purchases by Authorized Users other than Essex County may be subject to such taxes, and in those instances the tax should be computed based on the bid price and added to the invoice submitted to such entity for payment.

**18. EXPENSES PRIOR TO AWARD** Essex County is not liable for any costs incurred by a Bidder in the preparation and production of a bid or for any work performed prior to contract award and/or issuance of an approved Purchase Order.

**19. ADVERTISING BID RESULTS** A Bidder in submitting a bid agrees not to use the results therefrom as a part of any commercial advertising without the prior written approval of the Purchasing Agent. In addition to any other sanctions or remedies available to it in law or equity, the Purchasing Agent may suspend from bidding on its requirements or terminate a contract of any Bidder/Contractor who violates the terms of this clause.

## 20. PRODUCT REFERENCES

- a. **"Or Equal"** On all Bid Specifications the words "or equal" are understood to apply where a copyright brand name, trade name, catalog reference, or patented Product is referenced. References to such specific Product are intended as descriptive, not restrictive, unless otherwise stated. Comparable Product will be considered if proof of compatibility is provided, including appropriate catalog excerpts, descriptive literature, specifications and test data, etc. The Purchasing Agents decision as to acceptance of the Product as equal shall be final.
- b. **Discrepancies in References** In the event of a discrepancy between the model number referenced in the Bid Specifications and the written description of the Products therein which cannot be reconciled, with respect to such discrepancy, then the written description shall prevail.

**21. RECYCLED OR RECOVERED MATERIALS** Upon the conditions specified in the Bid Specifications and in accordance with the laws of the State of New York, Contractors are encouraged to use recycled or recovered materials in the manufacture of Products and packaging to the maximum extent practicable without jeopardizing the performance or intended end use of the Product or packaging unless such use is precluded due to health, welfare, safety requirements or in the Bid Specifications. Where such use is not practical, suitable, or permitted by the Bid Specifications, Contractor shall deliver new materials in accordance with the "Warranties & Guaranties" set forth below.

Refurbished or remanufactured components or items may only be accepted at the discretion of the Purchasing Agent, or upon the conditions set forth in the Bid Specifications.

Items with recycled, recovered, refurbished or remanufactured content must be identified in the bid or will be deemed new Product.

**22. PRODUCTS MANUFACTURED IN PUBLIC INSTITUTIONS** Bids offering Products which are manufactured or produced in public institutions will be rejected.

## 23. PRICING

- a. **Unit Pricing** If required by the Bid Specifications, the Bidder should insert the price per unit specified and the price extensions in decimals, not to exceed four places for each item, in the bid. In the event of a discrepancy between the unit price and the extension, the unit price shall govern unless, in the sole judgment of the Purchasing Agent, such unit pricing is obviously erroneous.
- b. **Net Pricing** Prices must be net, including transportation, customs, tariff, delivery and other charges fully prepaid by the Contractor to the destination(s) indicated in the Bid Specifications, subject only to the cash discount. If the award is to be made on another basis, transportation and other charges must be prepaid by the Contractor and added to the invoice as a separate item, unless otherwise



required in the Bid Specifications.

- c. **"No Charge" Bid** When bids are requested on a number of Products as a group or Lot, a Bidder desiring to bid "no charge" on a Product in the grouping or Lot must clearly indicate such. Otherwise, such bid may be considered incomplete and be rejected, in whole or in part, at the discretion of the Purchasing Agent.

If a price is written in numbers and alpha, the alpha will govern.

Prices shall be net FOB any point in Essex County, New York. Price quoted shall include all delivery costs. Prices shall be net, including transportation and delivery charges fully prepaid by the successful bidder to destination indicated in the proposal. If award is made on any other basis, transportation charges must be prepaid by the successful bidder and added to the invoice as a separate item. In any case, title shall not pass until items have been delivered and accepted by the County.

## **24. DRAWINGS**

- a. **Drawings Submitted With Bid** When the Bid Specifications require the Bidder to furnish drawings and/or plans, such drawings and/or plans shall conform to the mandates of the Bid Documents and shall, when approved by the Purchasing Agent, be considered a part of the bid and of any resulting contract. All symbols and other representations appearing on the drawings shall be considered a part of the drawing.
- b. **Drawings Submitted During the Contract Term** Where required by the Bid Specifications to develop, maintain and deliver diagrams or other technical schematics regarding the scope of work, Contractor shall be required to develop, maintain, deliver and update such drawings on an ongoing basis at no additional charge. Contractor shall be responsible for updating drawings and plans during the contract term to reflect additions, alterations, and deletions. Such drawings and diagrams shall be delivered to the Authorized Users representative as required by the Bid Specifications. Where required, Contractor shall furnish to Authorized User in a timely manner the required drawings representing the then current, "as modified" condition of all product included in the scope of work.
- c. **Accuracy of Drawings Submitted** All drawings shall be neat and professional in manner and shall be clearly labeled as to locations and type of product, connections and components. Drawings and diagrams are to be in compliance with accepted drafting standards. Acceptance or approval of such plans shall not relieve the Contractor from responsibility for design or other errors of any sort in the drawings or plans, or from its responsibility for performing as required, furnishing product, services or installation, or carrying out any other requirements of the intended scope of work.

**25. SITE INSPECTION** Where Bidder is required by the Bid Specifications to deliver or install Product, or to service installed product(s) or equipment, Bidder shall be given an opportunity and shall be required to inspect the site prior to submission of the Bid, including environmental or other conditions or pre-existing deficiencies in the installed product, equipment or environment, which may affect Bidders ability to deliver, install or

otherwise provide the required product. All inquiries regarding such conditions may only be made in writing. Bidder shall be deemed to have knowledge of any deficiencies or conditions which such inspection or inquiry might have disclosed, and to have included the costs of repair in its bid. Bidder must provide a detailed explanation of work intended to be performed under this clause. Bidder shall be required to remedy any pre-existing deficiencies or conditions at the commencement of the contract term. Reimbursement for the cost of repairing the conditions or deficiencies shall be separately enumerated in the bid.

## **26. SAMPLES**

- a. **Standard Samples** Bid Specifications may indicate that the Product to be purchased must be equal to a standard sample on display in a place designated by the Purchasing Agent and such sample will be made available to the Bidder for examination prior to the opening date. Failure by the Bidder to examine such sample shall not entitle the Bidder to any relief from the conditions imposed by the Bid Documents.
- b. **Bidder Supplied Samples** The Purchasing Agent reserves the right to request from the Bidder/Contractor a representative sample(s) of the Product offered at any time prior to or after award of a contract. Unless otherwise instructed, samples shall be furnished within the time specified in the request. Untimely submission of a sample may constitute grounds for rejection of bid or cancellation of the Contract. Samples must be submitted free of charge and be accompanied by the Bidders name and address, any descriptive literature relating to the Product and a statement indicating how and where the sample is to be returned. Where applicable, samples must be properly labeled with the appropriate bid or Essex County contract reference.

A sample may be held by the Purchasing Agent during the entire term of the contract and for a reasonable period thereafter for comparison with deliveries. At the conclusion of the holding period the sample, where feasible, will be returned as instructed by the Bidder, at the Bidders expense and risk. Where the Bidder has failed to fully instruct the Purchasing Agent as to the return of the sample (i.e. mode and place of return, etc.) or refuses to bear the cost of its return, the sample shall become the sole property of the receiving entity at the conclusion of the holding period.

- c. **Enhanced Samples** When an approved sample exceeds the minimum specifications, all Product delivered must be of the same enhanced quality and identity as the sample. Thereafter, in the event of a Contractors default, the Purchasing Agent may procure a commodity substantially equal to the enhanced sample from other sources, charging the Contractor for any additional costs incurred.
- d. **Conformance with Sample(s)** Submission of a sample (whether or not such sample is tested by, or for, the Purchasing Agent) and approval thereof shall not

relieve the Contractor from full compliance with all conditions and terms, performance related and otherwise, specified in the Bid Documents. If in the judgment of the Purchasing Agent the sample or product submitted is not in accordance with the specifications or testing requirements prescribed in the Bid Documents, the Purchasing Agent may reject the bid. If an award has been made, the Purchasing Agent may cancel the contract at the expense of the Contractor.

- e. **Testing** All samples are subject to tests in the manner and place designated by the Purchasing Agent, either prior to or after contract award. Unless otherwise stated in the Bid Specifications, Bidder Samples consumed or rendered useless by testing will not be returned to the Bidder.

**27. ADDENDA / INTERPRETATION** No verbal interpretation of the intent of any of the specifications or other Contract Documents will be made before receipt of bids. Requests for interpretations prior to receipt of bids must be presented, in writing, to the Purchasing Agent, 100 Court Street, P.O. Box 217, Elizabethtown, NY 12932, and to be given consideration must be received by the Purchasing Agent at least seven (7) days prior to the date set for the opening of bids.

Any interpretation, and any additional information or instruction will, if issued, be in the form of a written Addendum or Addenda sent to all holders of Contract Documents at the addresses furnished therefor, at least five (5) days prior to the date of the opening of bids.

Failure of any bidder to receive any Addenda shall not relieve such bidder from any obligation under this bid as submitted. All Addenda so issued shall become a part of the Contract Documents.

### ***Bid Evaluation***

**28. BID EVALUATION** The Purchasing Agent reserves the right to accept or reject any and all bids, or separable portions of offers, and waive technicalities, irregularities, and omissions if the Purchasing Agent determines the best interests of the County will be served. The Purchasing Agent, in his/her sole discretion, may accept or reject illegible, incomplete or vague bids and his/her decision shall be final. A conditional or revocable bid which clearly communicates the terms or limitations of acceptance may be considered and contract award may be made in compliance with the Bidders conditional or revocable terms in the offer.

Where a bidder is requested to submit a bid on individual items and/or on a total sum or sums, the right is reserved to award bids on individual items or on total sums. The County reserves the right to award in whole or in part based on the lowest responsible bid.

The following three items will automatically render a bid unacceptable to Essex County:

- a. Failure to sign bid proposal page.
- b. Failure to include necessary bid deposit (as required).
- c. Failure to sign and submit non-collusive bidding certificate.

It shall be fully understood that any deviations from the inclusion of the above items will be grounds to see the bid as non-compliant and will not be considered for award.

The Purchasing Agent reserves the right to reject such bids, as in his opinion, are incomplete, conditional, obscure, or which contain irregularities of any kind including unbalanced bids. One in which the amount bid for one or more separate items is substantially out of line with the current market prices for the materials and/or work covered thereby.

**29. CONDITIONAL BID** Unless the Bid Specifications provides otherwise, a bid is not rendered non-responsive if the Bidder specifies that the award will be accepted only on all or a specified group of items or Product included in the specification. It is understood that nothing herein shall be deemed to change or alter the method of award contained in the Bid Documents.

**30. CLARIFICATIONS / REVISIONS** Prior to award, the Purchasing Agent reserves the right to seek clarifications, request bid revisions, or to request any information deemed necessary for proper evaluation of bids from all Bidders deemed to be eligible for contract award. Failure to provide requested information may result in rejection of the bid.

**31. PROMPT PAYMENT DISCOUNTS** While prompt payment discounts will not be considered in determining the low bid, the Purchasing Agent may consider any prompt payment discount in resolving bids which are otherwise tied. However, any notation indicating that the price is net, (e.g. net 30 days), shall be understood to mean only that no prompt payment discount is offered by the Bidder. The imposition of service, interest, or other charges, except pursuant to the provisions of Article 11\_A of the *State Finance Law*, which are applicable in any case, may render the bid non-responsive and may be cause for its rejection.

**32. EQUIVALENT OR IDENTICAL BIDS** In the event two offers are found to be substantially equivalent, price shall be the basis for determining the award recipient. If two or more Bidders submit substantially equivalent bids as to pricing or other factors, the decision of the Purchasing Agent to award a contract to one or more of such Bidders shall be final.

**33. PERFORMANCE QUALIFICATIONS** The Purchasing Agent reserves the right to investigate or inspect at any time whether or not the Product, qualifications or facilities offered by the Bidder/Contractor meet the requirements set forth in the Bid Documents. Contractor shall at all times during the contract term remain responsible and responsive. A Bidder/Contractor must be prepared, if requested by the Purchasing Agent, to present



evidence of experience, ability and financial standing, as well as a statement as to plant, machinery and capacity of the manufacturer for the production, distribution and servicing of the Product bid. If the Purchasing Agent determines that the conditions and terms of the Bid Documents or Contract are not complied with, or that items or Product proposed to be furnished do not meet the specified requirements, or that the qualifications, financial standing or facilities are not satisfactory, or that performance is untimely, the Purchasing Agent may reject such bid or terminate the contract. Nothing in the foregoing shall mean or imply that it is obligatory upon the Purchasing Agent to make an investigation either before or after award of a contract, but should such investigation be made, it in no way relieves the Bidder/Contractor from fulfilling all requirements and conditions of the contract.

**34. DISQUALIFICATION FOR PAST PERFORMANCE** Bidder may be disqualified from receiving awards if Bidder, or anyone in Bidders employment, has previously failed to perform satisfactorily in connection with public bidding or contracts.

**35. QUANTITY CHANGES PRIOR TO AWARD** The Purchasing Agent reserves the right, at any time prior to the award of a specific quantity contract, to alter in good faith the quantities listed in the Bid Specifications to conform with requirements. In the event such right is exercised, the lowest responsible Bidder meeting specifications will be advised of the revised requirements and afforded an opportunity to extend or reduce its bid price in relation to the changed quantities. Refusal by the low Bidder to so extend or reduce its bid price may result in the rejection of its bid and the award of such contract to the lowest responsible Bidder who accepts the revised requirements.

**36. RELEASE OF BID EVALUATION MATERIALS** Requests concerning the evaluation of bids may be submitted under the *Freedom of Information Law*. Information, other than the Bid Tabulation, shall be released as required by law after contract award. Written requests should be directed to the Purchasing Agent.

**37. TIME FRAME FOR OFFERS** The Purchasing Agent reserves the right to make awards within sixty (60) days after the date of the bid opening, during which period, bids must remain firm and cannot be withdrawn. If, however, an award is not made within the sixty (60) day period, bids shall remain firm until such later time as either a contract is awarded or the Bidder delivers to the Purchasing Agent written notice of the withdrawal of its bid. Any bid which expressly states therein that acceptance must be made within a shorter specified time, may at the sole discretion of the Purchasing Agent, be accepted or rejected.

## **TERMS & CONDITIONS**

**38. CONTRACT CREATION / EXECUTION** Except as may be otherwise provided by law or by the Purchasing Agent, upon receipt of all required approvals a Contract shall be deemed executed and created with the successful Bidder(s) upon the Purchasing Agent's mailing or electronic communication to the address on the bid of (a) a Letter of Acceptance, (b) a fully executed contract, or (c) a Purchase Order authorized by the

Purchasing Agent.

**39. COMPLIANCE WITH LAWS, ETC.** The Bidder shall comply with all the provisions of the laws of the State of New York and of the United States of America which affect municipalities and municipal contracts, and any and all State and Federal rules and regulation, and of amendments and additions thereto, insofar as the same shall be applicable to any contract awarded hereunder with the same force and effect as if set forth at length herein. The Bidder's special attention is called to the following laws: *General Municipal Law* Section 103-d, *State Finance Law* Section 167-b prohibiting the purchase of tropical hardwood products, and the New York State Public Employee Safety & Health Act of 1980.

**40. MODIFICATION OF TERMS** The terms and conditions set forth in the Contract shall govern all transactions by Authorized User(s) under this Contract. The Contract may only be modified or amended upon mutual written agreement of the Purchasing Agent and Contractor.

The Contractor may, however, offer Authorized User(s) more advantageous pricing, payment, or other terms and conditions than those set forth in the Contract. In such event, a copy of such terms shall be furnished to the Authorized User(s) and Purchasing Agent by the Contractor.

Other than where such terms are more advantageous for the Authorized User(s) than those set forth in the Contract, no alteration or modification of the terms of the Contract, including substitution of Product, shall be valid or binding against Authorized User(s) unless authorized by the Purchasing Agent or specified in the Contract Award Notification. No such alteration or modification shall be made by unilaterally affixing such terms to Product upon delivery (including, but not limited to, attachment or inclusion of standard pre-printed order forms, product literature, "shrink wrap" terms accompanying software upon delivery, or other documents) or by incorporating such terms onto order forms, purchase orders or other documents forwarded by the Contractor for payment, notwithstanding Authorized Users subsequent acceptance of Product, or that Authorized User has subsequently processed such document for approval or payment.

**41. SCOPE CHANGES** The Purchasing Agent reserves the right, unilaterally, to require, by written order, changes by altering, adding to or deducting from the contract specifications, such changes to be within the general scope of the contract. The Purchasing Agent may make an equitable adjustment in the contract price or delivery date if the change affects the cost or time of performance.

With respect to any specific quantity stated in the contract, the Purchasing Agent reserves the right after award to order up to 20% more or less (rounded to the next highest whole number) than the specific quantities called for in the contract. Notwithstanding the foregoing, the Purchasing Agent may purchase greater or lesser percentages of contract quantities should the Purchasing Agent and Contractor so agree.

**42. ESTIMATED QUANTITY CONTRACTS** Estimated quantity contracts are expressly

agreed and understood to be made for only the quantities, if any, actually ordered during the contract term. No guarantee of any estimated quantity(s) is implied or given. Unless otherwise set forth in the Bid Specifications, contracts for services and technology are completely voluntary as to use, and therefore no quantities are guaranteed.

**43. BEST PRICING OFFER** During the contract term, if substantially the same or a smaller quantity of a Product is sold by the Contractor outside of this contract vehicle upon the same or similar terms and conditions as that of this contract at a lower price, the price under this contract shall be immediately reduced to the lower price.

**44. PURCHASE ORDERS** Unless otherwise authorized in writing by the Purchasing Agent, no Products are to be delivered or furnished by Contractor until transmittal of an official Purchase Order from the Authorized User requiring the Product. Unless terminated or canceled pursuant to the authority vested in the Purchasing Agent, Purchase Orders shall be effective and binding upon the Contractor when placed in the mail or electronically transmitted prior to the termination of the contract period, addressed to the Contractor at the address set forth in the Contract for receipt of orders, or in the Contract Award Notification.

All Purchase Orders issued pursuant to contracts let by the Purchasing Agent must bear the appropriate contract number and, if necessary, required State approvals. Unless otherwise specified, all Purchase Orders against centralized contracts will be placed by Authorized Users directly with the Contractor and any discrepancy between the terms stated on the vendors order form, confirmation or acknowledgment, and the contract terms shall be resolved in favor of the terms most favorable to the Authorized User.

If, with respect to an agency specific contract, a Purchase Order is not received within two weeks after the issuance of a Contract Award Notification, it is the responsibility of the Contractor to request in writing that the appropriate Authorized User forward a Purchase Order. If, thereafter, a Purchase Order is not received within a reasonable period of time, the Contractor shall promptly notify the appropriate purchasing officer in Essex County. Failure to timely notify such officer may, in the discretion of the Purchasing Agent and without cost to the State, result in the canceling of such requirement by the Purchasing Agent with, at the Purchasing Agents discretion, a corresponding reduction in the contract quantity and price.

**45. PRODUCT DELIVERY** It shall be understood that with respect to contract deliveries, time is of the essence. Delivery must be made as ordered and in accordance with the terms of the contract. Unless otherwise specified in the Bid Specifications, delivery shall be made within thirty calendar days after receipt of a purchase order by the Contractor. The decision of the Purchasing Agent as to compliance with delivery terms shall be final. The burden of proof for delay in receipt of Purchase Order shall rest with the Contractor. In all instances of a potential or actual delay in delivery, the Contractor shall immediately notify the Purchasing Agent and the Authorized User, and confirm in writing the explanation of the delay, and take appropriate action to avoid any subsequent late deliveries. Any extension of the time for delivery must be requested in

writing by the Contractor and approved in writing by the Purchasing Agent. Failure to meet such time schedule may be grounds for cancellation of the order or, in the Purchasing Agents discretion, the Contract.

The County must be notified twenty-four (24) hours in advance of delivery. The County reserves the right to deny acceptance of delivery if this notice is not given, at no cost to the County.

The successful bidder shall be responsible for delivery of items in good condition at point of destination, and shall file with the carrier all claims for breakage, imperfections, and other losses, which will be deducted from invoices. The Purchasing Agent will note for the benefit of successful bidder when packages are not received in good condition. Carton shall be labeled with purchase order or contract number, successful bidders name and general statement of contents. Failure to comply with this condition shall be considered sufficient reason for refusal to accept the goods.

Unless otherwise stated in the specifications, all items must be delivered into and placed at a point within the building as directed by the shipping instructions or the Purchasing Agent. The successful bidder will be required to furnish proof of delivery in every instance.

Unloading and placing of equipment and furniture is the responsibility of the successful bidder, and the County accepts no responsibility for unloading and placing of equipment Any costs incurred due to the failure of the successful bidder to comply with this requirement will be charged to him. No help for unloading will be provided by the County, and suppliers should notify their truckers accordingly.

All deliveries shall be accompanied by delivery tickets or packing slips. Ticket shall contain the following information for each item delivered:

Contract Number and/or Purchase Order Number  
Name of Article  
Item Number (if applicable)  
Quantity  
Name of the Successful Bidder

**46. SATURDAY & HOLIDAY DELIVERIES** Unless otherwise specified in the Bid Specifications or by an Authorized User, deliveries will not be scheduled for Saturdays, Sundays or legal holidays observed by the State of New York except of Product for daily consumption or where an emergency exists or the delivery is a replacement or is late, in which event the convenience of the Authorized User shall govern.

#### **47. SHIPPING / RECEIPT OF PRODUCT**

- a. **Packaging** Tangible Product shall be securely and properly packed for shipment, storage and stocking in appropriate, clearly labeled shipping containers and according to accepted commercial practice, without extra charge for packing materials, cases or other types of containers. The container shall become and remain the property of the receiving entity unless otherwise specified in the contract documents.
- b. **Shipping Charges** Contractor shall be responsible for insuring that the Bill of



Lading states "charges prepaid" for all shipments. Unless otherwise stated in the Bid Specifications, all deliveries shall be deemed to be FOB Destination tailgate delivery at the dock of the Authorized User. Unless otherwise agreed, items purchased at a price F.O.B. Shipping point plus transportation charges are understood to not relieve the contractor from responsibility for safe and proper delivery notwithstanding the Authorized Users payment of transportation charges.

- c. **Receipt of Product** The Contractor shall be solely responsible for assuring that deliveries are made to personnel authorized to accept delivery on behalf of the Authorized User. Any losses resulting from the Contractors failure to deliver Product to authorized personnel shall be borne exclusively by the Contractor.

**48. TITLE AND RISK OF LOSS** Notwithstanding the form of shipment, title and risk of loss shall not pass from the Contractor to the Authorized User until the Products have been received, inspected and accepted by the receiving entity. Acceptance shall occur within a reasonable time or in accordance with such other defined acceptance period as may be specified in the Bid Specifications. Mere acknowledgment by Authorized User personnel of the delivery or receipt of goods (e.g. signed bill of lading) shall not be deemed or construed as acceptance of the Products received. Any delivery of Product which is substandard or does not comply with the Contract terms, may be rejected or accepted on an adjusted price basis, as determined by the Purchasing Agent.

**49. RE\_WEIGHING PRODUCT** Deliveries are subject to re-weighing at the point of destination by the receiving entity. If shrinkage occurs which exceeds that normally allowable in the trade, the receiving entity shall have the option to require delivery of the difference in quantity, or to reduce the payment accordingly .

**50. PRODUCT SUBSTITUTION** In the event a specified manufacturers Product listed in the Contractors Bid becomes unavailable or cannot be supplied by the Contractor for any reason (except as provided for in the Force Majeure Clause below) a Product deemed by the Purchasing Agent to be the equal or better of the specified commodity or service must be substituted by the Contractor at no additional cost or expense to the Authorized User. Unless otherwise specified, any substitution of Product prior to the Purchasing Agents approval may be cause for cancellation of contract.

**51. REJECTED PRODUCT** When Products are rejected, they must be removed by the Contractor from the premises of the receiving entity within ten days of notification of rejection by Authorized User. Upon rejection notification, risk of loss of rejected or non-conforming Product shall remain on Contractor. Rejected items not removed by the Contractor within ten days of notification shall be regarded as abandoned by the Contractor, and the Authorized User shall have the right to dispose of the items as its own property. The Contractor shall promptly reimburse the Authorized User for any and all costs and expenses incurred in storage or effecting removal or disposition.

**52. INSTALLATION** Where installation is required, Bidder shall be responsible for

placing and installing the equipment in the required locations. All materials used in the installation shall be of good quality and shall be free from any and all defects which would mar the appearance of the equipment or render it structurally unsound. Installation includes the furnishing of any equipment, rigging and materials required to install or replace the Product in the proper location. The Contractor shall protect the site from damage for all its work and shall repair damages or injury of any kind caused by the Contractor, its employees, officers or agents. If any alteration, dismantling or excavation, etc. is required to effect installation, the Contractor shall thereafter promptly restore the structure or site to its original condition. Work shall be performed so as to cause the least inconvenience to the Authorized User(s) and with proper consideration for the rights of other contractors or workers. The Contractor shall promptly perform its work and shall coordinate its activities with those of other contractors. The Contractor shall clean up and remove all debris and rubbish from its work as required or directed. Upon completion of the work, the building and surrounding area of work shall be left clean and in a neat, unobstructed condition, and everything in satisfactory repair and order.

**53. REPAIRED OR REPLACED PRODUCT / COMPONENTS** Where the Contractor is required to repair, replace or substitute Product or components under the Contract, the repaired, replaced or substituted Product shall be subject to all terms and conditions for new Product set forth in the contract, including product warranties.

**54. ON\_SITE STORAGE** Materials, equipment or supplies may be stored at the County's or Authorized User's site at the Contractor's sole risk and only with the approval of, as the case may be, the County or the Authorized User.

**55. EMPLOYEES / SUBCONTRACTORS / AGENTS** All employees, subcontractors or agents performing work under the contract must be trained technicians who meet or exceed the technical and training qualifications set forth in the Bid Specifications or the Bid, whichever is greater, and must comply with all rules and requirements of the Contract. The Purchasing Agent reserves the right to conduct a security background check or otherwise approve any employee or agent furnished by Contractor and to refuse access to or require replacement of any personnel for cause, including but not limited to, technical or training qualifications, quality of work or change in security status or non-compliance with Authorized Users security or other requirements. Such approval shall not relieve the Contractor of the obligation to perform all work in compliance with the contract terms. The Purchasing Agent reserves the right to reject and/or bar from the facility for cause any employee, subcontractor, or agents of the Contractor.

**56. ASSIGNMENT / SUBCONTRACTORS** The Contractor shall not assign, transfer, convey, sublet, or otherwise dispose of the contract or its right, title or interest therein, or its power to execute such contract to any other person, company, firm or corporation in performance of the contract, other than the assignment of the right to receive moneys due, without the prior written consent of Essex County. Prior to an assignment of the right to receive moneys becoming effective, Contractor shall file a written notice of such assignment simultaneously with Essex County and participating Authorized User(s).

The Purchasing Agent reserves the right to reject any proposed subcontractor, assignee or supplier for bona fide business reasons, which may include, but are not limited to: that the proposed transferee is on the Department of Labors list of companies with which New York State cannot do business; the Purchasing Agent determines that the company is not qualified; unsatisfactory contract performance or service has been previously provided; or attempts were not made to solicit minority and womens business enterprises (M/WBE) bidders for the subcontract.

**57. PERFORMANCE / BID BOND** Essex County reserves the right to require the Bidder/Contractor to furnish without additional cost, a performance, payment or bid bond or negotiable irrevocable letter of credit or other form of security for the faithful performance of the contract, whenever the Purchasing Agent in his/her sole discretion deems such bond or security to be in Essex County's best interest. Where required, such bond or other security shall be in the form prescribed by the Purchasing Agent.

**58. STOP / SUSPENSION OF WORK**

- a. **Stop Work Order** The Purchasing Agent reserves the right to stop the work covered by this contract at any time that the successful Contractor becomes unable or incapable of performing the work or meeting any requirements or qualifications set forth in the contract. In the event of such stopping, the Purchasing Agent shall have the right to arrange for the completion of the work in such manner as it may deem advisable and if the cost thereof exceeds the amount of the bid, the successful Contractor shall be liable for any such cost on account thereof.
- b. **Suspension of Work Order** The Purchasing Agent, in his/her sole discretion, reserves the right to suspend any or all activities under this contract, at any time, in the best interests of the State or Issuing Entity. In the event of such suspension, the contractor will be given a formal written notice outlining the particulars of such suspension. Examples of the reason for such suspension include, but are not limited to, a budget freeze on County spending, declaration of emergency, or other such circumstances. Upon issuance of such suspension of work, the Contractor is not to accept any purchase orders, as specified in the Suspension Order. Activity may resume at such time as the Purchasing Agent issues a formal written notice authorizing a resumption of work.

**59. CANCELLATION** A contract may be canceled by the Purchasing Agent, and/or an Authorized User may cancel its participation, license or service order under the contract, at the Contractors expense upon non-performance, or upon a determination that Contractor is non-responsive, or non-responsible.

**60. FORCE MAJEURE** The Contractor shall not be responsible for delay resulting from its failure to perform if neither the fault nor negligence of the Contractor, its officers, employees or agents contributed to such delay and the delay is due directly to acts of God, wars, acts of public enemies, strikes, fires or floods, or other similar cause beyond the control of the Contractor, or for any of the foregoing which affect subcontractors or suppliers and no alternate source of supply is available to the Contractor. In such event,

Contractor shall notify the Purchasing Agent, by certified or registered mail, of the delay or potential delay and the cause(s) thereof either (a) within ten (10) calendar days after the cause which creates or will create the delay first arose if the Contractor could reasonably foresee that a delay could occur by reason thereof, or (b), if delay is not reasonably foreseeable, within five (5) calendar days after the date the Contractor first had reason to believe a delay could result. The foregoing shall constitute the Contractor's sole remedy or excuse with respect to such delay. In the event performance is suspended or delayed, in whole or in part, by reason of any of the aforesaid causes or occurrences and proper notification is given the Purchasing Agent, any performance so suspended or delayed shall be performed by the Contractor at no increased cost, promptly after such disabilities have ceased to exist unless it is determined in the sole discretion of the Purchasing Agent that the delay will significantly impair the value of the contract to the County or to Authorized Users, whereupon the Purchasing Agent may:

- a. Accept allocated performance or deliveries from the Contractor. The Contractor, however, hereby agrees to grant preferential treatment to County Agencies with respect to Product subjected to allocation; and/or
- b. Purchase from other sources (without recourse to and by the Contractor for the costs and expenses thereof) to replace all or part of the Products which are the subject of the delay, which purchases may be deducted from the contract quantity; or
- c. Terminate the contract or the portion thereof which is subject to delivery delays, and thereby discharge any unexecuted portion of the contract or the relative part thereof.

**61. CONTRACT BILLINGS** Contractor shall provide complete and accurate billing invoices to each Authorized User in order to receive payment. Billings for Agencies must contain all information required by the County Treasurer and/or Auditor. The County Treasurer shall render payment for Agency purchases, and such payment shall be made in accordance with ordinary County procedures and practices. Payment of contract purchases made by Authorized Users other than Agencies shall be billed directly by Contractor on invoices/vouchers, together with complete and accurate supporting documentation as required by the Authorized User.

Submission of an invoice and payment thereof shall not preclude the Purchasing Agent from reimbursement or demanding a price adjustment in any case where the Product delivered is found to deviate from the terms and conditions of the bid and award documents.

**62. DEFAULT - AUTHORIZED USER** An Authorized User's breach shall not be deemed a breach of the centralized contract. In the event a participating Authorized User fails to make payment to the Contractor for Products delivered, accepted and properly invoiced, within 60 days of such delivery and acceptance, the Contractor may, upon 10 days advance written notice to both the Purchasing Agent and the Authorized User's purchasing official, suspend additional shipments of Product or provision of



services to such entity until such time as reasonable arrangements have been made and assurances given by such entity for current and future contract payments.

Notwithstanding the foregoing, the Contractor shall, at least 10 days prior to declaring a breach of contract by any Authorized User, by certified or registered mail, notify both the Purchasing Agent and the purchasing official of the breaching Authorized User of the specific facts, circumstances and grounds upon which a breach will be declared. It is understood, however, that if the Contractor's basis for declaring a breach is insufficient, the Contractor's declaration of breach and failure to service an Authorized User shall constitute a breach of its contract and the County or Authorized User may thereafter utilize any remedy available at law or equity.

### **63. INTEREST ON LATE PAYMENTS**

- a. **County Agencies** The payment of interest on certain payments due and owed by a County agency may be made in accordance with Section 3-a of the *General Municipal Law* at the rate of three percent (3%) per annum.
- b. **By Non-County Agencies** The terms of Article 11\_A apply only to procurements by and the consequent payment obligations of the County. Neither expressly nor by any implication is the County responsible for payments on any purchases made by a Non-County Agency Authorized User.
- c. **By Contractor** Should the Contractor be liable for any payments to the County hereunder, interest, late payment charges and collection fee charges will be determined and assessed pursuant to Section 18 of the *State Finance Law* to the same extent as though the contract was with the State of New York rather than the County.

**64. REMEDIES FOR BREACH** It is understood and agreed that all rights and remedies afforded below shall be in addition to all remedies or actions otherwise authorized or permitted by law:

- a. **Cover / Substitute Performance** Upon the failure of the Contractor to properly perform within the time specified, failure to provide acceptable service, to make immediate replacement of rejected Product when so requested, or upon the revocation of the Contract by the Purchasing Agent for cause, or upon repudiation of the contract by the Contractor, the Purchasing Agent may, with or without formally bidding same:
  - i. purchase from other sources to replace the Product rejected, revoked, not timely delivered or repudiated; or
  - ii. If after making reasonable attempts, under the circumstances then existing, to timely provide acceptable service or acquire replacement product of equal or comparable quality, the Purchasing Agent is unsuccessful, the Purchasing Agent may acquire acceptable service or replacement product of lesser or greater quality.

Such purchases may, in the discretion of the Purchasing Agent, be deducted from the contract quantity.

- b. **Withhold Payment** In any case where a question of non-performance by Contractor arises, payment may be withheld in whole or in part at the discretion of the Purchasing Agent. Should the amount withheld be finally paid, a cash discount originally offered may be taken as if no delay in payment had occurred.
- c. **Reimbursement of Costs Incurred** The Contractor agrees to reimburse the County and/or Authorized User promptly for any and all additional costs and expenses incurred for acquiring acceptable services, and/or replacement Product. Should the cost of cover be less than the contract price, the Contractor shall have no claim to the difference. The Contractor covenants and agrees that in the event suit is successfully prosecuted for any default on the part of the Contractor, all costs and expenses expended or incurred by the County or Authorized User in connection therewith, including reasonable attorneys fees, shall be paid by the Contractor.

Where the Contractor fails to timely deliver pursuant to the guaranteed delivery terms of the contract, the Purchasing Agent may authorize an ordering Authorized User to rent substitute equipment temporarily. Any sums expended for such rental shall, upon demand, be reimbursed to the Authorized User promptly by the Contractor or deducted by the Authorized User from payments due or to become due the Contractor on the same or another transaction.

- d. **Deduction / Credit** Sums due as a result of these remedies may be deducted or offset by the County or Authorized User from payments due, or to become due, the Contractor on the same or another transaction. If no deduction or only a partial deduction is made in such fashion the Contractor shall pay to the County or Authorized User the amount of such claim or portion of the claim still outstanding, on demand. The Purchasing Agent reserves the right to determine the disposition of any rebates, settlements, restitution, liquidated damages, etc. which arise from the administration of the contract.

**65. ASSIGNMENT OF CLAIM** Contractor hereby assigns to the County any and all its claims for overcharges associated with this contract which may arise under the antitrust laws of the United States, 15 U.S.C. Section 1, *et seq.* and the antitrust laws of the State of New York, *General Business Law* Section 340, *et seq.*

**66. TOXIC SUBSTANCES** Each Contractor furnishing a toxic substance as defined by Section 875 of the *Labor Law*, shall provide such Authorized User with not less than two copies of a material safety data sheet, which sheet shall include for each such substance the information outlined in Section 876 of the *Labor Law*.

Before any chemical product is used or applied on or in any building, a copy of the product label and Material Safety Data Sheet must be provided to and approved by the user agency representative.

**67. INDEPENDENT CONTRACTOR** It is understood and agreed that the legal status of the Contractor, its agents, officers and employees under this Contract is that of an independent contractor, and in no manner shall they be deemed employees of the County or Authorized User, and therefore are not entitled to any of the benefits associated with such employment. The Contractor agrees, during the term of this contract, to maintain at Contractors expense those benefits to which its employees would otherwise be entitled by law, including health benefits, and all necessary insurance for its employees, including workers compensation, disability and unemployment insurance, and to provide the Authorized User with certification of such insurance upon request. The Contractor remains responsible for all applicable federal, state and local taxes, and all FICA contributions.

**68. SECURITY / CONFIDENTIALITY** Contractor warrants, covenants and represents that it will comply fully with all security procedures of the County and any Authorized User(s) in performance of the Contract.

Contractor further warrants, covenants and represents that any confidential information obtained by Contractor, its agents, subcontractors, officers, or employees in the course of performing its obligations, including without limitation, security procedures, business operations information, or commercial proprietary information in the possession of the County or any Authorized User hereunder or received from another third party, will not be divulged to any third parties. Contractor shall not be required to keep confidential any such confidential material which is publicly available through no fault of Contractor, independently developed by Contractor without reliance on confidential information of the County or Authorized User, or otherwise obtained under the Freedom of Information Act or other applicable New York State Laws and Regulations. This warranty shall survive termination of this Contract for a period of five (5) years. Contractor further agrees to take appropriate steps to instruct its personnel, agents, officers and any subcontractors regarding the obligations arising under this clause to insure such confidentiality.

**69. COOPERATION WITH THIRD PARTIES** The Contractor shall be responsible for fully cooperating with any third party agents, including but not limited to subcontractors of the Authorized User, relating to delivery of product or coordination of services.

**70. CONTRACT TERM - EXTENSION** In addition to any stated renewal periods in the Contract, any contract or unit portion thereof let by the Purchasing Agent may be extended by the Purchasing Agent for an additional period(s) of up to one year (cumulatively) with the written concurrence of the Contractor.

**71. WARRANTIES & GUARANTEES** Contractor hereby warrants and guarantees:

- a. To fully defend, indemnify and save harmless the County, Authorized Users and their respective officers, agents and employees from suits, actions, damages and costs of every name and description arising out of the acts or omissions of Contractor, its officers, employees, subcontractors, partners, or agents, in any

performance under this contract including: i) personal injury, damage to real or personal tangible or intangible property, without limitation; ii) negligence, either active or passive, without limitation, or iii) infringement of any law or of a United States Letter Patent with respect to the Products furnished, or of any copyright, trademark, trade secret or other third party intellectual proprietary rights, without limitation, provided that the County or Authorized User shall give Contractor: (a) prompt written notice of any action, claim or threat of infringement suit, or other suit, promptness of which shall be established by Authorized User upon the furnishing of written notice and verified receipt, (b) the opportunity to take over, settle or defend such action, claim or suit at Bidders sole expense, and (c) assistance in the defense of any such action at the expense of Contractor. Where a dispute or claim arises relative to a real or anticipated infringement, the County or Authorized User may require Bidder/Contractor, at its sole expense, to submit such information and documentation, including formal patent attorney opinions, as the Purchasing Agent shall require.

- b.** Contractor warrants full ownership, clear title free of all liens, or perpetual license rights to any Products transferred to Authorized User under this Contract, and Contractor shall be solely liable for any costs of acquisition associated therewith without limitation. Contractor warrants that Authorized User will have undisturbed, peaceful use of the Products, including, without limitation, software, object or source codes, custom programming or third party intellectual property rights incorporated or embedded therein, and training modules or Documentation. Contractor fully indemnifies the County and Authorized User for any loss, damages or actions arising from a breach of said warranty without limitation.
- c.** To pay, at its sole expense, all applicable permits, licenses, tariffs, tolls and fees and give all notices and comply with all laws, ordinances, rules and regulations of any governmental entity in conjunction with the performance of obligations under the contract.
- d.** Unless recycled or recovered materials are available in accordance with the "Recycled & Recovered Materials" clause, Product offered shall be standard new equipment, current model of regular stock product with all parts regularly used with the type of equipment offered; and no attachment or part has been substituted or applied contrary to the manufacturers recommendations and standard practice. Every Product, including any substituted or replacement unit delivered, must be guaranteed against faulty material and workmanship for a period of one year from and after the date the unit is accepted unless otherwise specified by the County or Authorized User. Notwithstanding the foregoing, when the manufacturers standard guarantee for Product or any component thereof exceeds one year, the longer guarantee period shall apply to such unit or component thereof delivered under this contract. Furthermore, the Contractor agrees to extend its warranty period with regard to any Product delivered by the cumulative periods of time, after notification, during which the Product requires



servicing or replacement (down time) or is in the possession of the Contractor, its agents, officers or employees. If during the regular or extended warranty periods faults develop, the Contractor shall promptly repair or, upon demand, replace the defective unit or component part affected. All costs for labor and material and transportation incurred to repair or replace defective goods during the warranty periods shall be borne solely by the Contractor, and the County or Authorized User shall in no event be liable or responsible therefor. This warranty shall survive any termination of the contract in accordance with the warranty term.

- e. Where the provision of services requires the replacement or repair of Product, any replaced or repaired component, part or Product shall be new and shall, if available, be replaced by the original manufacturers component, part or Product. All proposed substitutes for the original manufacturers installed Product must be approved by the Authorized User before installation. The Product or part shall be equal to or of better quality than the original Product being replaced. Any Product replaced by the Contractor under the contract shall be guaranteed for one (1) year from the date of replacement and replaced at no cost to the Authorized User if found defective during that time.
- f. Prior to award and during the Contract term and any renewals thereof, Contractor must establish to the satisfaction of the Purchasing Agent that it meets or exceeds all requirements of the bid and any applicable laws, including but not limited to, permits, insurance coverage, licensing, proof of coverage for workman's compensation, and shall provide such proof as required by the Purchasing Agent. Failure to do so may constitute grounds for the County to cancel or suspend this contract, in whole or in part, or to take any other action deemed necessary by the Purchasing Agent.

The Contractor further warrants and guarantees:

- (a) His/Her/Its products against defective material or workmanship and to repair or replace any damages or marring occasioned in transit
- (b) To furnish adequate protection from damage for all work and repair damages of any kind for which he or his workmen are responsible, to the building or equipment, to his own work, or to the work of other successful bidders.
- (c) To carry adequate insurance to protect the County from loss in case of accident, fire, theft, etc.
- (d) That all deliveries will be equal to the accepted bid sample.
- (e) That the equipment delivered is standard, new, latest model of regular stock product or as required by the specifications; also that no attachment or part has been substituted or applied contrary to manufacturer's recommendations and standard practice. Every unit delivered must be guaranteed against faulty material and workmanship for a period of at least one year from date of delivery. If during this period such faults develop, the successful bidder agrees to replace the unit or the part affected without cost to the County. Any merchandise provided under the contract which is or becomes defective during the guarantee period shall be replaced by the successful bidder free of charge with the specific understanding that all replacements

shall carry the same guarantee as the original equipment. The successful bidder shall make any such replacement immediately upon receiving notice from the County.

(f) That all manufacturers product warranties and guarantees shall be furnished to the County, and that the County's rights thereunder shall not be in any way impaired or limited.

**72. YEAR 2000 WARRANTY** The following Year 2000 warranty applies to procurements of:

- A) Product**, including: i) equipment incorporating embedded software or other technology (e.g. copiers, elevators, security systems), ii) software, or iii) other technology; or
- B) Services** including: i) consulting, integration, code or data conversion ii) maintenance or support services, iii) data entry or processing, or iv) contract administration services (e.g. billing, invoicing, claim processing).

This Year 2000 Warranty shall survive beyond termination or expiration of the Contract through: a) one year, b) December 31, 2000, or c) the Contractor or Third Party Manufacturers stated Year 2000 warranty term, whichever is longer. Nothing in this warranty statement shall be construed to limit any rights or remedies otherwise available under this Contract for breach of warranty.

**a. Definitions** For purposes of this warranty, the following definitions shall apply:

- i. "Product"** shall include, without limitation: any piece or component of equipment, hardware, firmware, middleware, custom or commercial software, or internal components or subroutines therein which perform any date/time data recognition function, calculation, comparing or sequencing. Where services are furnished (e.g., maintenance, consulting, systems integration, code or data conversion, data entry) the term "Product" shall include resulting deliverables.
- ii. "Contractors Product"** shall include all Product delivered under this Contract by Contractor other than Third Party Products.
- iii. "Third Party Product"** shall include product manufactured or developed by a corporate entity independent from Contractor and provided by Contractor on a non-exclusive licensing or other distribution agreement with the third party manufacturer. "Third Party Product" does not include product where Contractor is: (a) a corporate subsidiary or affiliate of the third party manufacturer/developer; and/or (b) the exclusive re-seller or distributor of product manufactured or developed by said corporate entity.

**b. Warranty Disclosure** At the time of bid for individual or agency specific contracts, or at the time of ordering Product or Product quote for Essex County centralized contracts, Contractor must disclose in writing to Authorized User:

- i. For Contractor Product and Products (including, but not limited to, Contractor and/or Third Party Products and/or Authorized Users**

- Installed Products) which have been specified to perform as a system:** Compliance or non-compliance of the Products individually and as a system with the Warranty set forth below; and
- ii. **For Third Party Product not specified to perform as part of a system:** compliance on the grounds that the Contractor has passed-through the third party manufacturer Year 2000 Warranty or non-compliance based upon the fact that a) Contractor indicates that they can not pass through the third party manufacturers Year 2000 Warranty or b) there is no third party manufacturers Year 2000 Warranty to pass through.

**NOTE: AN ABSENCE OR FAILURE TO FURNISH THE REQUIRED WRITTEN WARRANTY DISCLOSURE SHALL BE DEEMED A STATEMENT OF COMPLIANCE BY THE CONTRACTOR OF THE PRODUCT(S) OR SYSTEM(S) IN QUESTION WITH THE YEAR 2000 WARRANTY STATEMENT SET FORTH BELOW.**

- c. **Year 2000 Warranty** Year 2000 Warranty "compliance" shall be defined in accordance with the following warranty statement:

**Warranty Statement:** Contractor warrants that Product(s) furnished pursuant to this Contract shall, when used in accordance with the Product documentation, be able to accurately process date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000, including leap year calculations. Where a purchase requires that specific Products must perform as a package or system, this warranty shall apply to the Products as a system.

In the event of any breach of this warranty, Contractor shall restore the Product to the same level of performance as warranted herein, or repair or replace the Product with conforming Product so as to minimize interruption to Authorized Users ongoing business processes, time being of the essence, at Contractors sole cost and expense. This warranty does not extend to correction of Authorized Users errors in data entry or data conversion.

- d. **YEAR 2000 Warranty on Services** Where Contractor is providing ongoing services, including but not limited to: i) consulting, integration, code or data conversion ii) maintenance or support services, iii) data entry or processing, or iv) contract administration services (e.g. billing, invoicing, claim processing), in addition to the foregoing Year 2000 warranty on service deliverables, Contractor warrants that services shall be provided in an accurate and timely manner without interruption, failure or error due to the inaccuracy of Contractors business operations in processing date/time data (including, but not limited to, calculating, comparing, and sequencing) from, into, and between the twentieth and twenty-first centuries, and the years 1999 and 2000, including leap year calculations. Contractor shall be responsible for damages resulting from any delays, errors or untimely performance resulting therefrom, including but not limited to the failure or untimely performance of such services.

## GENERAL

**73. APPLICABILITY** In addition to the terms contained in **Part I** (*General - All Procurements*), the terms contained in **Part II** (***Software & Technology Procurements***) apply to software and technology procurements.

### **74. DEFINITIONS - Part II**

**DOCUMENTATION** The complete set of manuals (e.g. user, installation, instruction or diagnostic manuals) in either hard or electronic copy, necessary to enable an Authorized User to properly test, install, operate and enjoy full use of the Product in accordance with the license rights.

**ENTERPRISE** The business operations in the United States of a Licensee or Enterprise Participant, without regard to geographic location where such operations are performed or the entity actually performing such operations on behalf of Licensee or Enterprise Participant. For the County of New York, "business operations" shall be defined as the business operations of all Agencies, as defined in Part I.

**ENTERPRISE LICENSE** A contract which grants Enterprise Participants unlimited license rights to access, use and/or execute Product within the Enterprise.

**ENTERPRISE PARTICIPANTS** One or more Licensees, as defined in Part I, participating in an Enterprise License.

**LICENSE EFFECTIVE DATE** The date Product is delivered to an Authorized User. Where a License involves Licensees right to copy a previously licensed and delivered Master Copy of a Program, the license effective date for additional copies shall be deemed to be the date on which the Purchase Order is executed.

**LOGICAL PARTITION** A subset of the processing power within a CEC which has been divided through hardware and/or software means (i.e. *Processor Resources/System Manager* [PR/SM]) so as to limit the total processing power which is accessible by an operating system image by individual users or individual software products.

**OBJECT CODE** The machine executable code that can be directly executed by a computers central processing unit(s).

**PHYSICAL PARTITION** A subset of the processing power within a CEC which has been derived through hardware means so as to limit the total processing power accessible by an operating system image by individual users or individual Products.

**SITE** The location (street address) where Product will be executed.

**SOURCE CODE** The programming statements or instructions written and expressed in any language understandable by a human being skilled in the art which are translated



by a language compiler to produce executable machine Object Code.

**TERMS OF LICENSE** The terms and conditions set forth in the Contract which are in effect and applicable to a Product order at the time of order placement, and only such additional terms as are consistent therewith or more advantageous to the Authorized User as are set forth on the individual Product order form executed and approved by both Authorized User and Contractor.

**VIRUS** Any computer code, whether or not written or conceived by Contractor, which disrupts, disables, harms, or otherwise impedes in any manner the operation of the Product, or any other associated software, firmware, hardware, or computer system (such as local area or wide-area networks), including aesthetic disruptions or distortions, but does not include security keys or other such devices installed by Product manufacturer.

## **TERMS AND CONDITIONS**

**75. SOFTWARE LICENSE GRANT** *Unless otherwise set forth in the Bid Specifications or Contract, where Product is acquired on a licensed basis the following shall constitute the license grant:*

- a. **License Scope** Licensee is granted a non-exclusive, perpetual license to use, execute, reproduce, display, perform, or merge the Product with other product within its business enterprise in the United States. Licensee shall have the right to use and distribute modifications or customizations of the Product to and for use by any Authorized Users otherwise licensed to use the product, provided that any modifications, however extensive, shall not diminish manufacturers proprietary title or interest. No license, right or interest in any trademark, trade name, or service mark is granted hereunder.
- b. **License Term** The license term shall commence upon the License Effective Date. Where the terms of license permit licensing on a non-perpetual basis, the license term stated in the Contract shall be extended by the time periods allowed for testing and acceptance.
- c. **Licensed Documentation** Contractor hereby grants to Licensee a perpetual license right to make, reproduce (including downloading electronic copies of the Product) and distribute, either electronically or otherwise, copies of Product Documentation as necessary to enjoy full use of the Product. If commercially available, Licensee shall have the option to require the Contractor to deliver, at Contractors expense: a) One (1) hard copy and One (1) Master Electronic Copy of the Documentation in diskette or CD-ROM format; or b) hard copies of the Product Documentation by type of license in the following amounts, unless otherwise mutually agreed:
  - Individual/Named User License \_ 1 copy per License
  - Concurrent Users \_ 8 copies per site
  - Processing Capacity \_ 8 copies per site

- d. **Product Use** Product may be accessed, used, executed, reproduced, displayed, performed by Licensee to service all Authorized Users of the machine on which Product is installed, up to the capacity measured by the applicable licensing unit stated in the terms of license (i.e. payroll size, number of employees, CPU, MIPS, MSU, concurrent user, workstation).
- e. **Permitted License Transfers** As Licensee's business operations may be altered, expanded or diminished, licenses granted hereunder may be transferred or combined for use at an alternative or consolidated Authorized User site not originally specified in the license, including transfers between Agencies ("permitted license transfers"). Licensee(s) do not have to obtain the approval of Contractor for permitted license transfers, but must give thirty (30) days prior written notice to Contractor of such move(s) and certify in writing that the Product is not in use at the prior site. There shall be no additional license or other transfer fees due Contractor, provided that: i) the maximum capacity of the consolidated machine is equal to the combined individual license capacity of all licenses running at the consolidated or transferred site. (e.g., named users, seats, or MIPS); and ii) that, if the maximum capacity of the consolidated machine is greater than the individual license capacity being transferred, a logical or physical partition or other means of restricting access will be maintained within the computer system so as to restrict use and access to the Product to that unit of licensed capacity solely dedicated to beneficial use for Licensee.
- f. **Restricted Use By Outsourcers / Facilities Management, Service Bureaus / or Other Third Parties** Outsourcers, facilities management or service bureaus retained by Licensee shall have the right to use the Product to maintain Licensee's business operations, including data processing, for the time period that they are engaged in such activities, provided that: 1) Licensee gives notice to Contractor of such party, site of intended use of the Product, and means of access; and 2) such party has executed, or agrees to execute, the Product manufacturers standard nondisclosure or restricted use agreement which executed agreement shall be accepted by the Contractor ("Non-Disclosure Agreement"); and 3) if such party is engaged in the business of facility management, outsourcing, service bureau or other services, such third party will maintain a logical or physical partition within its computer system so as to restrict use and access to the program to that portion solely dedicated to beneficial use for Licensee. In no event shall Licensee assume any liability for third parties compliance with the terms of the Non-Disclosure Agreement, nor shall the Non-Disclosure Agreement create or impose any liabilities on the County or Licensee. Any third party with whom a Licensee has a relationship for a state function or business operation, shall have the temporary right to use Product (using, for example, but not limited to, JAVA Applets), provided that such use shall be limited to the time period during which the third party is using the Product for the stated function or business activity.
- g. **Archival Back-Up and Disaster Recovery** Licensee may use and copy the Product and related Documentation in connection with: 1) reproducing a reasonable number of copies of the Product for archival backup and disaster recovery procedures in the event of destruction or corruption of the Product or

disasters or emergencies which require Licensee to restore backup(s) or to initiate disaster recovery procedures for its platform or operating systems; 2) reproducing a reasonable number of copies of the Product and related documentation for cold site storage. "Cold Site" storage shall be defined as a restorable back-up copy of the Product not to be installed until and after the declaration by the Licensee of a disaster; 3) reproducing a back-up copy of the Product to run for a reasonable period of time in conjunction with a documented consolidation or transfer otherwise allowed under paragraph (F) above. "Disaster Recovery" shall be defined as the installation and storage of Product in ready-to-execute, back-up computer systems prior to disaster or breakdown which is not used for active production or development.

- h. Confidentiality Restrictions** The Product is a trade secret and proprietary product. Licensee and its employees will keep the Product strictly confidential, and Licensee will not disclose or otherwise distribute or reproduce any Product to anyone other than as authorized under the terms of license. Licensee will not remove or destroy any proprietary markings of Contractor.
- i. Restricted Use by Licensee** Except as expressly authorized by the terms of license, Licensee shall not:

  - a. Copy the Product;
  - b. Cause or permit reverse compilation or reverse assembly of all or any portion of the Product;
  - c. Distribute, disclose, market, rent, lease or transfer to any third party any portion of the Product or the Documentation, or use the Product or Documentation in any service bureau arrangement;
  - d. Disclose the results of Product performance benchmarks to any third party who is not an Authorized User without prior notice to Contractor;
  - e. Export the Licensed Software in violation of any U.S. Department of Commerce export administration regulations.

**76. ENTERPRISE LICENSE OPTION FOR SOFTWARE** Multiple Authorized Users may license any Product offered under the Contract on behalf of their collective business operations. An Enterprise License shall incorporate the terms set forth in this Part II and the pricing set forth in the Contract, and additionally the following terms:

- a. Enterprise \_ Defined** Any Authorized User may be an Enterprise Participant. Enterprise Participants will be enumerated in the Enterprise License, including: i) contact name, ship to and main billing address of each Enterprise Participant, ii) street address of the included End User sites of each Enterprise Participant. The originally defined Enterprise may be modified at any time thereafter, including deletion or addition of Enterprise Participants, sites or "ship to" locations, provided that Contractor is given written notice and that any additional capacity required by such addition is licensed in accordance with the Enterprise License terms.
- b. Product Use** Product licensed under this Enterprise Option shall be licensed with the rights set forth in this Part II, without reference to a specific designated system or Licensee, up to the maximum licensed capacity. Product may be used

and freely transferable anywhere within the defined Enterprise, including higher or lower performance machines, and Enterprise Participants will not incur an increase in license, support or other charges provided that the aggregate utilization of the Product does not exceed the aggregate Enterprise Licensed capacity.

- c. **Submission of Orders, Billing and Usage Reporting** An Enterprise may be established for order placement and billing as either a "single" or "multiple" point of contact, at Licensees option. Where designated as a "single", one Enterprise Participant shall be designated as the lead agency and central point for submission of Purchase Orders, usage reporting and billing. Where designated as "multiple" point of contact, each designated Enterprise Participant shall be responsible for submission of Purchase Orders, reporting and billing with regard to its use of Enterprise Licensed Product. For either single or multiple point of contact Enterprises, a) Contractor agrees to hold each Enterprise Participant solely responsible for payment and performance; and b) Contractor shall be responsible for furnishing an annual report to each designated point of contact summarizing overall Enterprise License activity for the preceding twelve months.
- d. **Shipping / Delivery** Contractor shall be responsible for delivery of Master Copies of Enterprise Licensed Product and documentation to Enterprise Participants. Within either "Single" or "Multiple" Enterprise Licenses, shipping and delivery of Master Copies of Product and Documentation shall be the responsibility of Contractor to each "ship to" location specified on the Purchase Order(s). Distribution and installation of Enterprise Licensed Product to End Users at a site shall be the responsibility of the Licensee.
- e. **Enterprise Operating Systems** Unless otherwise specified by the parties, up to ten (10) hardware/operating system combinations for Product shall be included at no additional charge. The initial ten hardware/operating systems may be specified at any time within five (5) years of the Enterprise License effective date. Additional hardware/operating systems beyond the initial ten (10) may be specified at any time by the Enterprise, however if additional copies of Product are required for hardware/operating systems beyond the initial ten, the cost for such systems will be as mutually agreed between the parties.
- f. **Product Acceptance** Each Enterprise Participant shall have a right of acceptance, as set forth above in this Part II, only for the first copy of Product for its site(s).
- g. **Enterprise Fees** Enterprise License Fees shall be set forth in the Contract. Notwithstanding the foregoing, the Product license fees for additional copies or units of capacity for Enterprise licensed Product shall not increase by more than six percent (6%) annually each year during the Enterprise License term. Contractor may offer additional discounts/incentives for Enterprise Participants as may be mutually agreed between the parties. Enterprise Participants shall be entitled to aggregate the volume of all Enterprise Participants for purposes of establishing any applicable discounts under the Contract, and Enterprise Licensed Volume shall be aggregated with volume of non-Enterprise Licensed Product otherwise purchased under the centralized Contract. Upon termination of the Enterprise, Enterprise Participants have the right to acquire additional



capacity or users at the Enterprise License price for twelve months after the termination of the Enterprise License.

- h. Technical Support** Unless otherwise mutually agreed, technical support is optional and may be elected individually by Product by each Enterprise Participant. Where an Enterprise Participant is under a current maintenance or technical support contract, such Enterprise Participant shall be entitled to credit any support paid covering any portion of the Enterprise License Term to the fees due under the Enterprise license.

Enterprise Participants shall have the right to partially or wholly de-support a subset of unused Enterprise licensed capacity upon written notice to Contractor at the end of any then-current technical support term without penalty or charge. The capacity for a Program license which has been de-supported must remain inactive and may not be used within the Enterprise unless technical support for such capacity has been reinstated. In the event of de-support, Contractor reserves the right to reasonably determine compatibility of future releases or new programs prior to shipment.

- i. Merger of Two or More Enterprises** Two or more Enterprises may be merged to form a larger Enterprise for the purpose of sharing and exchanging data at no additional license fee provided that participants give Contractor notice of such merger and that the combined capacity does not exceed the maximum capacity of the individual licenses.
- j. "Nested" Enterprises** Individual Enterprise License participant(s) may license additional capacity or products for the specific use of a subset of the larger enterprise. Said participant(s) must certify in writing to Contractor that such use is only by the enumerated subset of participants.
- k. Default** A default by any Enterprise Participant shall entitle the Contractor to the remedies against such participant under the Contract, but shall not be deemed a default by the remaining non-defaulting Enterprise Participants.

**77. PRODUCT ACCEPTANCE** Unless otherwise provided in the Bid Specifications, the County and/or Authorized User(s) shall have sixty (60) days from delivery to accept Product. Failure to provide notice of acceptance or rejection by the end of the period provided for under this clause would constitute acceptance by the County or Authorized User(s) as of the expiration of that period.

Unless otherwise provided in the Bid Specifications, The County or Authorized User shall have the option to run acceptance testing on the Product prior to acceptance, such tests and data sets to be specified by User. Where using its own data or tests, The County or Authorized User must have the tests or representative set of data available upon delivery. This demonstration will take the form of a documented installation test, capable of observation by the County or Authorized User, and shall be made part of the Contractors standard documentation. The test data shall remain accessible to the County or Authorized User after completion of the test.

In the event that the documented installation test cannot be completed successfully within sixty (60) days from delivery, and the Contractor or Product is responsible for the delay, The County or Authorized User shall have the option to cancel

the order in whole or in part, or to extend the testing period for another sixty (60) day increment. The County or Authorized User shall notify Contractor of acceptance upon successful completion of the documented installation test. Such cancellation shall not give rise to any cause of action against the County or Authorized User for damages, loss of profits, expenses, or other remuneration of any kind.

Costs and liabilities associated with a failure of the Product to perform in accordance with the functionality tests or product specifications during the acceptance period shall be borne fully by Contractor to the extent that said costs or liabilities shall not have been caused by negligent or willful acts or omissions of the The County or Authorized Users agents or employees. Said costs shall be limited to fees paid to Contractor, if any, or any liability for costs incurred at the direction or recommendation of Contractor.

**78. AUDIT OF LICENSED PRODUCT USAGE** Contractor shall have the right to periodically audit, at its expense, use of licensed Product at any site where a copy of the Product resides provided that: i) Contractor gives Licensee or Enterprise Participants at least thirty (30) days advance notice, ii) such audit is conducted during such party's normal business hours iii) each Licensee or Enterprise Participant is entitled to designate a representative who shall be entitled to participate and simultaneously review all information obtained by the audit, and shall be entitled to copies of all reports, data or information obtained by the Contractor; and iv) if the audit shows that such party is not in compliance such party shall be liable for the unlicensed capacity and shall be required to purchase the additional units or rights necessary to bring it into compliance.

**79. OWNERSHIP / TITLE TO CUSTOM PRODUCTS OR PROGRAMMING** Where contract deliverables include custom products or programming, title, rights and interests to such Product(s) shall be determined as follows:

**a. Definitions**

**Product** For purposes of this section, the term "Product" shall have the meaning set forth in Part I of these *General Specifications*, which includes, but is not limited to: software applications or programming, programming tools, documentation (including user or training manuals), modules, interfaces, templates, and other elements such as utilities, subroutines, algorithms, formulas, source code, object code, reports, drawings, or data.

**"Existing Product"** is defined as any proprietary material(s) existing or developed independently and not at the expense of Licensee.

**"Custom Product"** is defined as any material(s), exclusive of Existing Product, created, prepared, written, compiled or developed by Contractor, or anyone acting on his behalf for The County or Authorized User pursuant to the Contract.

**b. Contractor or Third Party Manufacturers Title To Existing Product** Title to Existing Product(s) does not transfer. With respect to such Existing Product(s), whether

embedded in or operating in conjunction with Custom Product, Contractor warrants: a) all right, title and interest in Contractors Existing Product(s); or b) all license rights, title and interest in third party Existing Product(s), which include the right to grant to The County or Authorized User an irrevocable, non-exclusive, worldwide, paid-up license to use, execute, reproduce, display, perform, and distribute Existing Product(s). Contractor hereby grants a irrevocable, non-exclusive, worldwide, paid-up license to use, execute, reproduce, display, perform, and distribute Existing Product(s) embedded in or transferred for use in conjunction with Custom Product(s). The Licensee agrees to reproduce the copyright notice and any other legend of ownership on any copies made under the license granted under this paragraph prior to distribution or use.

**c. Title To Custom Product** Title to Custom Product(s), excluding Existing Product, shall be deemed the sole and exclusive property of the County or Authorized User, who shall have all right, title and interest (including ownership and copyrights). For the purposes of the federal copyright law, execution of this contract shall constitute an assignment of all right, title and interest in the Custom Product(s) by Contractor to the County or Authorized User. The County or Authorized User, in its sole discretion, reserves the right to sell Custom Product or to license them on an exclusive or non-exclusive basis to Contractor or other Third Parties. Contractor hereby agrees to take all necessary and appropriate steps to ensure that Custom Product is protected against unauthorized use, execution, reproduction, display, performance, or distribution by or through Contractor, its partners or agents. Notwithstanding this reservation of title, Contractor shall not be precluded from using the related or underlying general knowledge, skills and experience developed in the course of providing the Custom Product in the course of Contractor's business.

**d. Acquisitions Funded By Tax Exempt Financing** In addition to the foregoing rights under a, b and c, the sale or licensing of Custom Product or rights therein shall not occur until such Product or rights are or become useable, and shall be at fair market value which shall be determined at the time of sale or licensing. Any such transfer shall be pursuant to a separate written agreement. If the Contract deliverables are to be funded through tax exempt financing, the County or Authorized User may assign to a Trustee or other entity for security purposes County or Authorized Users ownership and license rights in Custom and Existing Products. Contractor will cooperate with the County or Authorized User to execute such other documents as may be appropriate to achieve the objectives of this paragraph.

**e. Other Acquisitions (Not Funded by Tax Exempt Financing)** In addition to the rights set forth above (paragraphs "a", "b" and "c"), the County or Authorized User reserves the right to transfer any or all rights to Custom Materials on an exclusive or non-exclusive basis. Where such transfer (sale or licensing) is provided in the Bid Specifications, Contractor shall include a purchase price for the such rights in its bid. Such price shall be offered as a deduction from Contractor's overall Bid or Project Bid price, and shall be weighted as set forth in the bid evaluation criteria, if any. Such rights shall transfer to the successful Bidder/Contractor upon successful completion and acceptance by the County or Authorized User of all contract deliverables. Contractor will

cooperate with the County or Authorized User to execute such other documents as may be appropriate to achieve the objectives of this paragraph.

**80. PROOF OF LICENSE** The Contractor must provide to each Licensee who places a Product order either: a) the Product manufacturer's certified License Confirmation Certificates in the name of each such Licensee; or b) a written confirmation from the Product manufacturer accepting Contractors Product invoice as proof of license. Bidder or Contractor shall submit a sample manufacturers certificate, or alternatively such written confirmation from the manufacturer, with the Bid or Contract. Such certificates must be in a form acceptable to the Licensee.

**81. PRODUCT VERSION** Product orders shall be deemed to reference Manufacturers most recently released model or version of the Product at time of delivery, unless an earlier model or version is specifically requested in writing by the County or Authorized User and Contractor is willing to provide such version.

**82. MIGRATION TO CENTRALIZED CONTRACT** The County or Authorized User may obtain additional Product authorized under this contract, (e.g., licensed capacity upgrades, new releases, documentation, maintenance, consulting or training) whether or not Product was initially obtained independently of this contract. The County or Authorized Users election to obtain additional Product shall not operate to diminish, alter or extinguish rights previously granted.

**83. NOTICE OF PRODUCT DISCONTINUANCE** In the event that a Product manufacturer proposes to discontinue maintenance or support for Product, Contractor shall (1) notify the County and each Authorized User in writing of the intended discontinuance, and (2) continue to provide maintenance and support for the greater of: a) the best terms offered by Contractor to any other customer, or b) not less than eighteen (18) months from the date of notice, and (3) at The County or Authorized Users option, either: a) provided that the County or Authorized User is under maintenance, provide the County or Authorized User with either a Product replacement with equivalent functionality at no additional charge, or b) provide County or Authorized User with the source code for Licensed Product at no additional charge to enable it to continue use and maintenance of the Product.

**84. REINSTATEMENT OF MAINTENANCE** The County or Authorized User shall not be required to purchase maintenance for use of Product, and may discontinue maintenance at the end of any current maintenance term upon written notice to Contractor. In the event that The County or Authorized User discontinues maintenance of licensed Product, it may, at any time thereafter, reinstate maintenance for Product without any additional penalties or other charges, by paying Contractor at rates which would have been due under the contract for the period of time that such maintenance had lapsed, or for twelve months, whichever is less.

**85. NO HARDSTOP / PASSIVE LICENSE MONITORING** Contractor hereby represents, warrants and covenants that the Product and all Upgrades do not and will



not contain any computer code that would disable the Product or Upgrades or impair in any way its operation based on the elapsing of a period of time, exceeding an authorized number of copies, advancement to a particular date or other numeral, or other similar self-destruct mechanisms (sometimes referred to as "time bombs", "time locks", or "drop dead" devices) or that would permit Contractor to access the Product to cause such disablement or impairment (sometimes referred to as a "trap door" device). Contractor agrees that in the event of a breach or alleged breach of this provision that The County or Authorized User shall not have an adequate remedy at law, including monetary damages, and that The County or Authorized User shall consequently be entitled to seek a temporary restraining order, injunction, or other form of equitable relief against the continuance of such breach, in addition to any and all remedies to which The County or Authorized User shall be entitled.

**86. ADDITIONAL WARRANTIES / GUARANTEES** Where Contractor or Product manufacturer offers additional or more advantageous warranties than set forth herein, Contractor shall offer or pass through any additional or more advantageous warranties to The County or Authorized Users. In addition to the "Warranties/Guarantees" set forth in Part I, Contractor makes the following warranties.

- a. **Product Performance Warranty** Contractor represents and warrants that the Products delivered pursuant to this contract conform to the manufacturers specifications, performance standards, and documentation and that the documentation fully describes the proper procedure for using the Products in an efficient manner. Contractor does not warrant that software is error-free.

In the event that Contractor does not remedy a substantial breach of this warranty within the cure period, Licensee shall also have the right to terminate any payments due Contractor, with a refund of the any fees prospectively paid from the date of breach.

- b. **Year 2000 Warranty** For all procurements of Product, Contractor must furnish a warranty statement in accordance with the NYS Standard Year 2000 Warranty Compliance Statement set forth in Part I at the time of bid for agency specific contracts or product order for centralized contracts.
- c. **Virus Warranty** Contractor represents and warrants that Licensed Software contains no known viruses. Bidder is not responsible for viruses introduced at Licensees site. For purposes of this provision, "Virus" shall have the meaning set forth in Part II, "Definitions".

A breach of any of the foregoing shall be deemed a material breach of the Contract or any License granted thereunder. The defaulting party shall be given written notice of a warranty breach under this section and shall have a thirty (30) day period to cure such breach.

**87. INDEMINIFICATION THE WARRANTIES SET FORTH IN THESE GENERAL**

**SPECIFICATIONS (PARTS I and II) ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Contractor shall defend, indemnify and save harmless the County and Authorized Users from suits, actions, claims, damages and costs arising under or connected to Contractors actions, and except where express loss liabilities set forth elsewhere in the Contract provide for a higher loss limitation liability than as set forth in this paragraph, or where such express provisions impose Contractor liability on "without limitation", the total liability of Contractor for such claim(s), regardless of the nature and basis for the claim, shall not exceed two (2) times the fees paid for the applicable Product. For any suit, action, claim, damages or costs arising under or are connected to personal injury or property damage, or breach of the title, patent and copyright warranties, Contractor shall be fully liable without limitation.

The County or Authorized User may retain such moneys from the amount due Contractor as may be necessary to satisfy any claim for damages, costs and the like asserted by or against the County or Authorized User, provided however, that Contractor shall not indemnify each such entity to the extent that any claim, loss or damages arising hereunder is caused by the negligence act or failure to act of said entity.

**88. SOURCE CODE ESCROW FOR LICENSED PRODUCTS** If source code or source code escrow is offered by either Contractor or Product manufacturer/developer to any other commercial customers, Contractor either: i) will provide Licensee with the Source Code for the Product; or ii) place the Source Code in a third party escrow arrangement with a designated escrow agent who shall be named and identified to the County, and who shall be directed to release the deposited Source Code in accordance with a standard escrow agreement acceptable to the County; or iii) will certify to the County that the Product manufacturer/developer has named the County, and the Licensee, as a named beneficiary of an established escrow arrangement with its designated escrow agent who shall be named and identified to the County and Licensee, and who shall be directed to release the deposited Source Code in accordance with the terms of escrow. Source Code, as well as any corrections or enhancements to such source code, shall be updated for each new release of the Product in the same manner as provided above. Contractor shall identify the escrow agent upon commencement of the contract term and shall certify annually that the escrow remains in effect in compliance with the terms of this paragraph.

The County may release the Source Code to Licensees under this Contract who have licensed Product or obtained services, who may use such copy of the Source Code to maintain the Product.



Andrew M. Cuomo, Governor

Colleen C. Gardner, Commissioner

Essex County Government

Donna Thompson, Sr Purchasing Clerk  
7551 Court St  
Elizabethtown NY 12932

Schedule Year 2010 through 2011  
Date Requested 01/04/2011  
PRC# 2011000017

Location Terry Mountain  
Project ID#  
Project Type Repair a communications tower

### PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2010 through June 2011. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website [www.labor.state.ny.us](http://www.labor.state.ny.us). Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

#### NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: \_\_\_\_\_ Date Cancelled: \_\_\_\_\_

Name & Title of Representative: \_\_\_\_\_

Phone: (518) 457-5589 Fax: (518) 485-1870  
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240





# **General Provisions of Laws Covering Workers on Article 8 Public Work Contracts**

## **Introduction**

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

## **Responsibilities of the Department of Jurisdiction**

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission; a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion [online](#).

## **Hours**

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

There are very few exceptions to this rule. Complete information regarding these exceptions is available on the "[4 Day / 10 Hour Work Schedule](#)" form (PW 30R).

## **Wages and Supplements**

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12240; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website [www.labor.state.ny.us](http://www.labor.state.ny.us).

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website [www.labor.state.ny.us](http://www.labor.state.ny.us).

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website [www.labor.state.ny.us](http://www.labor.state.ny.us).

## **Payrolls and Payroll Records**

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. Payrolls must be maintained for at least three (3) years from the project's date of completion. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed \$100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds \$25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

### **Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties**

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

### **Withholding of Payments**

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

### **Summary of Notice Posting Requirements**

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "[Public Work Project](#)" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

## **Apprentices**

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12240 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

## **Interest and Penalties**

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

## **Debarment**

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

## **Criminal Sanctions**

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

## **Discrimination**

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of \$50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c) ).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d) ).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

### **Workers' Compensation**

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

### **Unemployment Insurance**

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.





Andrew M. Cuomo, Governor

Colleen C. Gardner, Commissioner

Essex County Government

Donna Thompson, Sr Purchasing Clerk  
7551 Court St  
Elizabethtown NY 12932

Schedule Year 2010 through 2011  
Date Requested 01/04/2011  
PRC# 2011000017

Location Terry Mountain  
Project ID#  
Project Type Repair a communications tower

### Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

### Contractor Information

All information must be supplied

Federal Employer Identification Number: _____		
Name: _____		
Address: _____ _____		
City: _____	State: _____	Zip: _____
Amount of Contract: \$ _____	Contract Type:	
Approximate Starting Date: ____/____/____	<input type="checkbox"/> (01) General Construction	
Approximate Completion Date: ____/____/____	<input type="checkbox"/> (02) Heating/Ventilation	
	<input type="checkbox"/> (03) Electrical	
	<input type="checkbox"/> (04) Plumbing	
	<input type="checkbox"/> (05) Other : _____	

Phone: (518) 457-5589 Fax: (518) 485-1870  
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12240



# IMPORTANT NOTICE

FOR

## CONTRACTORS & CONTRACTING AGENCIES

### Social Security Numbers on Certified Payrolls

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concerns with regard to inclusion of this information on payrolls if another identifier will suffice.

For these reasons, *the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor.*

**NOTE:** This change does not affect the Department's ability to request and receive the entire social security number from employers during the course of its public work / prevailing wage investigations.

**To all State Departments, Agency Heads and Public Benefit Corporations  
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

## **Budget Policy & Reporting Manual**

# **B-610**

### **Public Work Enforcement Fund**

*effective date December 7, 2005*

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#### **1. Purpose and Scope:**

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

#### **2. Background and Statutory References:**

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

#### **3. Procedures and Agency Responsibilities:**

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.



**To all State Departments, Agency Heads and Public Benefit Corporations**  
**IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND**

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor  
Administrative Finance Bureau-PWEF Unit  
Building 12, Room 464  
State Office Campus  
Albany, NY 12240

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

# NEW LEGISLATION

*Effective February 24, 2008*

## WORKER NOTIFICATION – A9052 – S6240

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage rate* for their particular job classification *on each pay stub*\*. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her particular job classification. The required notification will be provided with each wage schedule, may be downloaded from our website [www.labor.state.ny.us](http://www.labor.state.ny.us) or made available upon request by contacting the Bureau of Public Work at 518-457-5589.

\* In the event that the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

NEW YORK STATE DEPARTMENT OF LABOR  
BUREAU OF PUBLIC WORK  
State Office Building Campus Building 12 Room 130  
Albany, New York 12240

# THIS IS A **PUBLIC WORK PROJECT**

Any worker, laborer, or mechanic employed on this project is entitled to receive the ***prevailing wage and supplements*** rate for the classification at which he/she is working.

*Chapter 629  
of the  
Labor Laws  
of 2007*

**These wages are set by law and  
must be posted at the work site.**

**They can also be found at**

**[www.labor.state.ny.us](http://www.labor.state.ny.us)**

If you feel that you have not received proper wages or benefits, please call our nearest office. \*

<b>Albany</b>	(518) 457-2744	<b>Newburgh</b>	(845) 568-5398
<b>Binghamton</b>	(607) 721-8005	<b>Patchogue</b>	(631) 687-4886
<b>Buffalo</b>	(716) 847-7159	<b>Rochester</b>	(585) 258-4505
<b>Garden City</b>	(516) 228-3915	<b>Syracuse</b>	(315) 428-4056
<b>New York City</b>	(212) 775-3568	<b>Utica</b>	(315) 793-2314
		<b>White Plains</b>	(914) 997-9507

*\* For New York City government agency construction projects,  
please contact the Office of the NYC Comptroller at (212) 669-4443,  
**[www.comptroller.nyc.gov](http://www.comptroller.nyc.gov)** - click on Bureau of Labor Law.*

Contractor Name:

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Project Location:

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# NEW LEGISLATION

*Effective July 18, 2008*

## **OSHA 10-hour Construction Safety and Health Course – S1537-A**

This provision is an addition to the existing prevailing wage rate law, Labor Law §220, section 220-h. It requires that on all public work projects of at least \$250,000.00, all laborers, workers and mechanics working on the site, be certified as having successfully completed the OSHA 10-hour construction safety and health course. It further requires that the advertised bids and contracts for every public work contract of at least \$250,000.00, contain a provision of this requirement.

***NOTE:** The OSHA 10 Legislation does not apply to projects advertised for bid prior to July 18, 2008 AND only applies to workers on a public work project that are required under Article 8 to receive the prevailing wage.*

Rules and regulations will be promulgated and posted on the NYSDOL website [www.labor.state.ny.us](http://www.labor.state.ny.us) when finalized.

## **Where to find OSHA 10-hour Construction Course**

1. NYS Department of Labor website for scheduled outreach training at:

[www.labor.state.ny.us/workerprotection/safetyhealth/DOSH\\_ONSITE\\_CONSULTATION.shtm](http://www.labor.state.ny.us/workerprotection/safetyhealth/DOSH_ONSITE_CONSULTATION.shtm)

2. OSHA Training Institute Education Centers:

### **Rochester Institute of Technology OSHA Education Center**

Rochester, NY

Donna Winter

Fax (585) 475-6292

e-mail: [dlwtpo@rit.edu](mailto:dlwtpo@rit.edu)

(866) 385-7470 Ext. 2919

[www.rit.edu/~outreach/course.php3?CourseID=54](http://www.rit.edu/~outreach/course.php3?CourseID=54)

### **Atlantic OSHA Training Center**

UMDNJ – School of Public Health

Piscataway, NJ

Janet Crooks

Fax (732) 235-9460

e-mail: [crooksje@umdnj.edu](mailto:crooksje@umdnj.edu)

(732) 235-9455

<https://ophp.umdnj.edu/wconnect/ShowSchedule.awp?~~GROUP~AOTCON~10~>

### **Keene State College**

Manchester, NH

Leslie Singleton

e-mail: [lsingletin@keene.edu](mailto:lsingletin@keene.edu)

(800) 449-6742

[www.keene.edu/courses/print/courses\\_osha.cfm](http://www.keene.edu/courses/print/courses_osha.cfm)

3. List of trainers and training schedules for OSHA outreach training at:

[www.OutreachTrainers.org](http://www.OutreachTrainers.org)

## Requirements for OSHA 10 Compliance

Chapter 282 of the Laws of 2007, codified as Labor Law 220-h will take effect on July 18, 2008. The statute provides as follows:

The advertised specifications for every contract for public work of \$250,000.00 or more must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors receive such training “prior to the performing any work on the project.”

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- copies of bona fide course completion card;
- training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- other valid proof

\*\*A certification by the employer attesting that all employees have completed such course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-485-5696.

# WICKS Reform 2008

(For all contracts advertised or solicited for bid on or after 7/1/08)

- Raises the threshold for public work projects subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work. The total project's threshold would increase from \$50,000 to: \$3 million in Bronx, Kings, New York, Queens and Richmond counties; \$1.5 million in Nassau, Suffolk and Westchester counties; and \$500,000 in all other counties.
- For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical work and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or use of a Project Labor Agreement (PLA), and must be open to public inspection.
- Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.
- The Commissioner of Labor shall have the power to enforce separate specification requirements on projects, and may issue stop-bid orders against public owners for non-compliance.
- Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.
- Reduces from 15 to 7 days the period in which contractors must pay subcontractors.

## **IMPORTANT INFORMATION**

### **Regarding Use of Form PW30R**

**“Employer Registration for Use of 4 Day / 10 Hour Work Schedule”**

### **To use the ‘4 Day / 10 Hour Work Schedule’:**

There **MUST** be a *Dispensation of Hours (PW30)* in place on the project

***AND***

You **MUST** register your intent to work 4 / 10 hour days, by completing the PW30R Form.

### ***REMEMBER...***

The ‘4 Day / 10 Hour Work Schedule’ applies **ONLY** to Job Classifications and Counties listed on the PW30R Form.

**(Please note :** For each Job Classification check the individual wage schedule for specific details regarding their 4/10 hour day posting.)



# Instructions for Completing Form PW30R

## “Employer Registration for Use of 4 Day / 10 Hour Work Schedule”

### ***Before completing Form PW30R check to be sure ...***

- There is a *Dispensation of Hours* in place on the project.
- The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.
- The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

### **Instructions (Type or Print legibly):**

#### Contractor Information:

- Enter the Legal Name of the business, FEIN, Street Address, City, State, Zip Code; the Company's Phone and Fax numbers; and the Company's email address (if applicable)
- Enter the Name of a Contact Person for the Company along with their Phone and Fax numbers, and the personal email address (if applicable)

#### Project Information:

- Enter the Prevailing Rate Case number (PRC#) assigned to this project
- Enter the Project Name / Type (i.e. Smithtown CSD – Replacement of HS Roof)
- Enter the Exact Location of Project (i.e. Smithtown HS, 143 County Route #2, Smithtown, NY; Bldgs. 1 & 2)
- If you are a Subcontractor, enter the name of the Prime Contractor for which you work
- On the Checklist of Job Classifications -
  - Go to pages 2 and 3 of the form
  - Place a checkmark in the box to the right of the Job Classification you are choosing
  - Mark all Job Classifications that apply

#### Requestor Information:

- Enter the name of the person submitting the registration, their title with the company, and the date the registration is filled out

#### Return Completed Form:

- **Mail** the completed PW30R form (3 pages) to: NYSDOL Bureau of Public Work, SOBC – Bldg.12 – Rm.130, Albany, NY 12240 **-OR-**
- **Fax** the completed PW30R form (3 pages) to: NYSDOL Bureau of Public Work at (518)485-1870



**New York State Department of Labor**  
**Bureau of Public Work**  
W. Averell Harriman State Office Campus  
Building 12 - Room 130  
Albany, New York 12240  
Phone - (518) 457-5589 Fax - (518) 485-1870

## Employer Registration for Use of 4 Day / 10 Hour Work Schedule

*Before completing Form PW30R check to be sure ...*

There is a *Dispensation of Hours* in place on the project.

The 4 Day / 10 Hour Work Schedule applies to the Job Classifications you will be using.

The 4 Day / 10 Hour Work Schedule applies to the County / Counties where the work will take place.

### Please Type or Print the Requested Information

*When completed ...*

Mail to NYSDOL Bureau of Public Work, SOBC, Bldg. 12, Rm.130, Albany, NY 12240

-or-

Fax to NYSDOL Bureau of Public Work at (518) 485-1870

### Contractor Information

Company Name: \_\_\_\_\_ FEIN: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Phone Number \_\_\_\_\_ Fax Number: \_\_\_\_\_ Email Address: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone No: \_\_\_\_\_ Fax No: \_\_\_\_\_ Email: \_\_\_\_\_

### Project Information

Project PRC#: \_\_\_\_\_ Project Name/Type: \_\_\_\_\_

Exact Location  
of Project: \_\_\_\_\_ County: \_\_\_\_\_

(If you are Subcontractor)

Prime Contractor Name: \_\_\_\_\_

Job Classification(s) to Work 4/10 Schedule: *(Choose all that apply on Job Classification Checklist - Pages 2 & 3)*

### Requestor Information

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

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

## Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

<b>Job Classification</b>	<b>Tag #</b>	<b>Applicable Counties</b>	<b>Check Box</b>
Electrician	25m	Nassau, Suffolk	<input type="checkbox"/>
Electrician	43	Cayuga, Chenango, Cortland, Herkimer, Madison, Oneida, Onondaga, Oswego, Otsego, Tompkins, Wayne	<input type="checkbox"/>
Electrician	840Teledata	Cayuga, Onondaga, Ontario, Seneca, Wayne, Yates	<input type="checkbox"/>
Electrician	86	Genesee, Livingston, Monroe, Ontario, Orleans, Wayne, Wyoming	<input type="checkbox"/>
Electrician Lineman	1049Line/Gas	Nassau, Suffolk	<input type="checkbox"/>
Electrician Lineman	1249a	Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates	<input type="checkbox"/>
Elevator Constructor	138	Columbia, Delaware, Dutchess, Greene, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester	<input type="checkbox"/>
Elevator Constructor	14	Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming	<input type="checkbox"/>
Elevator Constructor	27	Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, Yates	<input type="checkbox"/>
Elevator Constructor	35	Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Oneida, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington	<input type="checkbox"/>
Elevator Constructor	62.1	Broome, Cayuga, Chenango, Cortland, Delaware, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, Tioga, Tompkins	<input type="checkbox"/>
Glazier	677.1	Jefferson, Lewis, Livingston, Monroe, Ontario, Seneca, St. Lawrence, Wayne, Yates	<input type="checkbox"/>
Insulator - Heat & Frost	30-Syracuse	Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins	<input type="checkbox"/>

## Job Classification Checklist

(Place a checkmark by all classifications that will be using the 4/10 schedule)

<b><i>Job Classification</i></b>	<b>Tag #</b>	<b>Applicable Counties</b>	<b>Check Box</b>
Operating Engineer - Heavy& Highway	832H	Allegany, Chemung, Genesee, Livingston, Monroe, Ontario, Schuyler, Steuben, Wayne, Yates	<input type="checkbox"/>
Painter	178 B	Broome, Chenango, Tioga	<input type="checkbox"/>
Painter	178 E	Chemung, Schuyler, Steuben	<input type="checkbox"/>
Painter	178 O	Delaware, Otsego	<input type="checkbox"/>
Painter	31	Cayuga, Herkimer, Lewis, Madison, Oneida, Onondaga, Ontario, Oswego, Seneca	<input type="checkbox"/>
Painter	38.O	Oswego	<input type="checkbox"/>
Painter	4-Buf,Nia, Olean	Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Livingston, Niagara, Orleans, Steuben, Wyoming	<input type="checkbox"/>
Painter	4-Jamestown	Cattaraugus, Chautauqua	<input type="checkbox"/>
Sheetmetal Worker	46	Livingston, Monroe, Ontario, Seneca, Wayne, Yates	<input type="checkbox"/>
Teamster - Heavy&Highway	294h/h	Albany, Columbia, Fulton, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington	<input type="checkbox"/>
Teamster - Heavy&Highway	317a.hh	Allegany, Cayuga, Cortland, Seneca, Steuben, Tompkins, Wayne, Yates	<input type="checkbox"/>
Teamster - Heavy&Highway	693.H/H	Broome, Chenango, Delaware, Otsego, Tioga	<input type="checkbox"/>

## Introduction to the Prevailing Rate Schedule

### Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

#### Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

#### Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

#### Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

#### Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is for each hour worked, some classifications require the payment or provision of supplements for each hour paid (including paid holidays on which no work is performed) and/or may require supplements to be paid or provided at a premium rate for premium hours worked.

#### Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website ([www.labor.state.ny.us](http://www.labor.state.ny.us)) for current wage rate information.

#### Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2



Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor  
 Bureau of Public Work  
 State Office Campus, Bldg. 12  
 Albany, NY 12240

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-775-3568	212-775-3579
Bureau of Public Work - Patchogue	631-687-4883	631-687-4904
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

## Clinton County General Construction

<b>Asbestos Worker</b>	<b>01/01/2011</b>
------------------------	-------------------

**JOB DESCRIPTION** Asbestos Worker

**DISTRICT** 9

**ENTIRE COUNTIES**

Albany, Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

**WAGES**

Per hour

7/01/2010-  
11/30/2010

Asbestos Worker

Removal & hazardous

abatement Only

\$ 17.50 plus additional \$3.00\*

Only for the removal of insulation materials from mechanical systems which are not going to be scrapped.

\*Increase to be allocated at a later date.

**SUPPLEMENTAL BENEFITS**

Per hour paid

Journeyman

\$ 7.50

**OVERTIME PAY**

See (B, E, \*Q, \*\*T, V) on OVERTIME PAGE

**HOLIDAY**

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (2, 4, 6, 25) on HOLIDAY PAGE

\*Code Q applies to 4,6,25.

\*\*Code T applies to 2.

9-12a - Removal Only

<b>Boilermaker</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Boilermaker

**DISTRICT** 6

**ENTIRE COUNTIES**

Cayuga, Clinton, Cortland, Franklin, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

**WAGES**

Per hour:

07/01/2010

Boilermaker

\$ 28.71

**SUPPLEMENTAL BENEFITS**

Per hour paid:

Journeyman

\$ 19.03

\*IMPORTANT NOTE(Portion of Supplemental benefits per hour paid at same premium as shown for overtime.)

Journeyman

\$ 18.24\*

**OVERTIME PAY**

New Work: See (B,E,Q) on OVERTIME PAGE. Time & 1/2 for the 9th & 10th hours Monday thru Saturday, double all addtl. hours

Maintenance: See (B,E,Q) on OVERTIME PAGE.

**HOLIDAY**

Paid:

See (1) on HOLIDAY PAGE

Overtime:

See (5, 6, 10, 11, 15) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour:

( 1/2 ) year terms at the following percentage of Journeyman's wage.

07/01/2010	1st 65%	2nd 65%	3rd 70%	4th 75%	5th 80%	6th 85%	7th 90%	8th 95%
	\$18.67	\$18.67	\$20.10	\$21.54	\$22.97	\$24.41	\$25.84	\$27.28

Supplemental Benefits per hour:

Six month terms at the following dollar amounts:

07/01/2010	1st \$15.09	2nd \$15.09	3rd \$15.66	4th \$16.21	5th \$16.77	6th \$17.35	7th \$17.91	8th \$18.47
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\*IMPORTANT NOTE (Portion of Supplemental benefits per hour paid at same premium as shown for overtime.)

07/01/2010	1st \$14.30*	2nd \$14.30*	3rd \$14.87*	4th \$15.42*	5th \$15.98*	6th \$16.56*	7th \$17.12*	8th \$17.68*
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6-175

## Carpenter - Building

01/01/2011

**JOB DESCRIPTION** Carpenter - Building

**DISTRICT** 1

## ENTIRE COUNTIES

Clinton, Essex, Franklin

## WAGES

Per hour:

07/01/2010

Carpenter	\$ 23.66
Soft Floor Layer	23.66
Carpet Layer	23.66
Dry-Wall Applicator	23.66
Lather	23.66
Piledriver (Bldg)	23.81
Diver Wet Day	61.25
Diver Dry Day	24.66
Diver Tender	24.66
Welder	23.66

State or Federal Designated hazardous site, requiring protective gear shall be an additional \$1.50 per hour.

\*Divers raise becomes effective on July 1st of each year, not June 1st.

## SUPPLEMENTAL BENEFITS

Supplement Benefits per hour worked:

Journeyman \$ 14.925

## OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday which occurs on Sunday shall be observed the following Monday.

## REGISTERED APPRENTICES

Wages per hour:

1 year terms at the following percentage of Journeyman's base wage

1st	2nd	3rd	4th
50%	60%	70%	80%

Supplemental Benefits per hour worked:

Carpenter	
1st year terms	\$ 7.045
2nd year terms	10.965
3rd year terms	14.925
4th year terms	14.925

1-1042

**Carpenter - Building / Heavy&Highway**

**01/01/2011**

**JOB DESCRIPTION** Carpenter - Building / Heavy&Highway

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

**WAGES**

Wages per hour:

	07/01/2010	05/01/2011
Carpenter - ONLY for Artificial Turf/Synthetic Sport Surface Installer	\$ 26.00	An Additional \$1.50**

\*\* To be allocated at a later date

Note - Does not include the operation of equipment. Please see Operating Engineers rates.

**SUPPLEMENTAL BENEFITS**

Per hour Paid:

07/01/2010

Journeyman \$ 16.94

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (2, 17, 27) on HOLIDAY PAGE

Overtime: See (6, 16, 27) on HOLIDAY PAGE

Note: When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. When a holiday falls upon a Sunday, it shall be observed on the following Monday.

**REGISTERED APPRENTICES**

Wages per hour:

One year terms at the following percentage of Journeyman's wage:

1st	2nd	3rd	4th
50%	60%	70%	80%

Supplemental Benefits per hour paid:

07/01/2010

Carpenter	
1st year term	\$ 8.44
2nd year term	13.54
3rd year term	14.39
4th year term	15.24

1-42AtSS

**Carpenter - Heavy&Highway**

**01/01/2011**

**JOB DESCRIPTION** Carpenter - Heavy&Highway

**DISTRICT 1**

**ENTIRE COUNTIES**

Clinton, Essex, Franklin, Hamilton, Warren, Washington

**WAGES**

Per hour:

07/01/2010

Carpenter	\$ 27.54
Millwright	28.04

Piledriver	27.54
Dockbuilder	27.54
Diver-Wet Day	61.25
Diver-Dry Day	28.54
Diver-Tender	28.54

State or Federal designated hazardous site, requiring protective gear shall be an additional \$1.50 per hour.  
Certified welders when required to perform welding work will receive an additional \$1.50 per hour.

#### SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 14.945

#### OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

#### HOLIDAY

Paid: See (2, 17) on HOLIDAY PAGE  
Overtime: See (5, 6) on HOLIDAY PAGE

#### REGISTERED APPRENTICES

Wages per hour:

One year terms at the following percentage of Journeyman's base wage

1st	2nd	3rd	4th
50%	60%	70%	80%

Supplemental Benefits per hour worked:

1st year terms	\$ 7.065
2nd year terms	10.985
3rd year terms	14.945
4th year terms	14.945

1-370/1042H/H

#### Electrician

01/01/2011

**JOB DESCRIPTION** Electrician

**DISTRICT** 6

#### ENTIRE COUNTIES

Clinton, Essex, Franklin, Jefferson, Lewis, St. Lawrence

#### WAGES

Per hour:	07/01/2010	04/01/2011
Electrician	\$ 30.00	Additional
Cable Splicer	31.50	\$1.50
Tunnel worker/welder	31.50	

NOTE:

A) Shift Work: The following rates will apply on all Contracting Agency mandated shifts worked between the hours listed below. The employer may be permitted to adjust the starting hours of the shift by up to two (2) hours if required by the agency. If a shift begins outside of the stated shift hours, the rate paid would be determined by what shift period the majority of the hours were worked.

1st shift	8:00 AM to 4:30 PM	Regular wage rate
2nd shift	4:30 PM to 1:00 AM	Regular wage rate plus 17.3%
3rd shift	12:30 AM to 9:00 AM	Regular wage rate plus 31.4%

B) Additional \$1.50 per hour for all underground and tunnel work working 35 feet or more on scaffolds, ladders, towers, steeples, structural steel, or over 65 feet from mechanical lifts.

#### SUPPLEMENTAL BENEFITS

Per hour worked:

Journeyman \$ 15.15  
\*plus 3% of



gross wage

\* NOTE: THE 3% IS BASED ON THE HOURLY WAGE PAID ON STRAIGHT TIME RATE OR PREMIUM TIME RATE.

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

(Hourly) terms at the following percentage of journeyman's wage.

	1-1000	to 2000	to 3500	to 5000	to 6500	to 8000
	40%	45%	50%	60%	70%	80%
07/01/2010	\$ 12.00	\$ 13.50	\$ 15.00	\$ 18.00	\$ 21.00	\$ 24.00
Tunnel apprentices						
07/01/2010	\$ 13.50	\$ 15.00	\$ 16.50	\$ 19.50	\$ 22.50	\$ 25.50

Supplemental Benefits per hour worked:

Appr 1st & 2nd term	\$ 6.69 * plus 3% of gross wage
Appr All other terms	\$ 15.15 * plus 3% of gross wage paid.

\* NOTE: THE 3% IS BASED ON THE HOURLY WAGE PAID ON STRAIGHT TIME RATE OR PREMIUM TIME RATE.

6-910

<b>Elevator Constructor</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Elevator Constructor

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Clinton, Essex, Fulton, Hamilton, Herkimer, Montgomery, Oneida, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

**PARTIAL COUNTIES**

Columbia: Only the Townships of Stuyvesant, Kinderhook, Chatham, Canaan, Stockport, Ghent, Austerlitz, Greenport, Claverack, Hillsdale and New Lebanon.

Greene: Towns of Durham, Greenville, New Baltimore, Cosacki, Ciro, & Athens

**WAGES**

Per hour	07/01/2010	01/01/2011
Mechanic	\$ 37.69	An Additional \$ 3.00**
Helper	70% of Mechanic Wage Rate	

(\*\*)To be allocated at a later date

\*\*\*\* IMPORTANT NOTICE - EFFECTIVE 04/01/2009 \*\*\*\*

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman/Helper	\$ 20.035*
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\*Plus 6% of wages if less than 5 years service

\*Plus 8% of wages if more than 5 years service

## OVERTIME PAY

See (D, O) on OVERTIME PAGE

## HOLIDAY

Paid: See (5, 6, 15, 16) on HOLIDAY PAGE

Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE

Note: When a paid holiday falls on Saturday, it shall be observed on Friday. When a paid holiday falls on Sunday, it shall be observed on Monday.

## REGISTERED APPRENTICES

Wages per hour

1st 6mo	2nd 6mo	2nd yr	3rd yr	4th yr
50 %	55 %	65 %	70 %	80 %

Supplemental Benefits per hour worked

Apprentices	\$ 20.035
	+6%
	of wage

1-35

## Glazier

01/01/2011

## JOB DESCRIPTION Glazier

## DISTRICT 1

## ENTIRE COUNTIES

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

## WAGES

Per hour

07/01/2010

05/01/2011

An Additional

Glazier base wage	\$ 23.10	\$ 1.50**
	+ additional \$1.00 per hour for all hours worked	

*High Work Base Wage	27.00	1.80**
	+ additional \$3.30 per hour for all hours worked	

(\*)When working on Swing Stage or Lift 100 feet or more in height, measured from the ground level up.

(\*\*)To be allocated at a later date

## SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman	\$ 13.48
Journeyman	
High Work	18.03

## OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

Premium is applied to the respective base wage only.

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If any of the holidays are designated by federal law to be celebrated on a day other than that on which they regularly fall, then the holiday shall be celebrated on the day set by said federal law as if the day on which the holiday is celebrated was actually the holiday date.

## REGISTERED APPRENTICES

Wages per hour

Apprentice Glazier One Half Year (900 hr) terms at the following percentage of Journeyman's base wage.

1st	2nd	3rd	4th	5th	6th	7th	8th
35%	45%	55%	65%	75%	85%	90%	95%
+ additional \$1.00 per hour for all hours worked for all terms							

Apprentice Glazier Hi-Work One Half Year (900 hr) terms at the following percentage of Journeyman's Hi-Work base wage.

1st	2nd	3rd	4th	5th	6th	7th	8th
35%	45%	55%	65%	75%	85%	90%	95%

+ additional \$3.30 per hour for all hours worked for all terms

Supplemental Benefits per hour worked

For apprentices indentured after 07/01/2009 the following supplemental benefit applies:

Apprentice	
1st-4th term	\$12.13
5th-8th term	13.48
Apprentice High Work	
1st-4th term	\$ 14.03
5th-8th term	18.03

For apprentices indentured prior to and including 07/01/2009, the following supplemental benefit applies:

Apprentice	\$ 13.48
Apprentice High Work	18.03

1-201

<b>Insulator - Heat &amp; Frost</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Insulator - Heat & Frost

**DISTRICT 1**

**ENTIRE COUNTIES**

Clinton, Franklin

**WAGES**

Wages per hour	07/01/2010	05/01/2011	05/01/2012
		An Additional	An Additional
Asbestos Worker*	\$ 23.83	\$ 1.275**	\$ 1.275**
Insulator*	23.83		
Firestopping Worker*	23.83		

(\*)On Mechanical Systems only.

(\*\*)To be allocated at a later date

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman	\$ 17.46
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**OVERTIME PAY**

See (\*B1, \*\*Q) on OVERTIME PAGE

\*B1=Double time begins after 10 hours on Saturday

\*\*Q=Triple time on Labor Day if worked.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

When a holiday falls on Sunday the following Monday shall be observed as the holiday.

**REGISTERED APPRENTICES**

Wages per hour

one year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
60 %	70 %	80 %	90 %

Supplemental Benefits per hour worked:

Apprentices	\$ 17.46
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1-40/CF

<b>Ironworker</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Ironworker

**DISTRICT 1**

## ENTIRE COUNTIES

Albany, Clinton, Columbia, Delaware, Essex, Greene, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

## PARTIAL COUNTIES

Fulton: Only the Townships of Broadalbin, Mayfield, Northampton, Bleecker and Johnstown.

Hamilton: Only the Townships of Hope, Benson and Wells.

Montgomery: Only the Townships of Florida, Amsterdam, Charleston, Glen, Mohawk and Root.

Otsego: Only the Towns of Unadilla, Butternut, Morris, Otego, Oneonta, Laurens, Millford, Maryland and Worchester.

## WAGES

Per hour	07/01/2010	05/01/2011 An Additional
Ornamental	\$ 27.00	\$ 1.80**
Reinforcing	27.00	1.80**
Rodman	27.00	1.80**
Sheeter Bucker-up	27.25	1.80**
Structural & Precast	27.00	1.80**
Mover/Rigger	27.00	1.80**
Fence Erector	27.00	1.80**
Stone Derrickman	27.00	1.80**
Sheeter	27.25	1.80**
Curtain Wall Installer	27.00	1.80**
Metal Window Installer	27.00	1.80**

(\*\*)To be allocated at a later date

## SUPPLEMENTAL BENEFITS

Per hour worked

JOURNEYMAN \$ 21.31

## OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday which occurs on Sunday shall be observed the following Monday.

## REGISTERED APPRENTICES

Wages per hour

ONE YEAR TERMS AT THE FOLLOWING WAGE RATES:

	07/01/2010
1st yr	\$ 16.00
2nd yr	18.00
3rd yr	20.00
4th yr	22.00

Supplemental Benefits per hour worked

1st year	\$ 8.50
2nd year	16.34
3rd year	17.46
4th year	18.58

1-12

## Laborer - Building

01/01/2011

JOB DESCRIPTION Laborer - Building

DISTRICT 1

## ENTIRE COUNTIES

Clinton, Essex, Warren

## WAGES

GROUP #A:

Basic Rate, Multi Trade Tender, Pipe Layer (water, sewer & etc), Self-propelled equipment operator

GROUP #B:

Demolition and wrecking, Concrete or plaster pump.

GROUP #C:

Sandblaster on construction clean-up, Drilling equipment only where a separate air compressor unit supplies power, Metal formsetter (sidewalk) and Curb Setter, Asphalt Raker, and Tail/Screwman on paving machine.

**GROUP #D:**

Acetylene Burner on demolition and cutting of Pipe

**GROUP #E:**

Blaster

**GROUP #F:**

Workers in kilns, tanks, boilers etc., Asbestos & Hazardous Waste Work.

**WAGES per hour**

07/01/2010

Group # A	\$ 19.38
Group # B	19.53
Group # C	19.68
Group # D	19.83
Group # E	19.88
Group # F	20.38

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman \$ 15.22

**OVERTIME PAY**

See (B, E, \*E2, Q) on OVERTIME PAGE

\*Inclement weather makeup day may be provided November 15 to May 15.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour

Terms are at the following percentage of Group Rate A.

0-1,333 Hrs	1,334-2,666 Hrs	2,667-4,000 Hrs
70%	80%	90%

Supplemental Benefits per hour worked

Apprentices \$ 15.22

1-186ew

**Laborer - Heavy&Highway**

**01/01/2011**

**JOB DESCRIPTION** Laborer - Heavy&Highway

**DISTRICT** 1

**ENTIRE COUNTIES**

Clinton, Essex, Warren

**WAGES**

**GROUP # A:**

Basic Rate, Drill Helper, Flagman, Outboard and Hand Boats.

**GROUP # B:**

Chain Saw, Concrete Aggregate Bin, Concrete Bootman, Gin Buggy, Hand or Machine Vibrator, Jack Hammer, Mason Tender, Mortar Mixer, Pavement Breaker, Handlers of Steelmesh, Small Generators for Laborers' Tools, Installation of Bridge Drainage Pipe, Pipe Layers, Vibrator Type Rollers, Tamper, Drill Doctor, Water Pump Operator (1-1/2" and Single Diaphragm) Nozzle (Asphalt, Gunite, Seeding, and Sand Blasting), Laborers on Chain Link Fence, Rock Splitter and Power Unit, Pusher Type Concrete Saw and all other Gas, Electric, Oil and Air Tool Operators, Wrecking Laborer.

**GROUP # C:**



Drilling Equipment Only Where a Separate Air Compressor Unit Supplies Power, Acetylene Torch Operators, Asphalt Raker, Powderman, Tail or Screw Operator on Asphalt Paver.

**GROUP # D:**

Blasters, Metal Form Setters (sidewalk), Stone or Granite Curb Setters.

**GROUP # E:**

Hazardous waste, Lead & Abestos abatement.

WAGES per hour 07/01/2010

Group # A	\$ 22.54
Group # B	22.74
Group # C	22.94
Group # D	23.14
Group # E	24.54

All employees who work a single irregular shift starting between 5:00 pm and 1:00 am on governmental mandated night work shall be paid an additional \$1.75 per hour.

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeymen \$ 15.38

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If a holiday falls on Sunday, it will be celebrated on Monday. In the event that men work on this Sunday holiday, they shall be paid double time. In the event that men work on Monday, they shall be compensated at double time plus the holiday pay. Accordingly, the Monday following the Sunday is treated as the holiday.

**REGISTERED APPRENTICES**

Wages per hour

Terms are at the following percentage of Group A rate.

0-1333 Hrs	1334-2666 Hrs	2667-4000 Hrs
70%	80%	90%

Supplements per hour worked

Apprentices \$ 15.38

1-186/2h

**Lineman Electrician**

**01/01/2011**

**JOB DESCRIPTION** Lineman Electrician

**DISTRICT 6**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

**WAGES**

Per hour:

Includes Teledata Work within Ten feet of High Voltage Transmission Lines

	07/01/2010	05/02/2011	05/07/2012
Lineman/Tech./Welder	\$ 43.82	\$ 44.52	\$45.23
Cable splicer	43.82	44.52	45.23
Digging Machine Operator	39.44	40.07	40.71
Tractor Trailer Driver	37.25	37.84	38.45
Groundman/Truck Driver	35.06	35.62	36.18
Mechanic 1st Class	35.06	35.62	36.18

Flagman	26.29	26.71	27.14
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Additional 1.00 per hr.for entire crew when a helicopter is used.

Above rates applicable on all overhead Transmission line work & Fiber Optic Cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction.

Lineman/Technician/Welder	\$ 42.61	\$ 43.31	\$ 44.01
Digging Machine Operator	38.35	38.98	39.61
Tractor Trailer Driver	36.22	36.81	37.41
Groundman/Truck Driver	34.09	34.65	35.21
Mech. 1st Class	34.09	34.65	35.21
Flagman	25.57	25.99	26.41
Certified WelderPipe Type Cable	44.74	45.48	46.21
Cable Splicer pipe type cable	46.87	47.64	48.41

Additional 1.00 per hour for entire crew when a helicopter job.

Above rates apply on Switching Structures, Maintenance projects, Railroad Catenary install/maint, Third rail installation, Bonding of Rails and pipe type cable and installation of Fiber Optic Cable.

Lineman /Techician	\$ 41.32	\$ 42.02	\$ 42.72
Welder/Cable Splicer	41.32	42.02	42.72
Digging Machine Operator	37.19	37.82	38.45
Tractor Trailer Driver	35.12	35.72	36.31
Groundman/Truck Driver	33.06	33.62	34.18
Mechanic 1st Class	33.06	33.62	34.18
Flagman	24.79	25.21	25.63

Additional 1.00 per.hr.for entire crew when a helicopter is used.

Above rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of Fiber Optic Cable where no other construction trades are or have been involved.

Lineman/Technician	\$ 41.32	\$ 42.02	\$ 42.72
Cable Splicer pipe type cable	45.45	46.22	46.99
Certified Welder pipe type	43.39	44.12	44.86
Digging Machine Operator	37.19	37.82	38.45
Tractor Trailer Driver	35.12	35.72	36.31
Mechanic 1st Class	33.06	33.62	34.18
Groundman/Truck Driver	33.06	33.62	34.18
Flagman	24.79	25.21	25.63

Additional \$ 1.00 per hour for entire crew when a helicopter is used.

Above rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work"

**\*\* IMPORTANT NOTICE - EFFECTIVE 04/01/2009 \*\***

Four (4), ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day.

NOTE - In order to use the '4 Day/10 Hour Work Schedule,' you must submit an 'Employer Registration for Use of 4 Day/10 Hour Work Schedule,' form PW30R; additionally, there must be a dispensation of hours in place on the project.

#### **SUPPLEMENTAL BENEFITS**

Per hour worked including holidays listed below:

The following SUPPLEMENTAL benefits apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

\$ 15.00	\$ 16.50	\$ 18.25
*plus 7% of	*plus 7% of	*plus 7% of
hourly wage paid	hourly wage paid	hourly wage paid

#### **OVERTIME PAY**

See (B, E, Q,) on OVERTIME PAGE. Double time for all emergency work designated by the Dept. of Jurisdiction.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS OF AT LEAST FIVE ( 5 ) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1st shift	8:00 AM to 4:30 PM REGULAR RATE
2nd shift	4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %
3rd shift	12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

**HOLIDAY**

Paid	See ( 5, 6, 8, 13, 25 ) on HOLIDAY PAGE plus Gov. of NYS Election Day.
Overtime	See ( 5, 6, 8, 13, 25 ) on HOLIDAY PAGE plus Gov. of NYS Election Day.

SUPPLEMENTS for holidays paid at straight time

**REGISTERED APPRENTICES**

( 1000 ) hr terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked:

The following SUPPLEMENTAL benefits apply to all classification categories of CONSTRUCTION, TRANSMISSION and DISTRIBUTION.

\$ 15.00	\$ 16.50	\$ 18.25
*plus 7% of	*plus 7% of	*plus 7% of
hourly wage paid	hourly wage paid	hourly wage paid

\*NOTE: The 7% is based on the hourly wage paid, straight time rate or premium rate.

6-1249a

**Lineman Electrician - Teledata**

**01/01/2011**

**JOB DESCRIPTION** Lineman Electrician - Teledata

**DISTRICT** 6

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

**WAGES**

Per hour:

FOR WORK OUTSIDE BUILDING PROPERTY LINES.

	07/01/2010	01/01/2011
Cable Splicer	\$ 26.64	\$ 27.44
Installer/Repairman	25.29	26.05
Teledata Lineman	25.29	26.05
Technician/Equip Oper	25.29	26.05
Groundman	13.40	13.81

NOTE: EXCLUDES Teledata work within ten feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

**SUPPLEMENTAL BENEFITS**

Per hour worked:

\$ 4.43	\$ 4.43
*plus 3% of hourly	*plus 3% of hourly
wage paid	wage paid

\*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6, 16) on HOLIDAY PAGE

**Lineman Electrician - Traffic Signal Lighting**

**01/01/2011**

**JOB DESCRIPTION** Lineman Electrician - Traffic Signal Lighting

**DISTRICT 6**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

**WAGES**

Per hour:

	07/01/2010	05/02/2011	05/07/2012
Lineman/Technician	\$37.54	\$38.02	\$38.25
Certified Welder	39.42	39.92	40.16
Digging Mach	33.79	34.22	34.43
Tractor trailer driver	31.91	32.32	32.51
Groundman Truck Driver	30.03	30.42	30.60
Mechanic 1st Class	30.03	30.42	30.60
Flagman	22.52	22.81	22.95

Above rates applicable on all Lighting and Traffic Signal Systems with the installation, testing, operation, maintenance and repair of all traffic control and illumination projects, traffic monitoring systems, road weather information systems and the installation of Fiber Optic Cable.

**SUPPLEMENTAL BENEFITS**

Per hour worked:

All classifications	\$ 15.00	\$16.50	\$18.25
	*plus 6.5% of hourly wage paid	*plus 6.5% of hourly wage paid	*plus 6.5% of hourly wage paid

NOTE: Additional \$1.00 per hr. for entire crew when a helicopter is used.

\*NOTE: The 6.5% is based on the hourly wage paid, straight time rate or premium rate.

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

NOTE: DOUBLE TIME FOR ALL EMERGENCY WORK DESIGNATED BY THE DEPT. OF JURISDICTION.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS OF AT LEAST FIVE ( 5 ) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM TO 4:30 PM	REGULAR RATE
2ND SHIFT	4:30 PM TO 1:00 AM	REGULAR RATE PLUS 17.3%
3RD SHIFT	12:30 AM TO 9:00 AM	REGULAR RATE PLUS 31.4%

**HOLIDAY**

Paid See ( 5, 6, 8, 13, 25 ) on HOLIDAY PAGE plus Gov of NYS Election Day.

Overtime See ( 5, 6, 8, 13, 25 ) on HOLIDAY PAGE plus Gov of NYS Election Day.

**REGISTERED APPRENTICES**

WAGES: ( 1000 ) hour terms at the following percentage of Journeymans Wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS: Same as Journeyman/Technician.

6-1249a-LT

**Lineman Electrician - Tree Trimmer**

**01/01/2011**

**JOB DESCRIPTION** Lineman Electrician - Tree Trimmer

**DISTRICT 6**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

**WAGES**

Per hour:

Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

	07/01/2010	01/02/2011	01/01/2012
Tree trimmer	\$ 21.22	\$ 21.64	\$ 22.08
Equip Operator	18.72	19.09	19.48
Mechanic	18.72	19.09	19.48
Truck Driver	15.82	16.14	16.46
Ground person	12.99	13.25	13.51
Flag person	9.25	9.44	9.62
<b>SUPPLEMENTAL BENEFITS</b>			
Per hour worked:			
	\$ 6.84	\$ 7.36	\$ 7.88
	*plus 3% of	*plus 3% of	*plus 3% of
	hourly wage paid	hourly wage paid	hourly wage paid

Supplements paid at STRAIGHT TIME rate for holidays.

\*NOTE: The 3% is based on the hourly wage paid, straight time rate or premium rate.

#### OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

#### HOLIDAY

Paid: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE

Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE

6-1249TT

#### Mason - Building

01/01/2011

#### JOB DESCRIPTION Mason - Building

#### DISTRICT 1

#### ENTIRE COUNTIES

Clinton, Essex, Franklin

#### PARTIAL COUNTIES

Warren: Only the Townships of Chester, Hague, Horicon and Johnsburg.

#### WAGES

	07/01/2010	05/01/2011 An Additional	05/01/2012 An Additional
Bricklayer	\$ 24.96	\$ 1.71**	\$ 1.80**
Cement Finish	24.96	1.71**	1.80**
Plasterer/Fireproofer*	24.96	1.71**	1.80**
Pointer/Caulker/Cleaner	24.96	1.71**	1.80**
Stone Mason	24.96	1.71**	1.80**
Acid Brick	25.46	1.71**	1.80**

(\*)Fireproofer on Structural only.

(\*\*)To be allocated at a later date

#### SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 15.66

#### OVERTIME PAY

See (B, E, E2, Q) on OVERTIME PAGE

#### HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday which occurs on Sunday shall be observed the following Monday.

#### REGISTERED APPRENTICES

Wages per hour



750 hr terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

0-500 Hours	\$ 9.41
All others	15.66

1-2b.8

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**Mason - Building****01/01/2011**

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**JOB DESCRIPTION** Mason - Building

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

**WAGES**

Per hour 07/01/2010

Tile/Marble/Terazzo

Setter	\$ 28.78
Finisher	22.84

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman Setter	\$ 16.38
Journeyman Finisher	13.68

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE  
Overtime: See (5, 6) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

Wages per hour

Hour Terms at the following percentage of Journeyman's wage

Setter:	
1st term 0-500 hours	60%
2nd term 501-1500 hours	70%
3rd term 1501-2500 hours	80%
4th term 2501-3500 hours	85%
5th term 3501-4500 hours	90%
6th term 4501-6000 hours	95%

Finisher:	
1st term 0-500 hours	70%
2nd term 501-1500 hours	80%
3rd term 1501-2500 hours	90%
4th term 2501-3700 hours	95%

Supplemental Benefits per hour worked

Setter:	
1st term 0-500 hours	\$ 9.53
2nd term 501-1500 hours	9.53
3rd term 1501-2500 hours	12.955
4th term 2501-3500 hours	12.955
5th term 3501-4500 hours	14.668
6th term 4501-6000 hours	16.38

Finisher:	
1st term 0-500 hours	\$ 9.03

2nd term 501-1500 hours	9.03
3rd term 1501-2500 hours	11.355
4th term 2501-3700 hours	11.355

1-2TS.1

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**Mason - Heavy&Highway****01/01/2011**

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**JOB DESCRIPTION** Mason - Heavy&Highway**DISTRICT 1****ENTIRE COUNTIES**

Albany, Cayuga, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Oswego, Rensselaer, Saratoga, Schenectady, Schoharie, St. Lawrence, Warren, Washington

**PARTIAL COUNTIES**

Onondaga: For Heavy & Highway Cement Mason or Plaster Work in Onondaga County, refer to Mason-Heavy&Highway tag 1-2h/h on.

**WAGES**

Per hour

07/01/2010

07/01/2011  
An Additional07/01/2012  
An AdditionalMason &  
Bricklayer

\$ 29.22

\$ 1.90\*\*

\$ 2.00\*\*

Additional \$1.00 per hour for work on any swing scaffold or staging suspended by means of ropes or cables.

(\*\*)To be allocated at a later date

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman \$ 15.94

**OVERTIME PAY**

See (B, E, E2, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If a holiday falls on Sunday, the Monday following shall constitute the day of the legal holiday.

**REGISTERED APPRENTICES**

Wages per hour

750 HR TERMS at the following percent of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

0-500 Hours	\$ 9.34
All others	15.94

1-2hh.1

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**Millwright****01/01/2011**

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**JOB DESCRIPTION** Millwright**DISTRICT 1****ENTIRE COUNTIES**

Clinton, Essex, Franklin

**WAGES**

Per hour:

07/01/2010

07/01/2011  
Additional

Millwright

\$ 24.65

\$ 1.50

Millwright Welder &  
Hazardous Waste Work

25.90

1.50

**SUPPLEMENTAL BENEFITS**

Supplement Benefits per hour worked:

Journeyman Millwright \$ 15.25

## OVERTIME PAY

See (B, E, \*E2, Q) on OVERTIME PAGE

\*Saturday may be used as a make-up day and worked at the straight time rate of pay during a work week when conditions such as weather, power failure, fire or natural disaster prevent the performance of work on a regularly scheduled work day. If a make-up day is utilized, a minimum of eight hours must be scheduled.

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on Saturday shall be observed the preceding Friday.

## REGISTERED APPRENTICES

Wages per hour:

1 year terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour worked:

Millwrights	
1st Year Term	\$ 7.11
2nd Year Term	12.808
3rd Year Term	13.622
4th Year Term	14.436

1-1163b

## Operating Engineer - Building

01/01/2011

**JOB DESCRIPTION** Operating Engineer - Building

**DISTRICT** 1

### ENTIRE COUNTIES

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

### PARTIAL COUNTIES

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedelt Road then east along Bedelt Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

### WAGES

CLASS A1:

Crane, hydraulic cranes, tower crane, locomotive crane, piledriver, cableway, derricks, whirlies, dragline, boom trucks over 5 tons.

CLASS A:

Shovel, all Excavators (including rubber tire full swing), Gradalls, power road grader, all CMI equipment, front-end rubber tire loader, tractor-mounted drill (quarry master), mucking machine, concrete central mix plant, concrete pump, belcrete system, automated asphalt concrete plant, and tractor road paver, boom trucks 5 tons and under, maintenance engineer, self-contained crawler drill-hydraulic rock drill.

CLASS B:

Backhoes (rubber tired backhoe/loader combination), bulldozer, pushcat, tractor, traxcavator, scraper, LeTourneau grader, form fine grader, self-propelled soil compactor (fill roller), asphalt roller, blacktop spreader, power brooms, sweepers, trenching machine, Barber Green loader, side booms, hydro hammer, concrete spreader, concrete finishing machine, one drum hoist, power hoisting (single drum), hoist two drum or more, three drum engine, power hoisting (two drum and over), two drum and swinging engine, three drum swinging engine, hod hoist, A-L frame winches, core and well drillers (one drum), post hole digger, model CHB Vibro-Tamp or similar machine, batch bin and plant operator, dinky locomotive, skid steer loader, track excavator 5/8 cubic yard or smaller, front end rubber tired loader under four cubic yards, vac truck.

CLASS C:

Fork lift, high lift, all terrain fork lift: or similar, oiler, fireman and heavy-duty greaser, boilers and steam generators, pump, vibrator, motor mixer, air compressor, dust collector, welding machine, well point, mechanical heater, generators, temporary light plants, electric submersible pumps 4" and over, murphy type diesel generator, conveyor, elevators, concrete mixer, beltcrete power pack (belcrete system), seeding, and mulching machines, pumps.

\* In the event that equipment listed above is operated by robotic control, the classification covering the operation will be the same as if manually operated.

WAGES per hour

07/01/2010

Class # A1	\$ 32.98
Class # A	32.54
Class # B	31.63
Class # C	29.06

Additional \$0.50 per hr for Tower Cranes.

Additional \$0.50 per hr for Cranes with Boom length & jib 150ft. and over.

Additional \$1.00 per hr for Cranes with Boom length & jib 200ft. and over.

Additional \$2.00 per hr over B rate for Nuclear Leader work.

Additional \$0.40 per hr for tunnel or excavation of shaft 40' or more deep.

Additional \$2.50 per hr. for hazardous waste removal work on State and/or Federally designated waste site which require employees to wear Level C or above forms of personal protection

#### **SUPPLEMENTAL BENEFITS**

Per hour paid

Journeyman \$ 20.37

#### **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

#### **HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If a holiday falls on Sunday, it will be celebrated on Monday. If the holiday falls on Saturday, it will be celebrated on Friday.

Employees who work a Saturday holiday shall be paid double time plus the holiday pay.

#### **REGISTERED APPRENTICES**

Wages per hour

1000 hours terms at the following percentage of Journeyman's wage Class B

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour paid

All terms \$ 16.05

1-106b

#### **Operating Engineer - Heavy&Highway**

01/01/2011

**JOB DESCRIPTION** Operating Engineer - Heavy&Highway

**DISTRICT 1**

#### **ENTIRE COUNTIES**

Albany, Broome, Chenango, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Tioga, Warren, Washington

#### **PARTIAL COUNTIES**

Dutchess: Defined as north of the northern boundary line of City of Poughkeepsie then due east to Route 115 to Bedelt Road then east along Bedelt Road to VanWagner Road then north along VanWagner Road to Bower Road then east along Bower Road to Rte. 44 east to Route 343 then along Route 343 east to the northern boundary of Town of Dover Plains and east along the northern boundary of Town of Dover Plains to Connecticut.

Herkimer: East of a North/South line through the Railroad Station at Little Falls.

#### **WAGES**

MASTER MECHANIC

#### **CLASSIFICATION 1A:**

Boom Truck (over 5 tons, manufacturers rating), Crane, Cherry Picker (over 5 tons capacity), Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane

#### **CLASSIFICATION A:**

Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted. Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CM1 Type), Blacktop Plant (Automated), Boom truck (5 tons and under), Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine (Self-Propelled, Slipform), Concrete Pump, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All Purpose Hydraulically Operated, Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole, Pavement Breaker (SP Wertgen; PB-4 and similar type), Power Grader, Profiler (over 105 H.P.), Quad 9, Quarry Master (or equivalent), Scraper, Shovel, Side Boom, Slip Form Paver (If a second man is needed, he shall be an Oiler), Tractor Drawn Belt-Type Loader, Truck or Trailer Mounted Log Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

#### CLASSIFICATION B:

Asphalt Paver, Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (Non-Automated), Blast or Rotary Drill (Truck or Tractor Mounted), Boring Machine, Cage Hoist, Central Mix Plant (Non-Automated) and All Concrete Batching Plants, Cherry Picker (5 tons capacity and under), Concrete Paver (Over 16S), Crawler Drill (Self-contained), Crusher, Diesel Power Unit, Drill Rigs (Tractor Mounted), Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, Hi-Pressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders (If Employer requires another man to clean the screen or to maintain the equipment, he shall be an Oiler), L.C.M. Work Boat Operator, Locomotive, Mixer (for stabilized base self-propelled), Monorail Machine, Plant Engineer, Profiler (105 H.P. and under), Pug Mill, Pump Crete, Ready Mix Concrete Plant, Refrigeration Equipment (for soil stabilization), Road Widener, Roller (all above sub-grade), Sea Mule, Self-contained Ride-on Rock Drill (Excluding Air-Track Type Drill), Skidder, Tractor with Dozer and/or Pusher, Trencher, Tugger Hoist, Vermeer saw (ride on, any size or type), Welder, Winch, Winch Cat

#### CLASSIFICATION C:

A Frame Winch Hoist on Truck, Aggregate Plant, Ballast Regulator (Ride-on), Boiler (used in conjunction with production), Bituminous Heater (self-propelled), Cement and Bin Operator, Hands-Off Equipment (Compressors, Dust Collectors, Generators, Pumps, Welding Machines, Light Plants, Heaters), Concrete Pavement Spreader and Finisher, Concrete Paver or Mixer (16S and under), Concrete Saw (self-propelled), Conveyor, Directional Drill Machine Locator, Drill (Core), Drill (Well), Farm Tractor with accessories, Fine Grade Machine, Fireman, Fork Lift, Form Tamper, Grout Pump, Guniting Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker (Ride-on), Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heatman, Power Sweeper, Revinus Widener, Roller (Grade and Fill), Scarifier (Ride-on), Shell Winder, Skid steer loader (Bobcat or similar), Span-Saw (Ride-on), Steam Cleaner, Tamper (Ride-on), Tie Extractor (Ride-on), Tie Handler (Ride-on), Tie Insertor (Ride-on), Tie Spacer (Ride-on), Tire Repair, Track Liner (Ride-on), Tractor Tractor (with towed accessories), Vac Truck, Vibratory Compactor, Vibro Tamp, Well Point

\*Note for all above classifications of Operating Engineer - In the event that equipment listed above is operated by robotic control, the classification covering the operation will be the same as if manually operated.

#### WAGES per hour

	07/01/2010	07/01/2011 An Additional
Master Mechanic	\$ 34.15	\$ 2.12**
Class 1A	32.97	2.12**
Class A	32.54	2.12**
Class B	31.63	2.12**
Class C	29.06	2.12**

Additional \$2.00 per hour for All Employees who work a single irregular work shift starting from 5:00 PM to 1:00 AM that is mandated by the Contracting Agency.

Additional \$0.50 per hr for Cranes with Boom length & jib 150ft. and over.

Additional \$1.00 per hr for Cranes with Boom length & jib 200ft. and over.

Additional \$0.50 per hr for Tower Cranes.

Additional \$2.50 per hr. for hazardous waste removal work on State and/or Federally designated waste site which require employees to wear Level C or above forms of personal protection.

(\*\*)To be allocated at a later date

#### SUPPLEMENTAL BENEFITS

Per hour paid

Journeyman \$ 20.55

#### OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

#### HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If the holiday falls on Sunday, it will be celebrated on Monday. If the holiday falls on a Saturday, it will be celebrated on Saturday.

#### REGISTERED APPRENTICES



Wages per hour

1000 hours terms at the following percentage of Journeyman's wage Class B

1st	2nd	3rd	4th
60%	70%	80%	90%

Supplemental Benefits per hour paid

All Terms \$ 16.20

1-106h

<b>Operating Engineer - Marine Construction</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Operating Engineer - Marine Construction

**DISTRICT 4**

**ENTIRE COUNTIES**

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

**WAGES**

Per Hour:

DREDGING OPERATIONS 07/01/2010

**CLASS A**

Operator, Leverman, \$ 32.89  
Lead Dredgeman

**CLASS A1**

Dozer, Front Loader  
Operator To Conform to Operating Engineer  
Prevailing Wage in Locality where Work  
is being Performed including Benefits.

**CLASS B**

Spider/Spill Barge Operator, \$ 28.49  
Tug Operator(over1000hp),  
OperatorII, Fill Placer,  
Derrick Operator, Engineer,  
Chief Mate, Electrician,  
Chief Welder,  
Maintenance Engineer

Certified Welder, \$ 26.84  
Boat Operator(licensed)

**CLASS C**

Drag Barge Operator, \$ 26.14  
Steward, Mate,  
Assistant Fill Placer,  
Welder (please add) \$ 0.06

Boat Operator \$ 25.29

**CLASS D**

Shoreman, Deckhand, \$ 21.09  
Rodman, Scowman, Cook,  
Messman, Porter/Janitor  
Oiler(please add) \$ 0.09

**SUPPLEMENTAL BENEFITS**

Per Hour:

THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

07/01/2010

All Classes A & B                      \$ 8.05 plus  
7% of straight  
time wage  
(overtime hours add)                      \$ 0.63

All Class C                                \$ 7.75 plus  
7% of straight  
time wage  
(overtime hours add)                      \$ 0.48

All Class D                                \$ 7.45 plus  
7% of straight  
time wage  
(overtime hours add)                      \$ 0.23

**OVERTIME PAY**

See (B, F, R) on OVERTIME PAGE

**HOLIDAY**

Paid:                                        See (1) on HOLIDAY PAGE

Overtime:                                See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarConst

**Operating Engineer - Survey Crew**

**01/01/2011**

**JOB DESCRIPTION** Operating Engineer - Survey Crew

**DISTRICT 6**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schoenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

**PARTIAL COUNTIES**

Dutchess: : The Northern portion of the county from the Northern boundary line of the City of Poughkeepsie North.

Genesee: Only that portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia

**WAGES**

Per hour:

SURVEY CLASSIFICATIONS: Party Chief- One who directs a survey party. Instrument person- One who runs the instrument and assists the Party Chief. Rod person- One who holds the rods and, in general, assists the survey party.

	07/01/2010	06/01/2011	06/01/2012
Survey Rates:			
Party Chief	\$ 30.87	\$ 31.62	\$ 32.62
Instrument/Rod person	28.10	28.85	29.85

Additional \$3.00 per hr. for work in a Tunnel.

Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work

**SUPPLEMENTAL BENEFITS**

Per hour worked:

Journeyman	\$ 19.25	\$ 20.50	\$ 21.75
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**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid:                                        See (5, 6) on HOLIDAY PAGE

Overtime:                                See (5, 6) on HOLIDAY PAGE

**REGISTERED APPRENTICES**

WAGES: (1 yr. or 1000 hrs.) terms at the following wage rates.

1st year 60%	\$ 16.86	\$ 17.31	\$ 17.91
2nd year 70%	19.67	20.19	20.89
3rd year 80%	22.48	23.08	23.88

SUPPLEMENTAL BENEFITS:

\$ 19.25                      \$ 20.50                      \$ 21.75

6-545 D.H.H.

**Operating Engineer - Survey Crew - Consulting Engineer**

**01/01/2011**

**JOB DESCRIPTION** Operating Engineer - Survey Crew - Consulting Engineer

**DISTRICT 6**

**ENTIRE COUNTIES**

Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

**PARTIAL COUNTIES**

Dutchess: The northern portion of the county from the northern boundry line of the City of Poughkeepsie north.

Genesee: Entire county except that portion of the county that lies west of a line down the center of Route 98 excluding that area that lies within the City of Batavia.

**WAGES**

Per hour:

Feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction when performed under a Consulting Engineer Agreement.

SURVEY CLASSIFICATIONS: Party Chief- One who directs a survey party.

Instrument Man- One who runs the instrument and assists the Party Chief.

Rodman- One who holds the rods and in general, assists the survey party.

	06/01/2010	06/01/2011	06/01/2012
Survey Rates:			
Party Chief	\$ 30.87	\$ 31.62	\$ 32.62
Instrument/Rodperson	28.10	28.85	29.85

Additional \$3.00 per hr. for work in a Tunnel.

Additional \$2.50 per hr. for EPA or DEC certified toxic or hazardous waste work

**SUPPLEMENTAL BENEFITS**

Per hour worked:

\$ 19.25                      \$ 20.50                      \$ 21.75

**OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

**HOLIDAY**

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

6-545 DCE

**Painter**

**01/01/2011**

**JOB DESCRIPTION** Painter

**DISTRICT 1**

**ENTIRE COUNTIES**

Clinton, Franklin

**WAGES**

Per hour

	07/01/2010	05/01/2011 An Additional	05/01/2012 An Additional
Brush	\$ 21.09*	\$ 1.35**	\$ 1.35*
Paperhanger	21.09*	1.35**	1.35**
Drywall Finishers	21.09*	1.35**	1.35**
Spray Rate	21.09*	1.35**	1.35**
Lead Abatement	22.09*	1.35**	1.35**
Structural Steel***	22.09*	1.35**	1.35**
Lead Abatement on Structural Steel	23.09*	1.35**	1.35**

(\*)PLUS additional \$0.05 per hour for all hours worked added to the base wage for all above categories of Painter.

(\*\*)To be allocated at a later date

(\*\*\*)Employees working on objects with the use of swing stage, boatswain chair, pick and cables only will be paid at Structural Steel rate.

Structural Steel rate also applies to tanks over 100,000 gallons or over 20 feet high or under 55 feet wall height, towers, smoke stacks, flag poles.

Bridge Painter:  
See Bridge Painter rates for the following work.  
All Elevated Tanks and Shell Tanks over 55 feet wall height will be performed at the Bridge rate.

## SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 11.12

## OVERTIME PAY

See (B, E2, H) on OVERTIME PAGE

Premium is applied to base wage only.

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: If any of the holidays herein are designated by federal law to be celebrated on a day other than that on which they regularly fall, then the holiday shall be celebrated on the day set by said federal law.

## REGISTERED APPRENTICES

Wages per hour

1 year terms at the following percent of basic wage

1st year	2nd year	3rd year	4th year
40%	50%	60%	80%

PLUS additional \$0.05 per hour for all hours worked for all terms added to the wage

Supplemental Benefits per hour worked

All terms \$ 11.12

1-466-Z3

## Painter - Bridge & Structural Steel

01/01/2011

**JOB DESCRIPTION** Painter - Bridge & Structural Steel

**DISTRICT** 9

## ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

## WAGES

(Per Hour Worked)	07/01/2010	10/01/2010
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STEEL:

Bridge Painting	\$ 45.50	\$ 46.25
Power Tool/Spray	\$ 51.50	\$ 52.25

Shift Work: Where project specifications and/or contract provide for night work outside the regular hours of work, and said night work is performed on a second shift, which is separate from the first crew, the night shift employees shall be paid an additional 10% of the regular wage up to seven (7) hours, after which they shall be paid at time and one half the regular wage. If only a night shift is employed, the employees shall be paid at time and one half.

Note: For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

## SUPPLEMENTAL BENEFITS

Per Hour Worked:

07/01/2010	10/01/2010
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Journeyworker	\$ 29.90*	\$ 31.04*
	\$ 29.90**	\$ 31.04**

Hourly Rate after 40 hours from May 1st to Nov. 15th	\$6.00 only	\$6.75 only
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Hourly Rate after 50 hours

from Nov. 16th to April 30th	\$6.00 only	\$6.75 only
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\*For the period of May 1st to November 15th:

This rate shall be paid up to maximum of forty (40) hours worked per week. For all hours exceeding 40, the hourly rate shall drop to the hourly rate shown above by date.

EXCEPT for the first and last week of employment on the project, and for the weeks of Memorial Day, Independence Day and Labor Day, this rate shall be paid for the actual number of hours worked.

\*\*For the period of November 16th to April 30th:

This rate shall be paid up to a maximum of fifty (50) hours worked per week. For all hours exceeding 50, the hourly rate shall drop to the hourly rate shown above by date.

#### OVERTIME PAY

See (A, F, R) on OVERTIME PAGE

\*Note: When calculating overtime pay for the Power Tool/ Spray classification, add Six dollars to the hourly overtime rate calculated for the "Bridge Painting" classification.

#### HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (4, 6) on HOLIDAY PAGE

#### REGISTERED APPRENTICES

(wage per hour Worked):

(1) year terms at the following percentage of Journeyworkers wage.

Apprentices:	1st	2nd	3rd
07/01/2010	40%	60%	80%

Supplemental Benefits:

1st Term: Same percentage as used for wage

2nd and 3rd term: Same percentage as used for wage

9-DC-9/806/155-BrSS

#### Painter - Line Striping

01/01/2011

**JOB DESCRIPTION** Painter - Line Striping

**DISTRICT 9**

#### ENTIRE COUNTIES

Albany, Bronx, Clinton, Columbia, Dutchess, Essex, Franklin, Fulton, Greene, Hamilton, Kings, Montgomery, Nassau, New York, Orange, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Suffolk, Sullivan, Ulster, Warren, Washington, Westchester

#### WAGES

Per hour:

Painter (Striping-Highway):	07/01/2010
Striping-Machine Operator*	\$ 25.53
Linerman Thermoplastic	\$ 30.79

Note: \* Includes but is not limited to: Positioning of cones and directing of traffic using hand held devices. Excludes the Driver/Operator of equipment used in the maintenance and protection of traffic safety

#### SUPPLEMENTAL BENEFITS

Per hour paid:	07/01/2010
Journeyworker:	\$ 9.97 + 7% of wage

#### OVERTIME PAY

See (B, E, P, S) on OVERTIME PAGE

#### HOLIDAY

Paid: See (5, 20) on HOLIDAY PAGE

Overtime: See (5, 8, 11, 12, 15, 16, 17, 20, 21, 22) on HOLIDAY PAGE

9-8A/28A-LS

#### Painter - Metal Polisher

01/01/2011

**JOB DESCRIPTION** Painter - Metal Polisher

**DISTRICT 9**

#### ENTIRE COUNTIES



Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

## WAGES

07/01/2010

Metal Polisher \$ 25.60\*

\*Note: All workers shall be paid an additional premium in an amount equal to twenty (20%) percent of their basic straight time rate of pay for all time worked on hanging scaffolds and on standing scaffolds while working more than 34 feet off the ground. Such premium are to be paid on top of their straight time or overtime, whichever is applicable. This also applies to employees erecting scaffolding.

## SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2010

Journeyworker: \$ 11.12

## OVERTIME PAY

See (B, E, Q, T) on OVERTIME PAGE

## HOLIDAY

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

Overtime: See (5, 6, 9, 11, 15, 16, 25, 26) on HOLIDAY PAGE

## REGISTERED APPRENTICES

55% of Basic Polisher Rate

9-8A/28A-MP

## Plumber

01/01/2011

**JOB DESCRIPTION** Plumber

**DISTRICT** 1

## ENTIRE COUNTIES

Clinton, Warren, Washington

## PARTIAL COUNTIES

Saratoga: Entire county except the Townships of Stillwater, Halfmoon, Galway, Milton, Charlton and Clifton Park.

## WAGES

Per hour  
07/01/2010

Plumber &  
Steamfitter \$ 29.00

## SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 12.08  
+ 7.30\*

\* This portion of the benefit is subject to the SAME PREMIUM as shown for overtime.

## OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6, 16, 23) on HOLIDAY PAGE

Note: Whenever a Holiday falls on a Saturday, the preceding day, Friday, shall be observed as the Holiday. If a Holiday falls on a Sunday, the following day, Monday shall be observed as the Holiday.

## REGISTERED APPRENTICES

Wages per hour

One year terms at the following percentage of Journeyman's wage

1st yr	50%
2nd yr	60%
3rd yr	70%
4th yr	80%
5th yr	90%

Supplemental Benefits per hour worked

1st yr	\$ 10.82 + 3.65*
2nd yr	11.07 + 4.38*
3rd yr	11.32 + 5.11*
4th yr	11.58 + 5.84*
5th yr	11.83 + 6.57*

\* This portion of the benefit is subject to the SAME PREMIUM as shown for overtime.

1-773-SF

<b>Roofer</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Roofer

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Clinton, Columbia, Essex, Fulton, Greene, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Warren, Washington

**WAGES**

Per hour	07/01/2010	06/01/2011	06/01/2012	06/01/2013
Roofer/Waterproofer	\$ 25.65	An Additional	An Additional	An Additional
Pitch & Asbestos	27.65	\$ 1.50**	\$ 1.50**	\$ 1.50**

(\*\*)To be allocated at a later date

**SUPPLEMENTAL BENEFITS**

Per hour worked

Journeyman \$ 11.87

**OVERTIME PAY**

See ( B, E\*Note, Q ) on OVERTIME PAGE.

\* Saturday may be used as a make up day at straight time if employee misses 8 hrs or more during that week due to inclement weather.

**HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: When any Holiday falls on Saturday, the Friday before such Holiday shall be recognized as the legal Holiday. When a Holiday falls on Sunday, it shall be observed the following Monday.

**REGISTERED APPRENTICES**

Wages per hour

( 1/2 ) year terms at the following per cent of the Roofer/Waterproofer rate. For Pitch & Asbestos work, an additional \$2.00 must be paid in wages.

1st yr 1st half	50%
1st yr 2nd half	58%
2nd yr 1st half	66%
2nd yr 2nd half	74%
3rd yr 1st half	82%
3rd yr 2nd half	90%

Supplemental Benefits per hour worked

1st yr 1st half	\$ 10.10
1st yr 2nd half	10.29
2nd yr 1st half	10.52
2nd yr 2nd half	10.72
3rd yr 1st half	11.00
3rd yr 2nd half	11.20

1-241

<b>Sheetmetal Worker</b>	<b>01/01/2011</b>
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**JOB DESCRIPTION** Sheetmetal Worker

**DISTRICT 1**

**ENTIRE COUNTIES**

Albany, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, Washington

## WAGES

Per hour

07/01/2010

Sheetmetal Worker \$ 27.81

## SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 20.11

## OVERTIME PAY

See ( B,E\*,Q,) on OVERTIME PAGE

\* Double time after 8 hours on Saturdays.

## HOLIDAY

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

When any holiday falls on Saturday, the Friday before such holiday shall be recognized as the legal holiday. Any holiday falling on Sunday, the following Monday shall be recognized as the legal holiday.

## REGISTERED APPRENTICES

Wages per hour

6 Month Terms at the following rate:

1st term	\$ 13.34
2nd term	14.23
3rd term	15.12
4th term	15.71
5th term	16.69
6th term	18.08
7th term	19.47
8th term	20.86
9th term	22.25
10th term	23.64

Supplemental Benefits per hour worked

1st term	\$ 13.50
2nd term	13.77
3rd term	14.03
4th term	14.20
5th term	16.66
6th term	17.09
7th term	17.52
8th term	17.95
9th term	18.38
10th term	18.82

1-83

## Sprinkler Fitter

01/01/2011

**JOB DESCRIPTION** Sprinkler Fitter

**DISTRICT 1**

## ENTIRE COUNTIES

Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

## WAGES

Per hour

07/01/2010

Sprinkler \$ 30.15  
Fitter

## SUPPLEMENTAL BENEFITS

Per hour worked

Journeyman \$ 18.85

# **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

# **HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

# **REGISTERED APPRENTICES**

Wages per hour

One Half Year terms at the following percentage of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
50%	50%	55%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

07/01/2010

1st & 2nd terms \$ 8.41

3rd & 4th terms \$ 13.35

All others \$ 18.85

1-669

## **Teamster - Building**

01/01/2011

**JOB DESCRIPTION** Teamster - Building

**DISTRICT 7**

## **ENTIRE COUNTIES**

Clinton, Essex, Franklin, Jefferson, St. Lawrence

## **PARTIAL COUNTIES**

Lewis: Only the Townships of Croghan, Denmark, Diana, New Bremen, Harrisburg, Montague, Osceola and Pinckney.

Oswego: Only the Towns of Boyston, Redfield, and Sandy Creek.

Warren: Only the Townships of Hague, Horicon, Chester and Johnsbury.

## **WAGES**

GROUP # 1: Fuel Trucks, Fork Lift (Warehouse & Storage Area Only), Bus, Warehouse, Yardman, Truck Helper, Pickups, Panel Truck, Flatbody Material Trucks (straight Jobs), Single axle Dump Trucks, Dumpsters, Material Checkers & Receivers, Greasers, Tiremen, Mechanic Helpers and Parts Chasers.

GROUP # 2: Tandems, Mechanics & Batch Trucks.

GROUP # 3: Semi Trailers, Low Boys, Asphalt Distributor Trucks, and Agitator Mixer Truck, Dump Crete Type Vehicles and 3 axle Dump trucks.

GROUP # 4: Asbestos Removal, Special earth moving Euclid type or similar off highway equip.(non self load.) Articulated and all-track dump trucks.

Wages per hour

07/01/2010

06/01/2011

06/01/2012

06/01/2013

Building:

Group #1 \$ 19.79 \$ 19.71 \$ 19.58 Additional \$1.70

Group #2 19.79 19.71 19.58 1.70

Group #3 19.89 19.81 19.68 1.70

Group #4 20.05 19.96 19.84 1.70

## **SUPPLEMENTAL BENEFITS**

Per hour worked:

07/01/2010

06/01/2011

06/01/2012

All groups \$ 15.81 \$ 17.44 \$ 19.17

## **OVERTIME PAY**

See (B, E, Q) on OVERTIME PAGE

## **HOLIDAY**

Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

7-687B

## Teamster - Heavy&Highway

01/01/2011

**JOB DESCRIPTION** Teamster - Heavy&Highway

**DISTRICT** 7

### ENTIRE COUNTIES

Clinton, Essex, Franklin, Jefferson, St. Lawrence

### PARTIAL COUNTIES

Lewis: Only the Townships of Croghan, Denmark, Diana, New Bremen, Harrisburg, Montague, Osceola and Pinckney.

Oswego: Only the Towns of Boylston, Redfield, and Sandy Creek.

Warren: Only the Townships of Hague, Horicon, Chester and Johnsburg.

### WAGES

GROUP 1: Warehousemen, Yardmen, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks(straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers and Receivers, Greasers, Truck Tiremen, Mechanics Helpers and Parts Chasers. Fork Lift (storage & warehouse areas only) Tandems and Batch Trucks, Mechanics, Dispatcher. Semi-Trailers, Low-boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and dumpcrete type vehicles, Truck Mechanic, Fuel Truck.

GROUP 2: Specialized Earth Moving Equipment, Euclid type, or similar off-highway where not self-loading, Straddle (Ross) Carrier, and self-contained concrete mobile truck. Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

Per hour:

	07/01/2010	06/01/2011	06/01/2012	06/01/2013
Heavy/Highway:				Additional
Group #1	\$ 22.95	\$ 22.74	\$ 22.46	\$ 1.70
Group #2	23.17	22.96	22.68	1.70

Additional \$2.50 per hr for hazardous waste removal work on a City, County, and/or Federal Designated waste site and regulations require employee to use or wear respiratory protection. For work bid on or after April 1, 1982 there shall be a 12 month carryover of the negotiated rate in effect at the time of the bid.

### SUPPLEMENTAL BENEFITS

Per hour worked:

	07/01/2010	06/01/2011	06/01/2012
All classes	\$ 17.99	\$ 18.75	\$ 20.63

### OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

### HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

7-687

## Welder

01/01/2011

**JOB DESCRIPTION** Welder

**DISTRICT** 1

### ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

### WAGES

Per hour 07/01/2010

Welder (To be paid the same rate of the mechanic performing the work)

### OVERTIME PAY

### HOLIDAY

1-As Per Trade



## Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

- ( A ) Time and one half of the hourly rate after 7 hours per day
- ( AA ) Time and one half of the hourly rate after 7 and one half hours per day
- ( B ) Time and one half of the hourly rate after 8 hours per day
- ( B1 ) Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday.  
Double the hourly rate for all additional hours
- ( B2 ) Time and one half of the hourly rate after 40 hours per week
- ( C ) Double the hourly rate after 7 hours per day
- ( C1 ) Double the hourly rate after 7 and one half hours per day
- ( D ) Double the hourly rate after 8 hours per day
- ( D1 ) Double the hourly rate after 9 hours per day
- ( E ) Time and one half of the hourly rate on Saturday
- ( E1 ) Time and one half 1st 4 hours on Saturday Double the hourly rate all additional Saturday hours
- ( E3 ) Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
- ( E2 ) Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- ( E4 ) Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
- ( F ) Time and one half of the hourly rate on Saturday and Sunday
- ( G ) Time and one half of the hourly rate on Saturday and Holidays
- ( H ) Time and one half of the hourly rate on Saturday, Sunday, and Holidays
- ( I ) Time and one half of the hourly rate on Sunday
- ( J ) Time and one half of the hourly rate on Sunday and Holidays
- ( K ) Time and one half of the hourly rate on Holidays
- ( L ) Double the hourly rate on Saturday
- ( M ) Double the hourly rate on Saturday and Sunday
- ( N ) Double the hourly rate on Saturday and Holidays
- ( O ) Double the hourly rate on Saturday, Sunday, and Holidays
- ( P ) Double the hourly rate on Sunday
- ( Q ) Double the hourly rate on Sunday and Holidays
- ( R ) Double the hourly rate on Holidays
- ( S ) Two and one half times the hourly rate for Holidays, if worked
- ( S1 ) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.
- ( T ) Triple the hourly rate for Holidays, if worked

- ( U ) Four times the hourly rate for Holidays, if worked
- ( V ) Including benefits at SAME PREMIUM as shown for overtime
- ( W ) Time and one half for benefits on all overtime hours.

NOTE:BENEFITS are PER HOUR WORKED,for each hour worked, unless otherwise noted

## Holiday Codes

### PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

### OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

- ( 1 )        None
- ( 2 )        Labor Day
- ( 3 )        Memorial Day and Labor Day
- ( 4 )        Memorial Day and July 4th
- ( 5 )        Memorial Day, July 4th, and Labor Day
- ( 6 )        New Year's, Thanksgiving, and Christmas
- ( 7 )        Lincoln's Birthday, Washington's Birthday, and Veterans Day
- ( 8 )        Good Friday
- ( 9 )        Lincoln's Birthday
- ( 10 )       Washington's Birthday
- ( 11 )       Columbus Day
- ( 12 )       Election Day
- ( 13 )       Presidential Election Day
- ( 14 )       1/2 Day on Presidential Election Day
- ( 15 )       Veterans Day
- ( 16 )       Day after Thanksgiving
- ( 17 )       July 4th
- ( 18 )       1/2 Day before Christmas
- ( 19 )       1/2 Day before New Years
- ( 20 )       Thanksgiving
- ( 21 )       New Year's Day
- ( 22 )       Christmas
- ( 23 )       Day before Christmas
- ( 24 )       Day before New Year's
- ( 25 )       Presidents' Day
- ( 26 )       Martin Luther King, Jr. Day
- ( 27 )       Memorial Day





New York State Department of Labor - Bureau of Public Work  
State Office Building Campus  
Building 12 - Room 130  
Albany, New York 12240

**REQUEST FOR WAGE AND SUPPLEMENT INFORMATION**

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

**This Form Must Be Typed**

Submitted By:

(Check Only One)

☐

Contracting Agency

☐

Architect or Engineering Firm

☐

Public Work District Office

Date:

**A. Public Work Contract to be let by:** (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address ☐ (Check if new or change)

Telephone: ( )

Fax: ( )

E-Mail:

2. NY State Units (see Item 5)9.

☐ 01 DOT

☐ 02 OGS

☐ 03 Dormitory Authority

☐ 04 State University  
Construction Fund

☐ 05 Mental Hygiene  
Facilities Corp.

☐ 06 OTHER N.Y. STATE UNIT

☐ 07 City

☐ 08 Local School District

☐ 09 Special Local District, i.e.,  
Fire, Sewer, Water District

☐ 10 Village

☐ 11 Town

☐ 12 County

☐ 13 Other Non-N.Y. State  
(Describe)

3. SEND REPLY TO ☐ (check if new or change)  
Name and complete address:

Telephone:( )

Fax: ( )

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

☐ New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

☐ Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR  
THIS PROJECT :

OFFICE USE ONLY

**B. PROJECT PARTICULARS**

5. Project Title \_\_\_\_\_

Description of Work \_\_\_\_\_

Contract Identification Number \_\_\_\_\_

Note: For NYS units, the OSC Contract No. \_\_\_\_\_

6. Location of Project:  
Location on Site \_\_\_\_\_

Route No/Street Address \_\_\_\_\_

Village or City \_\_\_\_\_

Town \_\_\_\_\_

County \_\_\_\_\_

7. Nature of Project - Check One:

- ☐ 1. New Building
- ☐ 2. Addition to Existing Structure
- ☐ 3. Heavy and Highway Construction (New and Repair)
- ☐ 4. New Sewer or Waterline
- ☐ 5. Other New Construction (Explain)
- ☐ 6. Other Reconstruction, Maintenance, Repair or Alteration
- ☐ 7. Demolition
- ☐ 8. Building Service Contract

8. OCCUPATION FOR PROJECT :

- ☐ Construction (Building, Heavy Highway/Sewer/Water)
- ☐ Tunnel
- ☐ Residential
- ☐ Landscape Maintenance
- ☐ Elevator maintenance
- ☐ Exterminators, Fumigators
- ☐ Fire Safety Director, NYC Only
- ☐ Guards, Watchmen
- ☐ Janitors, Porters, Cleaners, Elevator Operators
- ☐ Moving furniture and equipment
- ☐ Trash and refuse removal
- ☐ Window cleaners
- ☐ Other (Describe)

9. Does this project comply with the Wicks Law involving separate bidding? YES ☐ NO ☐

10. Name and Title of Requester

Signature







**NEW YORK STATE DEPARTMENT OF LABOR  
Bureau of Public Work - Debarment List**

**LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE  
AWARDED ANY PUBLIC WORK CONTRACT**

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements

NOTE: The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = NYS Dept. of Labor; NYC = New York City Comptroller's Office; AG = NYS Attorney General's Office; DA = County District Attorney's Office.

A list of those barred from bidding, or being awarded, any public work contract or subcontract with the State, under section 141-b of the Workers' Compensation Law, may be obtained at the following link, on the NYS DOL Website:

<https://dbr.labor.state.ny.us/EDList/searchPage.do>



**NYSDOL Bureau of Public Work Debarment List 12/27/2010**

**Article 8**

AGENCY	Fiscal Officer	SSN/FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	AG	*****1355	4-A GENERAL CONSTRUCTION CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****7478	A & T GENERAL CONSTRUCTION INC.		3 ALAN B SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	NYC		A & T IRON WORKS INC		25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	DOL	*****0711	A ULIANO & SON LTD		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	DOL		A ULIANO CONSTRUCTION		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	NYC	*****5804	AAR CO ELECTRIC INC		5902 AVENUE N BROOKLYN NY 11234	03/20/2009	03/20/2014
DOL	DOL	*****9095	ABDO TILE CO		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	*****9095	ABDO TILE COMPANY		6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	*****0635	ABOVE ALL PUMP REPAIR CORP		360 KNICKERBOCKER AVENUE BATAVIA NY 11716	10/20/2008	10/20/2013
DOL	NYC	*****8758	ACC CONSTRUCTION CORP.		6 EAST 32ND ST - 7TH FL NEW YORK NY 10016	05/25/2006	05/25/2011
DOL	NYC	*****5022	ACE DRYWALL SYSTEMS INC.		194 ASHLAND PLACE BROOKLYN NY 11217	03/06/2008	03/06/2013
DOL	AG	*****8219	ACTIVE CABLING INC		C/O FRANK DECAPITE 7 SYCAMORE ROAD DRWOODBURY NY 11797	10/02/2008	10/01/2013
DOL	DOL		ADAM A CEMERYS		2718 CURRY ROAD SCHENECTADY NY 12303	07/08/2010	07/08/2015
DOL	DOL	*****3012	ADAM DECKMAN	DECKMAN PAINTING	154 POND VIEW PARKWAY ROCHESTER NY 14612	04/16/2007	04/16/2012
DOL	DOL		ADAM'S FLOOR COVERING LLC		2718 CURRY ROAD SCHENECTADY NY 12303	07/08/2010	08/08/2015
DOL	DOL		ALL TOWNS MECHANICAL	BARRY MORRIS	18 EAST SUNRISE HIGHWAY FREEPORT NY 11758	01/21/2008	01/21/2013
DOL	DOL	*****3101	ALLSTATE CONCRETE CUTTING, INC.		635 MIDLAND AVENUE GARFIELD NJ 07026	07/09/2007	07/09/2012
DOL	DOL	*****8291	AMIR'S VISION INC		230 PRATT STREET BUFFALO NY 14204	09/17/2008	09/17/2013
DOL	AG		ANASTASIA ANTHOULIS	AKA STACEY GOUZOS	131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****0860	ANDREA STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	AG		ANTHONY BRANCA		700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	DOL		ANTHONY POSELLA		30 GLEN HOLLOW ROCHESTER NY 14622	10/19/2009	10/19/2014
DOL	DOL		ANTHONY T RINALDI		C/O CRAIN CONSTRUCTION CO KINDERHAMACK RDKACKENSACK NY 07061	10/02/2008	10/02/2013
DOL	DOL		ANTHONY TAORMINA		215 MCCORMICK DRIVE BOHEMIA NY 11716	05/20/2009	05/20/2014
DOL	DOL		ANTHONY ULIANO		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	AG	*****7327	ANTHOS CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****2725	ARAGONA CONSTRUCTION CORP		5755 NEWHOUSE ROAD EAST AMHERST NY 14051	10/10/2007	10/10/2012
DOL	DOL	*****8688	ARC MECHANICAL CORP		215 MCCORMICK DRIVE BOHEMIA NY 11716	05/20/2009	05/20/2014
DOL	DOL	*****8482	ARGO CONTRACTING CORP		5752 WEST WEBB ROAD YOUNGSTOWN OH 44515	05/21/2008	05/21/2013
DOL	NYC	*****5804	ARIE BAR	C/O AAR CO ELECTRIC INC	5902 AVENUE N BROOKLYN NY 11234	03/20/2009	03/20/2014
DOL	DOL		ARTHUR C OSUORAH		PO BOX 1295 BUFFALO NY 14215	02/15/2008	02/15/2013
DOL	DOL	*****8027	ARTHUR DESIGN ENGINEERS & ASSOCIATES		PO BOX 1295 BUFFALO NY 14215	02/15/2008	02/15/2013
DOL	DOL	*****2993	AST DRYWALL & ACOUSTICS INC		46 JOHN STREET - STE 711 NEW YORK NY 10038	12/16/2008	12/16/2013
DOL	DA	*****5761	AZTEC PLUMBING & HEATING CORP		153 BAYWOODS LANE BAY SHORE NY 11706	03/19/2007	03/19/2012
DOL	DOL	*****7828	BALLAGH GENERAL CONTRACTING INC		250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012

**NYSDOL Bureau of Public Work Debarment List 12/27/2010**

**Article 8**

DOL	NYC		BASIL ROMEO		243-03 137TH AVENUE ROSEDALE NY 11422	03/25/2010	03/25/2015
DOL	DOL		BEATRICE ORTEGA		764 BRADY AVE - APT 631 BRONX NY 10462	05/21/2008	05/21/2013
DOL	DOL		BENNY VIGLIOTTI		C/O LUVIN CONSTRUCTION CO P O BOX 357CARLE PLACE NY 11514	03/15/2010	03/15/2015
DOL	DOL		BERNADETTE GORMALLY		250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012
DOL	NYC		BERNARD COHNEN		193 HARWOOD PLACE PARAMUS NJ 07652	05/14/2008	05/14/2013
DOL	DOL	*****5455	BEST OF FRIENDS OF SCHENECTADY CONSTR CO		425 HAMILTON STREET SCHENECTADY NY 12305	01/24/2006	01/24/2011
DOL	DOL	*****9890	BETTY JOE FRAZIER	NOBLE CONSTRUCTI ON GROUP	23960 WHITE ROAD WATERTOWN NY 13601	02/14/2008	02/14/2013
DOL	DOL		BIAGIO CANTISANI		200 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL	*****0818	BLASTEC INC	MILLER SANDBLASTIN G & PAINTING	121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DOL	*****8501	BLOCKHEAD CONCRETE & PAVING INC		P O BOX 71 CHEEKTOWAGA NY 14225	09/03/2008	09/03/2013
DOL	NYC	*****8377	BOSPHORUS CONSTRUCTION CORPORATION		3817 KINGS HIGHWAY-STE 1D BROOKLYN NY 11234	07/08/2010	07/08/2015
DOL	DOL		BRIAN HOXIE		2219 VALLEY DRIVE SYRACUSE NY 13207	12/04/2009	12/04/2014
DOL	DOL	*****4311	C & F SHEET METAL CORP		201 RICHARDS STREET BROOKLYN NY 11231	02/25/2009	02/24/2014
DOL	DOL	*****9286	CALI BROTHERS INC		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		CANTISANI & ASSOCIATES LTD		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	NYC	*****4437	CAPPRY CONTRACTING MGMT. CORP		1081 CONEY ISLAND AVENUE BROOKLYN NY 11230	02/09/2006	02/09/2011
DOL	DOL		CARMODY CONCRETE CORP		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY ENTERPRISES LTD		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY MASONRY CORP		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		CARMODY"2" INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL	*****9721	CATENARY CONSTRUCTION CORP		112 HUDSON AVENUE ROCHESTER NY 14605	02/14/2006	10/20/2014
DOL	DOL	*****7924	CBI CONTRACTING INCORPORATED		2081 JACKSON AVENUE COPIAGUE NY 11726	06/03/2010	06/03/2015
DOL	DOL		CHARLES MURDOUGH		203 KELLY DRIVE EAST AURORA NY 14052	03/26/2008	03/26/2013
DOL	DOL	*****1416	CHEROMINO CONTROL GROUP LLC		61 WILLET ST - SUITE 14 PASSAIC NJ 07055	12/03/2009	07/09/2015
DOL	DOL		CHESTER A BEDELL		1233 WALT WHITMAN ROAD MELVILLE NY 11747	04/29/2008	04/29/2013
DOL	DOL		CHRISTOPHER NICHOLSON		91 NEWMAN PLACE BUFFALO NY 14210	10/19/2006	10/19/2011
DOL	DOL		CITY GENERAL BUILDERS INC		131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	DOL	*****7086	CITY GENERAL IRON WORKS INC		131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	DOL	*****5329	CNY MECHANICAL ASSOCIATES INC		P O BOX 250 EAST SYRACUSE NY 13057	11/06/2008	11/06/2013
DOL	DOL	*****6866	COMMERCIAL SYSTEM CONSTRUCTION		91 NEWMAN PLACE BUFFALO NY 14210	10/19/2006	10/19/2011
DOL	DOL	*****5740	CORTLAND GLASS COMPANY INC		336 TOMPKINS STREET CORTLAND NY 13045	02/02/2010	10/21/2015
DOL	DOL	*****7794	CRAIN CONSTRUCTION COMPANY INC		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL		CRAIN CONSTRUCTION OF NEW JERSEY		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL		CRAIN CONSTRUCTION OF NEW YORK INC		C/O CRAIN CONSTRUCTION CO ONE KINDERHAMACK ROADHACKENSACK NJ 07061	10/02/2008	10/02/2013



**NYSDOL Bureau of Public Work Debarment List 12/27/2010**

**Article 8**

DOL	DOL		CRAIN CONTRACTING COMPANY		ONE KINDERHAMACK ROAD HACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	NYC	*****8777	CROSSLAND ELECTRICAL SYSTEMS INC		846 EAST 52ND STREET BROOKLYN NY 11203	12/19/2008	12/29/2013
DOL	DOL	*****0115	CROW AND SUTTON ASSOCIATES INC		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL	*****4266	CRYSTAL INTERIOR CONTRACTING INC		922 CRESCENT STREET BROOKLYN NY 11208	05/21/2008	05/21/2013
DOL	DOL	*****1804	CUSTOM GARDEN LANDSCAPING INC		283 NORTH MIDDLETOWN ROAD PEARL RIVER NY 10965	09/28/2009	09/28/2014
DOL	DOL	*****6339	D J FLOORS INC		9276 VIA CIMATO DRIVE CLARENCE CENTER NY 14032	08/29/2007	08/29/2012
DOL	DOL		D JAMES SUTTON		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		DANIEL CELLUCCI ELECTRIC		17 SALISBURY STREET GRAFTON MA 01519	06/02/2010	06/02/2015
DOL	DOL	*****7129	DANIEL T CELLUCCI	DANIEL CELLUCCI ELECTRIC	17 SALISBURY STREET GRAFTON MA 01519	06/02/2010	06/02/2015
DOL	DOL		DARIN ANDERSON		134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL		DARREN MAYDWELL		115 LEWIS STREET YONKERS NY 10703	05/12/2009	05/12/2014
DOL	DOL		DEANNA J REED		5900 MUD MILL RD-BOX 949 BREWERTON NY 13029	09/02/2008	09/02/2013
DOL	DOL	*****3012	DECKMAN PAINTING		154 POND VIEW PARKWAY ROCHESTER NY 14612	04/16/2007	04/16/2012
DOL	DOL	*****2311	DELCON CONSTRUCTION CORP		220 WHITE PLAINS ROAD TARRYTOWN NY 10591	08/27/2009	08/27/2014
DOL	DOL	*****6971	DELPHI PAINTING AND DECORATING INC		1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL	*****3538	DELTA CONTRACTING PAINTING AND DESIGN INC		75 MCCULLOCH DRIVE DIX HILLS NY 11746	10/19/2010	10/19/2015
DOL	DOL		DESMOND CHARLES		922 CRESCENT STREET BROOKLYN NY 11208	05/21/2008	05/21/2013
DOL	DOL	*****7157	DG PIPELINE INC		312 HALSEYVILLE ROAD ITHACA NY 14850	09/06/2006	09/06/2011
DOL	DOL		DIMITEIUS KASSIMIS		152-65 11TH AVENUE WHITESTONE NY 11357	05/22/2008	05/22/2013
DOL	DOL	*****3364	DJH MECHANICAL ASSOCIATES LTD		155 KINGSBRIDGE ROAD EAST MOUNT VERNON NY 10552	02/01/2006	02/01/2011
DOL	DOL		DONALD NOWAK		10 GABY LANE CHEEKTOWAGA NY 14227	10/15/2009	10/15/2014
DOL	DOL		DONALD SCHWENDLER		9276 VIA CIMATO DRIVE CLARENCE CENTER NY 14032	08/29/2007	08/29/2012
DOL	DOL	*****6148	DOT CONSTRUCTION OF NY INC		765 BRADY AVE - APT 631 BRONX NY 10462	05/21/2008	05/21/2013
DOL	DOL		DOUGLAS MCEWEN		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DOL		DOUGLAS S GRIFFEN		312 HALSEYVILLE ROAD ITHACA NY 14850	09/06/2006	09/06/2011
DOL	DOL		DRAGOLJUB RADOJEVIC	61 WILLET ST - SUITE 14	PASSAIC NJ 07055	12/03/2009	07/09/2015
DOL	NYC	*****6176	E N E L ELECTRICAL CORP		1107 MCDONALD AVENUE BROOKLYN NY 11230	07/30/2010	07/30/2015
DOL	DOL		EDWARD SUBEH		1 CHELSEA COURT ATLANTIC CITY NJ 08401	10/06/2008	10/06/2013
DOL	DOL	*****3554	ELITE BUILDING ENTERPRISES INC		34-08 PARKWAY DRIVE BALDWIN NY 11510	07/01/2008	07/21/2013
DOL	AG	*****3233	EMEIS & EMEIS GENERAL CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	DOL	*****6101	ENHANCED DATA COM INC		75 SHERBROOK ROAD NORTH BABYLON NY 11704	07/01/2010	07/01/2015
DOL	DOL		ERROL L ALLEN		134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL		ESCO INSTALLERS LLC		1 CHELSEA COURT ATLANTIC CITY NJ 08401	10/06/2008	10/06/2013
DOL	DOL	*****0329	FAULKS PLUMBING HEATING & AIR CONDITIONING INC		3 UPTON STREET HILTON NY 14468	06/10/2008	06/10/2013
DOL	DOL		FERNANDO GOMEZ		201 RICHARDS STREET BROOKLYN NY 11231	02/25/2009	02/25/2014
DOL	DOL	*****0768	FISHER CONCRETE INC		741 WELSH ROAD JAVA CENTER NY 14082	04/08/2009	04/08/2014

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DOL	DOL	*****0115	FOXCROFT NURSERIES INC		949 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		FRANCIS (FRANK) OSCIER		3677 SENECA STREET WEST SENECA NY 14224	09/03/2008	09/03/2013
DOL	NYC		FRANK (FRANCIS) OSCIER		3677 SENECA STREET WEST SENECA NY 14224	09/03/2008	09/03/2013
DOL	NYC		FRANK BAKER		24 EDNA DRIVE SYOSSET NY 11791	05/14/2008	05/14/2013
DOL	DOL		FRANK J MERCANDO	C/O MERCANDO CONTRACTIN G CO INC	134 MURRAY AVENUE YONKERS NY 10704	11/22/2008	11/22/2013
DOL	DOL		FRANK J MERCANDO		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	*****0128	FRANK J TUCEK & SON INC		92 NORTH ROUTE 9W CONGERS NY 10920	01/29/2007	01/29/2012
DOL	DOL		FRANK ORTIZ		75 SHERBROOK ROAD NORTH BABYLON NY 11704	07/01/2010	07/01/2015
DOL	DOL		FRED ABDO	ABDO TILE COMPANY AKA ABDO TILE CO	6179 EAST MOLLOY ROAD EAST SYRACUSE NY 13057	06/25/2010	06/25/2015
DOL	DOL	*****9202	G & M PAINTING ENTERPRISES INC		13915 VILLAGE LANE RIVERVIEW MI 48192	02/05/2010	02/05/2015
DOL	DOL	*****9832	G A FALCONE CONSTRUCTION INC		253 COMMONWEALTH AVENUE BUFFALO NY 14216	08/07/2007	08/07/2012
DOL	DOL	*****7088	GBA CONTRACTING CORP		4015 21ST AVENUE ASTORIA NY 11105	01/11/2008	01/11/2013
DOL	NYC		GELSOMINA TASSONE		25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	DOL		GEORGE A PATTI III		P O BOX 772 JAMESTOWN NY 14701	08/13/2010	08/13/2015
DOL	AG		GEORGE BEGAKIS		57-16 157TH STREET FLUSHING NY 11355	10/04/2006	10/04/2011
DOL	NYC		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GERALD A POLLOCK		336 TOMPKINS STREET CORTLAND NY 13045	06/29/2010	10/21/2015
DOL	AG		GERARD IPPOLITO		563 MUNCEY ROAD WEST ISLIP NY 11795	07/14/2008	07/14/2013
DOL	AG		GERASIMO ANDRIANIS		22-15 47TH STREET ASTORIA NY 11105	08/03/2006	08/03/2011
DOL	DOL		GREG SURACI		364 BLEAKER ROAD ROCHESTER NY 14609	10/25/2007	10/25/2012
DOL	DOL		GRIOGORIOS BELLOS		4015 21ST AVENUE ASTORIA NY 11105	01/11/2008	01/11/2013
DOL	DOL	*****9985	GROUND LEVEL CONSTRUCTION		10 GABY LANE CHEEKTOWAGA NY 14227	10/15/2009	10/15/2014
DOL	DOL	*****8904	HALLOCKS CONSTRUCTION CORP	P O BOX 278	YORKTOWN HEIGHTS NY 10598	12/01/2008	12/01/2013
DOL	DOL		HARALAMBOS KARAS		80-12 ASTORIA BOULEVARD EAST ELMHURST NY 11370	11/22/2008	10/22/2013
DOL	DOL	*****0080	HI-AMP ELECTRICAL CONTRACTING CORP		265-12 HILLSIDE AVENUE FLORAL PARK NY 11004	02/15/2008	02/15/2013
DOL	DOL	*****9893	HOXIE'S PAINTING CO INC		2219 VALLEY DRIVE SYRACUSE NY 13207	12/04/2009	12/04/2014
DOL	DOL	*****6429	IDM ENTERPRISES INC		60 OUTWATER LANE GARFIELD NJ 07026	05/09/2009	05/09/2014
DOL	DOL	*****6293	IMPRESSIVE CONCRETE CORP		264A SUBURBAN AVENUE DEER PARK NY 11729	12/18/2007	12/18/2012
DOL	DOL	*****8898	IN-TECH CONSTRUCTION INC		8346 BREWERTON ROAD CICERO NY 13039	07/06/2007	07/06/2012
DOL	DOL	*****7561	INDUS GENERAL CONSTRUCTION		33-04 91ST STREET JACKSON HEIGHTS NY 11372	04/28/2010	04/28/2015
DOL	NYC	*****7728	INTEGRITY CONSTRUCTION & CONSULTING SERVS		7615 MYRTLE AVENUE GLENDALE NY 11385	02/15/2007	02/15/2012
DOL	DOL	*****0488	INTERWORKS SYSTEMS, INC.		1233 WALT WHITMAN ROAD MELVILLE NY 11747	04/29/2008	04/29/2013
DOL	DOL		ISRAEL MONTESINOS		517 MILES SQUARE ROAD YONKERS NY 10701	02/15/2008	02/15/2013
DOL	DOL		IVAN D MARKOVSKI		60 OUTWATER LANE GARFIELD NJ 07026	05/09/2009	05/09/2014
DOL	DOL		IVAN TORRES		11 PLYMOUTH ROAD DIX HILLS NY 11746	02/15/2008	02/15/2013

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DOL	DOL	*****0579	J & I CONSTRUCTION CORP		110 FOURTH STREET NEW ROCHELLE NY 10801	02/15/2008	02/15/2013
DOL	DOL	*****7357	J C MCCASHION CONSTRUCTION INC		84 FREDERICK AVENUE ALBANY NY 12205	04/13/2006	04/13/2011
DOL	DOL	*****1584	J M TRI STATE TRUCKING INC		140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	AG	*****1562	JANS GENERAL CONSTRUCTION CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		JASON ASBURY		22562 SEA BASS DRIVE BOCA RATON FL 33428	10/10/2007	10/10/2012
DOL	DOL		JAY MEYER		239 MARSH DRIVE DEWITT NY 13214	02/20/2007	02/20/2012
DOL	DOL		JEANETTE CALICCHIA		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		JEFFREY ARTIERI		107 STEVENS STREET LOCKPORT NY 14094	11/04/2009	11/04/2014
DOL	DOL		JOHN B DUGAN		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DA		JOHN BIAS		153 BAYWOODS LANE BAY SHORE NY 11706	03/19/2007	03/19/2012
DOL	DOL		JOHN BUONADONNA		283 NORTH MIDDLETOWN ROAD PEARL RIVER NY 10965	09/28/2009	09/28/2014
DOL	NYC		JOHN C MCCASHION		84 FREDERICK AVENUE ALBANY NY 12205	04/13/2006	04/13/2011
DOL	NYC		JOHN DITURI		1107 MCDONALD AVENUE BROOKLYN NY 11230	07/30/2010	07/30/2015
DOL	DOL		JOHN JIULIANNI		222 GAINSBORG AVENUE E WEST HARRISON NY 10604	05/10/2010	05/10/2015
DOL	NYC		JOHN MARI JR		278 ROBINSON AVENUE NEW YORK NY 10312	04/06/2008	04/06/2013
DOL	NYC		JOHN O'SHEA		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	DOL	*****5970	JOHN PREVETE FRAMING AND JOHN PREVETE FRAMING INC	JOHN PREVETE	320 RIDGE ROAD WEST MILFORD NJ 07480	03/26/2008	03/26/2013
DOL	DOL		JOHN SAN SEVERE		C/O CRAIN CONSTRUCTION CO ONE KINDERHAMACK ROADHACKENSACK NJ 07061	10/02/2008	10/02/2013
DOL	DOL		JOSE DOS SANTOS JR		85-08 60TH AVENUE ELMHURST NY 11373	11/21/2008	11/21/2013
DOL	DOL		JOSEPH CALICCHIA		1223 PARK STREET PEEKSKILL NY 10566	09/12/2007	09/12/2012
DOL	DOL		JOSEPH MONETTE		C/O JOHN MONETTE 140 ARMSTRONG AVENUESYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	DOL	*****1763	JR RESTORATION & ROOFING INC		152-65 11TH AVENUE WHITESTONE NY 11357	05/22/2008	05/22/2013
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL	*****9422	JUNKYARD CONSTRUCTION CORP.		2068 ANTHONY AVENUE BRONX NY 10457	12/26/2007	12/26/2012
DOL	DOL	*****3810	K M MARTELL CONSTRUCTION, INC.		57 CROSS ROAD MIDDLETOWN NY 10940	06/25/2007	06/25/2012
DOL	DOL	*****9993	K M R ENTERPRISES		10 STUFFLE STREET CROPSEYVILLE NY 12052	12/20/2006	12/20/2011
DOL	DOL		K NELSON SACKOOR		16 JOY DRIVE NEW HYDE PARK NY 11040	01/05/2010	01/05/2015
DOL	DOL	*****8648	K-STAR CONSTRUCTION CORP		42 48 161ST STREET FLUSHING NY 11358	12/11/2006	12/11/2011
DOL	NYC		KAMIL OZTURK		3715 KINGS HWY - STE 1D BROOKLYN NY 11234	07/08/2010	07/08/2015
DOL	NYC		KAZIMIERZ KONOPSKI		194 ASHLAND PLACE BROOKLYN NY 11217	03/06/2008	03/06/2013
DOL	AG		KEFCAL CONSTRUCTION, INC.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	NYC	*****4923	KELLY'S SHEET METAL, INC.		1426 ATLANTIC AVENUE BROOKLYN NY 11216	12/28/2007	12/28/2012
DOL	DOL		KEMPTON MCINTOSH		8531 AVENUE B BROOKLYN NY 11236	12/16/2008	12/16/2013
DOL	DOL		KENNETH W. GRIFFIN		101 LILL STREET ROCHESTER NY 14621	05/01/2006	05/01/2011
DOL	DOL		KEVIN MARTELL		57 CROSS ROAD MIDDLETOWN NY 10940	06/25/2007	06/25/2012
DOL	AG	*****3318	KOSMAR CONTRACTING CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012

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DOL	DOL		KRIS CLARKSON		2484 CATON ROAD CORNING NY 14830	06/20/2007	06/20/2012
DOL	NYC	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL	*****9628	LANCET ARCH INC		112 HUDSON AVENUE ROCHESTER NY 14605	02/14/2006	10/19/2014
DOL	DOL		LANCET SPECIALTY CONTRACTING CORP		C/O CATENARY CONSTRUCTION 112 HUDSON AVENUE ROCHESTER NY 14605	10/19/2009	10/19/2014
DOL	DOL		LARRY FRANGOS		5752 WEST WEBB ROAD YOUNGSTOWN OH 44515	05/21/2008	05/21/2013
DOL	DOL	*****7907	LEEMA EXCAVATING INC		140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	AG	*****5102	LIBERTY TREE SERVICE, INC.		563 MUNCEY ROAD WEST ISLIP NY 11795	07/14/2008	07/14/2013
DOL	DOL	*****6651	LIGHTNING FAST LABOR FORCE SERVICES, INC.		150 NORTH CHESTNUT STREET ROCHESTER NY 14604	05/01/2006	05/01/2011
DOL	DOL	*****5953	LPD CONTRACTING INC		1205 MCBRIDE AVENUE WEST PATTERSON NJ 07424	08/27/2007	08/27/2012
DOL	DOL	*****5171	LUVIN CONSTRUCTION CORP		P O BOX 357 CARLE PLACE NY 11514	03/15/2010	03/15/2015
DOL	DOL	*****9875	M & S STRIPING INC		73 INDUSTRIAL PARK BLVD ELMIRA NY 14901	01/10/2007	01/10/2012
DOL	DOL	*****9688	M K PAINTING INC		4157 SEVENTH STREET WYANDOTT MI 48192	05/14/2007	05/14/2012
DOL	AG		MANNS CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	NYC		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	NYC		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		MARK LINDSLEY		355 COUNTY ROUTE 8 FULTON NY 13069	08/08/2009	08/14/2014
DOL	DOL		MASONRY CONSTRUCTION INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		MASONRY INDUSTRIES INC		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	AG	*****9970	MAY CONSTRUCTION CO INC		700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	NYC	*****4132	MCCASHION BROTHERS HOLDING COMPANY LLC		84 FREDERICK AVENUE ALBANY NY 12205	04/13/2006	04/13/2011
DOL	DOL		MCI CONSTRUCTION INC		975 OLD MEDFORD AVENUE FARMINGDALE NY 11738	08/24/2009	08/24/2014
DOL	DOL		MCS PAINTING CONTRACTORS, INC.		LIME KILN COURT STONY POINT NY 10980	01/25/2006	01/25/2011
DOL	DOL	*****4259	MERCANDO CONTRACTING CO INC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	*****0327	MERCANDO INDUSTRIES LLC		134 MURRAY AVENUE YONKERS NY 10704	12/11/2009	12/11/2014
DOL	DOL	*****0241	MERIT FENCE CO INC		130 OLD ROUTE 6 CARMEL NY 10512	08/06/2003	02/02/2012
DOL	DOL		MICHAEL L. KRIVITZA	NORTHEAST TECHNOLOGI ES	105 PINE STREET - APT 2 EAST ROCHESTER NY 14445	05/14/2007	05/14/2012
DOL	DOL		MICHAEL STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	DOL	*****0860	MICHAEL STEVENS	STEVENS TRUCKING	2458 EAST RIVER ROAD CORTLAND NY 13045	01/23/2008	01/23/2013
DOL	DOL		MICHAEL TAYLOR		66 RYBKA ROAD STUYVESANT FALLS NY 12174	03/02/2007	03/02/2012
DOL	DOL	*****0818	MILLER SANDBLASTING AND PAINTING		121 LINCOLN AVENUE ROCHESTER NY 14611	02/21/2008	02/21/2013
DOL	DOL	*****4435	MODERN TECH DESIGN & SERVICES INC		9151 SOUTHWESTERN BLVD ANGOLA NY 14006	01/19/2006	01/19/2011
DOL	NYC		MOHAMMAD SELIM		73-12 35TH AVE - APT F63 JACKSON HEIGHTS NY 11372	03/04/2010	03/04/2015
DOL	DA		MOHAMMED SALEEM		768 LYDIG AVENUE BRONX NY 10462	08/18/2009	05/25/2015
DOL	DOL	*****2251	MURDOUGH DEVELOPMENT CO., INC.		203 KELLY DRIVE EAST AURORA NY 14052	03/26/2008	03/26/2013
DOL	DA	*****9642	MUTUAL OF AMERICAL GENERAL CONSTRUCTION & MANAGEMENT CORP		768 LYDIG AVENUE BRONX NY 10462	08/18/2009	05/25/2015

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DOL	DOL	*****9445	NASDA ENTERPRISES INC		134-25 166 PLACE #5E JAMAICA NY 11434	08/07/2008	08/07/2013
DOL	DOL	*****2213	NEUSS CONSTRUCTION, INC.		1191 ROUTE 9W - SUITE #C6 MARLBORO NY 12542	09/06/2006	09/06/2011
DOL	DOL		NICK NITIS		3 ALAN B SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	DOL		NICOLE SPELLMAN		2081 JACKSON AVENUE COPIAGUE NY 11726	06/03/2010	06/03/2015
DOL	DOL	*****9890	NOBLE CONSTRUCTION		23960 WHITE ROAD WATERTOWN NY 13601	02/14/2008	02/14/2013
DOL	DOL	*****7771	NORTHEAST TECHNOLOGIES		105 PINE STREET APT. 2 EAST ROCHESTER NY 14445	05/14/2007	05/14/2012
DOL	DOL	*****1833	NORTHEASTERN SUPREME FLOOR CO.,INC		66 BENEDICT STREET CASTLETON NY 12033	03/02/2007	03/02/2012
DOL	DOL	*****7041	NYCOM SERVICES CORP		80-12 ASTORIA BOULEVARD EAST ELMHURST NY 11370	11/22/2008	11/22/2013
DOL	DOL	*****0797	O GLOBO CONSTRUCTION CORP		85-06 60TH AVENUE ELMHURST NY 11373	11/21/2008	11/21/2013
DOL	DOL	*****1803	OMNI CONTRACTING COMPANY, INC.		3 ALAN B. SHEPARD PLACE YONKERS NY 10705	12/11/2006	12/11/2011
DOL	NYC	*****6176	ORSOGRIL NEW YORK INC		25 CLIFF STREET NEW ROCHELLE NY 10801	06/15/2010	06/15/2015
DOL	NYC	*****3855	OT & T INC		36-28 23RD STREET LONG ISLAND CITY NY 11106	01/15/2008	05/14/2013
DOL	NYC	*****9833	PARADISE CONSTRUCTION CORP		6814 8TH AVENUE BROOKLYN NY 11220	12/03/2007	12/03/2012
DOL	DOL	*****3039	PARAGON PLATE GLASS, INC.		210 FACTORY STREET WATERTOWN NY 13601	11/07/2006	11/07/2011
DOL	DOL	*****5226	PASCARELLA & SONS		459 EVERDALE AVENUE WEST ISLIP NY 11759	12/15/2010	12/15/2015
DOL	DOL		PATRICK BURNS		19 E. CAYUGA STREET OSWEGO NY 13126	05/15/2008	05/15/2013
DOL	DOL		PATRICK SHAUGHNESSY		88 REDWOOD DRIVE ROCHESTER NY 14617	05/16/2008	05/16/2013
DOL	DOL		PEDRO RINCON		131 MELROSE STREET BROOKLYN NY 11206	03/02/2010	03/02/2015
DOL	AG		PETER GOUZOS		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		PETER J LANDI		249 MAIN STREET EASTCHESTER NY 10709	10/05/2009	10/05/2014
DOL	DOL	*****7229	PETER J LANDI INC		249 MAIN STREET EASTCHESTER NY 10709	10/05/2009	10/05/2014
DOL	DOL	*****1136	PHOENIX ELECTRICIANS COMPANY INC		540 BROADWAY P O BOX 22222ALBANY NY 12201	03/09/2010	03/09/2015
DOL	DOL	*****5419	PINE VALLEY LANDSCAPE CORP		RR 1, BOX 285-B BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL		PRECISION DEVELOPMENT CORP		115 LEWIS STREET YONKERS NY 10703	05/12/2009	05/12/2014
DOL	DOL	*****9359	PRECISION STEEL ERECTORS INC		P O BOX 949 BREWERTON NY 13029	09/02/2008	09/02/2013
DOL	DOL	*****2326	PUTMAN CONSTRUCTION COMPANY OF WESTERN NY		29 PHYLLIS AVENUE BUFFALO NY 14215	09/03/2008	09/03/2013
DOL	DOL	*****7438	R & H COMMERCIAL FLOORING, INC.		102 WILLOW AVENUE WATKINS GLEN NY 14891	06/20/2007	06/20/2012
DOL	DOL	*****1596	R & T SUPREME SPORTS FLOORING, LLC		66 RYBKA ROAD STUYVESANT FALLS NY 12174	03/02/2007	03/02/2012
DOL	DOL	*****1629	R S CONSTRUCTION COMPANY LLC		571 MILES SQUARE ROAD YONKERS NY 10701	04/04/2007	04/04/2012
DOL	AG	*****2626	RAINBOW RENOVATIONS, INC.		35-44 CRESCENT STREET LONG ISLAND CITY NY 11106	08/03/2006	08/03/2011
DOL	DOL		RAMON BONILLA		938 E 232ND STREET #2 BRONX NY 10466	05/25/2010	05/25/2015
DOL	DOL	*****7294	REDWOOD FLOORING, INC.		88 REDWOOD DRIVE ROCHESTER NY 14617	05/16/2008	05/16/2013
DOL	NYC	*****6978	RISINGTECH INC		243-03 137TH AVENUE ROSEDALE NY 11422	03/25/2010	03/25/2015
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT DIMARSICO		1233 WALT WHITMAN ROAD MELVILLE NY 11747	04/29/2008	04/29/2013
DOL	DOL		ROBERT O'HANLON		635 MIDLAND AVENUE GARFIELD NJ 07026	07/09/2007	07/09/2012
DOL	DOL		ROBERT STEVENSON		571 MILES SQUARE ROAD YONKERS NY 10701	04/04/2007	04/04/2012



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DOL	DOL	*****1721	ROBERTS CONSTRUCTION OF UPSTATE NEW YORK INC		5 SANGER AVENUE NEW HARTFORD NY 13413	01/28/2009	01/28/2014
DOL	DOL	*****3467	ROCKERS AND NOCKERS LLC		207 RIVERVIEW ROAD REXFORD NY 12148	10/23/2007	10/23/2012
DOL	DOL	*****9025	ROJO MECHANICAL LLC		938 E 232ND STREET #2 BRONX NY 10466	05/25/2010	05/25/2015
DOL	DOL		RONALD R SAVOY	C/O CNY MECHANICAL ASSOCIATES INC	P O BOX 250 EAST SYRACUSE NY 13057	11/06/2008	11/06/2013
DOL	DOL		ROSARIO CARRUBBA		5755 NEWHOUSE ROAD EAST AMHERST NY 14051	10/10/2007	10/10/2012
DOL	DOL	*****5905	ROSE PAINTING CORP		222 GAINSBORG AVENUE EAST WEST HARRISON NY 10604	05/10/2010	05/10/2015
DOL	DOL		RUDOLPH NEUSS		8 FAR HORIZONS DRIVE NEWBURGH NY 12550	09/06/2006	09/06/2011
DOL	DOL		RUSSELL TUPPER		8346 BREWERTON ROAD CICERO NY 13039	07/06/2007	07/06/2012
DOL	DOL		RUTH H SUTTON		939 GROVESIDE ROAD BUSKIRK NY 12028	08/27/2008	08/27/2013
DOL	DOL	*****2585	S B WATERPROOFING INC		SUITE #3R 2167 CONEY ISLAND AVENUEBROOKLYN NY 11223	11/04/2009	11/04/2014
DOL	DOL	*****9066	SAMAR PAINTING & DECORATING INC		137 E MAIN STREET ELMSFORD NY 10523	12/01/2008	12/01/2013
DOL	NYC	*****0987	SCHWARTZ ELECTRIC CONTRACTORS INC		89 WALKER STREET NEW YORK NY 10013	01/04/2008	01/04/2013
DOL	DOL	*****6348	SEABURY ENTERPRISES LLC		22562 SEA BASS DRIVE BOCA RATON FL 33428	10/10/2007	10/10/2012
DOL	NYC	*****4020	SERVI-TEK ELEVATOR CORP		2546 EAST TREMONT AVENUE BRONX NY 10461	07/16/2009	07/16/2014
DOL	NYC	*****8252	SEVERN TRENT ENVIRONMENTAL SERVICES INC		16337 PARK ROW HOUSTON TX 77084	06/12/2007	06/12/2012
DOL	DOL		SHAIKF YOUSUF		C/O INDUS GENERAL CONST 33-04 91ST STREETJACKSON HEIGHTS NY 11372	04/28/2010	04/28/2015
DOL	DOL	*****0256	SIERRA ERECTORS INC		79 MADISON AVE - FL 17 NEW YORK NY 10016	04/16/2009	04/16/2014
DOL	DOL	*****0415	SIGNAL CONSTRUCTION LLC		199 GRIDER STREET BUFFALO NY 14215	11/14/2006	02/25/2015
DOL	DOL	*****8469	SIGNATURE PAVING AND SEALCOATING		P O BOX 772 JAMESTOWN NY 14701	08/13/2010	08/13/2015
DOL	DOL	*****8469	SIGNATURE SEALCOATING AND STRIPING SERVICE		345 LIVINGSTON AVENUE P O BOX 772JAMESTOWN NY 14702	04/04/2007	08/13/2015
DOL	DOL	*****9397	SKY COMMUNICATIONS, INC.		PO BOX 278 DEWITT NY 13214	02/20/2007	02/20/2012
DOL	AG		SN CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG	*****7480	SNA CONTRACTING CORP		131 47TH STREET BROOKLYN NY 11232	01/26/2007	01/25/2012
DOL	AG	*****2738	SNA CONTRACTING CORP.		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		SPASOJE DOBRIC		61 WILLET STREET - SUITE PASSAIC NJ 07055	07/09/2010	07/09/2015
DOL	DOL	*****0918	SPECTRUM CONTRACTING GROUP INC		875 THIRD AVENUE NEW YORK NY 10022	12/11/2006	12/11/2011
DOL	AG	*****1355	SPIRIDON ANTHOULIS		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG		STACEY GOUZOS		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	NYC	*****6650	START ELEVATOR CONSTRUCTION, INC.		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	NYC	*****3896	START ELEVATOR MAINTENANCE, INC.		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	NYC	*****1216	START ELEVATOR REPAIR, INC.		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	NYC	*****2101	START ELEVATOR, INC.		4350 BULLARD AVENUE BRONX NY 10466	01/28/2008	01/28/2013
DOL	DOL		STEED GENERAL CONTRACTORS INC		1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL		STEPHEN BALZER		34-08 PARKWAY DRIVE BALDWIN NY 11510	07/01/2008	07/01/2013

**NYSDOL Bureau of Public Work Debarment List 12/27/2010**

**Article 8**

DOL	DOL		STEVE PAPASTEFANOU		1445 COMMERCE AVENUE BRONX NY 10461	10/09/2007	10/09/2012
DOL	DOL	*****4081	STS CONSTRUCTION OF WNY		893 EAGLE STREET BUFFALO NY 14210	06/09/2009	06/09/2014
DOL	DOL	*****5966	SUPREME SPORT SURFACES, INC.		66 BENEDICT STREET CASTLETON NY 12033	03/02/2007	03/02/2012
DOL	DOL	*****2036	SURACI ENTERPRISES INC		364 BLEAKER ROAD ROCHESTER NY 14609	10/25/2007	10/25/2012
DOL	DOL	*****9336	SWITZER SALES	ARTIERI SPECIALTIES	107 STEVENS STREET LOCKPORT NY 14094	11/04/2009	11/04/2014
DOL	AG		TAO GENERAL CONTRACTORS INC		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		THEODORE F FAULKS		18 FIREWEED TRAIL HILTON NY 14468	06/10/2008	06/10/2013
DOL	DOL		THOMAS ASCHMONEIT		79 MADISON AVENUE - FL 17 NEW YORK NY 10016	04/16/2009	04/16/2014
DOL	DOL		THOMAS E. MOONEY		164 WINSLOW STREET WATERTOWN NY 13601	11/07/2006	11/07/2011
DOL	DOL		THOMAS GORMALLY		250 KNEELAND AVENUE YONKERS NY 10705	07/09/2007	07/09/2012
DOL	DOL		TIMOTHY P SUCH		893 EAGLE STREET BUFFALO NY 14210	06/09/2009	06/09/2014
DOL	DOL		TNT DEMOLITION AND ENVIRONMENTAL INC		355 COUNTY ROUTE 8 FULTON NY 13069	08/08/2009	08/19/2014
DOL	DOL	*****3315	TOTAL DOOR SUPPLY & INSTALLATION INC		16 JOY DRIVE NEW HYDE PARK NY 11040	01/05/2010	01/05/2015
DOL	DOL	*****3315	TOTAL DOOR SUPPLY & INSTALLATION INC		16 JOY DRIVE NEW HYDE PARK NY 11040	01/05/2010	01/05/2015
DOL	DOL		TRI STATE TRUCKING INC		140 ARMSTRONG AVENUE SYRACUSE NY 13209	10/21/2009	10/21/2014
DOL	NYC	*****5184	UDDIN USA CORP		663 DEGRAW STREET BROOKLYN NY 11217	05/17/2007	05/17/2012
DOL	DOL		ULIANO AND SONS INC		22 GRIFFEN COURT MILLER PLACE NY 11746	10/26/2010	10/26/2015
DOL	DOL	*****8663	URBAN-SUBURBAN RECREATION INC		3 LUCON DRIVE DEER PARK NY 11728	06/20/2007	06/20/2012
DOL	DOL	*****0854	VANESSA CONSTRUCTION INC		588 MEACHAM AVE/STE 103 ELMONT NY 11003	08/24/2010	08/24/2015
DOL	DA		VASILIOS TSIMITRAS		235 91ST STREET BROOKLYN NY 11209	11/27/2006	11/27/2011
DOL	DOL		VIRGINIA L CAPONE		137 E MAIN STREET ELMSFORD NY 10523	12/01/2008	12/01/2013
DOL	NYC	*****9936	VISHAL CONSTRUCTION INC		73-12 35TH AVE - APT F63 JACKSON HEIGHTS NY 11272	03/04/2010	03/04/2015
DOL	NYC	*****5466	VIVA VICTORIA ENTERPRISES LTD		10317 90TH STREET OZONE PARK NY 11417	06/12/2006	06/12/2011
DOL	DOL	*****0329	WET PAINT CO. OF OSWEGO, INC		19 E. CAYUGA STREET OSWEGO NY 13126	05/15/2008	05/15/2013
DOL	DOL		WHITE PLAINS CARPENTRY CORP		220 FERRIS AVENUE WHITE PLAINS NY 10603	12/04/2009	12/04/2014
DOL	DOL		WILLIAM PUTNAM		50 RIDGE ROAD BUFFALO NY 14215	09/03/2008	09/03/2013
DOL	DA		WILLIAM TSIMITRAS		235 91ST STREET BROOKLYN NY 11209	11/27/2006	11/27/2011
DOL	DOL		WILLIAM W FARMER JR		112 HUDSON AVENUE ROCHESTER NY 14605	10/19/2009	10/19/2014
DOL	DOL		WINSTON J. GOINS, SR.		87 MALLING DRIVE ROCHESTER NY 14621	05/01/2006	05/01/2011
DOL	AG		YANG GENERAL CONTRACTING LTD		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG	*****0288	YIN CONSTRUCTION LTD		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	AG		YULY ARONSON		700 SUMMER STREET STAMFORD CT	11/24/2009	11/24/2014
DOL	AG	*****1564	ZARBEN GENERAL CONSTRUCTION INC		131 47TH STREET BROOKLYN NY 11232	01/25/2007	01/25/2012
DOL	DOL		ZEPHENIAH DAVIS		2068 ANTHONY AVENUE BRONX NY 10457	12/26/2007	12/26/2012

**NYSDOL Bureau of Public Work Debarment List 12/27/2010**

**Article 9**

<b>AGENCY</b>	<b>Fiscal Officer</b>	<b>SSN/FEIN</b>	<b>EMPLOYER NAME</b>	<b>EMPLOYER DBA NAME</b>	<b>ADDRESS</b>	<b>DEBARMENT START DATE</b>	<b>DEBARMENT END DATE</b>
DOL	NYC	*****8212	VELOX CLEANING CORP		32 ESSEX LANE WILLINGBORO NJ 08046	07/09/2010	07/09/2015

INDEX TO  
PROPOSAL

DESCRIPTION

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Proposal	3 pages
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Contractor's Acknowledgement	1 page

**CERTIFICATE OF AUTHORITY**

I, \_\_\_\_\_  
(Officer other than officer executing proposal documents)

certify that I am the \_\_\_\_\_ of the \_\_\_\_\_  
(Title) (Name of Contractor)

\_\_\_\_\_ a corporation, duly organized and in good standing under the

\_\_\_\_\_  
(Law under which organized, e.g., the New York Business Corporation Law)

named in the foregoing agreement; that \_\_\_\_\_  
(Person executing proposal documents)

who signed said agreement on behalf of the Contractor was, at the time of execution,

\_\_\_\_\_ of the Contractor; that said agreement was duly signed for  
(Title of such person)

and in behalf of said Contractor by authority of its Board of Directors, thereunto duly authorized, and that  
such authority is in full force and effect at the date hereof.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Corporate Seal

STATE OF NEW YORK     )  
COUNTY OF ESSEX     )

On this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, before me personally came \_\_\_\_\_  
\_\_\_\_\_ to me known, and known to me to be the \_\_\_\_\_

(Title) of \_\_\_\_\_ the corporation described in  
and which executed the above certificate, who being by me duly sworn did depose and say that he, the said \_\_\_\_\_  
\_\_\_\_\_ resides at \_\_\_\_\_, and that he is \_\_\_\_\_  
\_\_\_\_\_ of said corporation and knows the corporate seal of the said corporation; that the  
seal affixed to the above certificate is such corporate seal and that it was so affixed by order of the Board of  
Directors of said corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
Notary Public

\_\_\_\_\_  
County



## CERTIFICATION OF EXPERIENCE

I, \_\_\_\_\_ HEREBY CERTIFY THAT (COMPANY \_\_\_\_\_  
\_\_\_\_\_) HAS PERFORMED THE FOLLOWING WORK WITHING THE  
LAST THREE YEARS:

NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

-----  
NAMES OF BUSINESS: \_\_\_\_\_ CONTACT NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

AMOUNT OF CONTRACT: \_\_\_\_\_ TELEPHONE NO.: \_\_\_\_\_

TYPE OF WORK: \_\_\_\_\_ FAX NO.: \_\_\_\_\_

NOTE: THIS FORM MUST BE EXECUTED BY YOUR  
SURETY AND SUBMITTED WITH YOUR BID.

ESSEX COUNTY  
BID SECURITY FORM #1

**CONSENT OF SURETY**

Issued to: \_\_\_\_\_  
(Name of Bidder)

CONTRACT NUMBER \_\_\_\_\_

In consideration of the premises and of one dollar to it in hand paid by the County of Essex the receipt whereof is hereby acknowledged, the undersigned contents and agrees that if the contract, for which the preceding estimate and proposal is made, be awarded to the corporation, person or persons making the same, it will become bound as surety and guarantor for its faithful performance, and will execute it as party of the third part thereto when required to do so by the said County of Essex and if the said corporation, person or persons shall omit or refuse to execute such contract if so awarded, it will pay, on demand, to the said County of Essex , any difference between the sum bid by the corporation, person or persons and the sum which the said County may be obliged to pay the corporation, person or person to whom the contract may be afterwards awarded, the amount in each case to be determined by the bids for said contract.

In witness whereof, said Surety has set its seal and caused these presents to be signed by its duly authorized officers, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

(SEAL)

BY: \_\_\_\_\_

TITLE: \_\_\_\_\_

NOTE: Attach necessary Power of Attorney, Notarial Acknowledgement of Signature and Surety's Financial Statement.

**STATEMENT OF SURETY'S INTENT**

To: \_\_\_\_\_

We have reviewed the Bid of \_\_\_\_\_

(Contractor)

of \_\_\_\_\_

(Address)

for \_\_\_\_\_

(Project)

Bids for which will be received on \_\_\_\_\_

(Bid Opening Date)

and wish to advise that should this Bid of the Contractor be accepted and the Contract awarded to him, it is our present intention to become surety on the Performance Bond and Labor and Materials Payment Bond required by this Contract.

Any arrangement for the bonds required by the Contract is a matter between the Contractor and ourselves, and we assume no liability to you or third parties if for any reason we do not execute the requisite bonds.

We are duly authorized to transact business in the State of New York, and we appear on the U.S. Treasury Department's most current list (Circular 570 as amended).

Attest:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
Surety's Authorized Signature(s)

Attach Power of Attorney

(Corporate seal if any. If no seal, write  
"No Seal" across this place and sign.)

BID SECURITY

(ATTACHED HERE – CERTIFIED CHECK, CASH OR BID BOND)

## BIDDER'S CHECKLIST

Each of the following forms must be executed and notarized if applicable:

CERTIFICATE OF AUTHORITY \_\_\_\_\_

CERTIFICATION OF EXPERIENCE \_\_\_\_\_

BID SECURITY FORM # 1 \_\_\_\_\_

STATEMENT OF SURETY'S INTENT \_\_\_\_\_

PROPOSAL \_\_\_\_\_

NON-COLLUSIVE BIDDING CERTIFICATION \_\_\_\_\_



## PROPOSAL

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

Proposal of \_\_\_\_\_

---

to furnish and deliver all labor, supervision, materials, and equipment and perform all work in accordance with the Specifications for Terry Mountain Radio Tower Repair, Peru, New York for the following lump sum cost.

Bidders must provide a breakdown of the Base Bid, and complete all blanks on the Bid Proposal. Demolition, cutting and patching for each trade should be included with the respective trade. Dollar amounts in the Bid breakdown must total Base Bid. Unit price work shall not be included in the Base Bid amount.

Essex County is tax-exempt. Do not include sales tax in Bid amounts.

The undersigned bidder has carefully examined the contract documents, site of the work, is familiar with existing conditions, and will provide all necessary insurance, bonds, machinery, tools, apparatus, false work and other means of construction, and do all the work and furnish all the materials called for by said contract according to the following TOTAL BASE BID, including all labor, supplies and equipment, permits, fees, overhead and profit for general construction. The BASE BID price is to be shown in both words and figures. In the event of discrepancies, the amount shown in words shall govern. All items are to be furnished and installed in place complete.

---

(Amount in Words)

---

(Amount in Figures)

The undersigned further understands that the contract will be awarded to the competent, qualified bidder submitting the lowest bid for the Total Bid.

### ADDENDA ACKNOWLEDGEMENT

Addendum No.

Date Received

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

The undersigned agrees as follows:

1. The total contract price bid shall be accepted as full compensation for the complete work subject to additions or deductions in quantity of work performed or changes agreed upon.
2. Within twenty (20) days from the date of "Notice of Acceptance" of the Proposal, to

execute the contract and to furnish a satisfactory labor, material and performance bond in the amount of 100% of the contract price.

3. To execute the work as specified herein as soon as possible after notice of award.
4. To comply with requirements as to the conditions of employment, wage rates and hours set forth in the bidding documents.
5. Progress Payments will be made on a percentage of completion basis monthly.
6. 5% Retainage will be withheld until final approval of project(s).

Bidder: \_\_\_\_\_

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

Title: \_\_\_\_\_

Address: \_\_\_\_\_

Dated: \_\_\_\_\_

Telephone: \_\_\_\_\_

Fax: \_\_\_\_\_

Social Security/Federal ID No: \_\_\_\_\_

## **SUBCONTRACTOR LIST**

Please provide a list of subcontractors with bid amount for each subcontract listed below. Leave blank if not applicable. **Seal in separate envelope labeled "Subcontractor List & Bid Amount".**

### **GENERAL CONSTRUCTION:**

\_\_\_\_\_  
(Name & Address)  
Bid Amount:  
\_\_\_\_\_  
(in words) Dollars (\$\_\_\_\_\_) (in figures)

### **SITE WORK:**

\_\_\_\_\_  
(Name & Address)  
Bid Amount:  
\_\_\_\_\_  
(in words) Dollars (\$\_\_\_\_\_) (in figures)

### **MECHANICAL SUBCONTRACTOR:**

\_\_\_\_\_  
(Name & Address)  
Bid Amount:  
\_\_\_\_\_  
(in words) Dollars (\$\_\_\_\_\_) (in figures)

### **ELECTRICAL SUBCONTRACTOR:**

\_\_\_\_\_  
(Name & Address)  
Bid Amount:  
\_\_\_\_\_  
(in words) Dollars (\$\_\_\_\_\_) (in figures)

### **PLUMBING SUBCONTRACTOR:**

\_\_\_\_\_  
(Name & Address)  
Bid Amount:  
\_\_\_\_\_  
(in words) Dollars (\$\_\_\_\_\_) (in figures)

## **NON-COLLUSIVE BIDDING CERTIFICATION**

1. By submission of this bid, the undersigned bidder and each person signing on behalf of such bidder certifies and in the case of a joint bid each party thereto certifies as to its own organization — UNDER PENALTY OF PERJURY, that to the best of the undersigned's knowledge and belief:

(a) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

(b) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

(c) No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

2. The undersigned acknowledges and agrees that a bid shall not be considered for award nor shall any award be made where any of the above have not been complied with; provided however, that if in any case the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons therefor. Where one or more of the above has/have not been complied with, the bid shall not be considered for award nor shall any award be made unless the political subdivision, public department, agency or official thereof to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

3. The undersigned also acknowledges and agrees that the fact that a bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised price lists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of paragraph 1 above.

4. The undersigned further acknowledges and agrees that any bid hereafter made to any political subdivision of the state or any public department, agency or official thereof by a bidder which is a corporation or a limited liability company for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, regulation, or local law, and where such bid contains the certification referred to in paragraph 1 of this certificate, shall be deemed to have been authorized by the board of directors of the bidder, and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation or limited liability company.

Name of Bidder: \_\_\_\_\_  
(print full legal name)

Date Signed: \_\_\_\_\_ Signature: \_\_\_\_\_

Name of Person Signing Certificate: \_\_\_\_\_  
(print full legal name of signer)

Bidder is (check one): ☐ an individual, ☐ a limited liability partnership, ☐ a limited liability company,

☐ other entity (specify): \_\_\_\_\_

CONTRACTOR'S ACKNOWLEDGEMENT

(If Corporation)

STATE OF NEW YORK) SS:  
COUNTY OF ESSEX)

On this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, before me personally came \_\_\_\_\_

\_\_\_\_\_ to me known, and known to me to be the  
\_\_\_\_\_ of the Corporation described in and which executed the within instrument,  
who being duly sworn did depose and say that he, the said \_\_\_\_\_ reside at  
\_\_\_\_\_ and that he is \_\_\_\_\_ of said  
corporation and knows the corporate seal of the said corporation; that the seal affixed to the within  
instrument is such corporate seal and that it was so affixed by order of the Board of Directors of said  
corporation, and that he signed his name thereto by like order.

\_\_\_\_\_  
Notary Public

CONTRACTOR'S ACKNOWLEDGEMENT

(If Individual)

STATE OF NEW YORK) SS:  
COUNTY OF ESSEX)

On this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, before me personally came  
\_\_\_\_\_ to me known, and known to me to be  
the same person described in and who executed the within instrument and he duly acknowledged to me  
that he executed the same for the purpose herein mentioned and, if operating under and trade name, that  
the certificate required by the New York State Penal Law, Sections 440 and 440-b has been filed with  
the County Clerk of Essex County.

\_\_\_\_\_  
Notary Public

CONTRACTOR'S ACKNOWLEDGEMENT

(If Co-Partnership)

STATE OF NEW YORK) SS:  
COUNTY OF ESSEX)

On this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_, before me personally came  
\_\_\_\_\_ to me known, and known to me to be a member of the firm  
of and the person described in, and who executed the within instrument in behalf of said firm for the  
purposes herein mentioned and that the certificate required by the New York State Penal Law, Sections  
440 and 440-b has been filed with the County Clerk of Essex County.

\_\_\_\_\_  
Notary Public