

ADDENDUM NUMBER ONE
CAMDEN PUMP STATION IMPROVEMENTS
CONTRACT B
VILLAGE OF CAMDEN, HILLSDALE COUNTY, MICHIGAN
PROJECT NO. 10E04319
NOVEMBER 13, 2007
BID OPENING: NOVEMBER 20, 2007 AT NOON

PLAN SET

The attached Addendum #1 form Design Engineers & Consulting Associates, Inc. shall be added to the plans.

Sheet 6

Add the attached **STANDARD METAL FENCE DETAIL**

BID DOCUMENT

In the TABLE OF CONTENTS Section 00004-2, delete Section 02550 – Sanitary and Storm Sewer Systems.

In the TABLE OF CONTENTS Section 00004-2, change Section 02890 – Fencing and Gates to read **Section 02830 - Fencing and Gates**.

In the TABLE OF CONTENTS Section 00004-2, delete Section 11921 – Air Release Valves.

In the TABLE OF CONTENTS Section 00004-2, change Section 11973 – Electromagnetic Flow Meter and Recorder to read **Section 11974 - Electromagnetic Flow Meter and Recorder**.

In the PROJECT DIRECTORY & CERTIFICATION, Section 00005-1, Delete Bruce Martin, Maintenance Supt. from the list of Owner's Contacts, and add the phone number **517-398-2473** for Harold Walker.

In the INVITATION TO BIDDERS, Section 00020, Delete Bruce Martin, Maintenance Supt. as the Owner's Contact and add **Harold Walker, President** and add the phone number **517-398-2473**.

In the INSTRUCTIONS TO BIDDERS Section 00100-6, Item 13.11 delete the lines "The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the project is located or covenant to obtain such qualification prior to

award of the Contract.” USDA allows out-of-state contractors to bid and be awarded contracts to work on projects in Michigan.

In the BID FORM Section 00300-2, Delete Item 3.01 K.

In the BID FORM Section 00300-7 Item 9.01, under A Corporation, the last line shall be changed to read “**Date of Qualification to do business in _____ [State where Project is located] is ___/___/_____ (if applicable)**”.

On the BID FORM Section 00300-10, Item 22 – Permanent On-site Generator, add the following line: “**All costs for gas line installation work related to the on-site generator shall be included in the lump sum cost for Item 22.**”

In Section 01010-1 SUMMARY OF WORK, Item 1.01 D, add the phone number **517-398-2473** for Village President, Harold Walker.

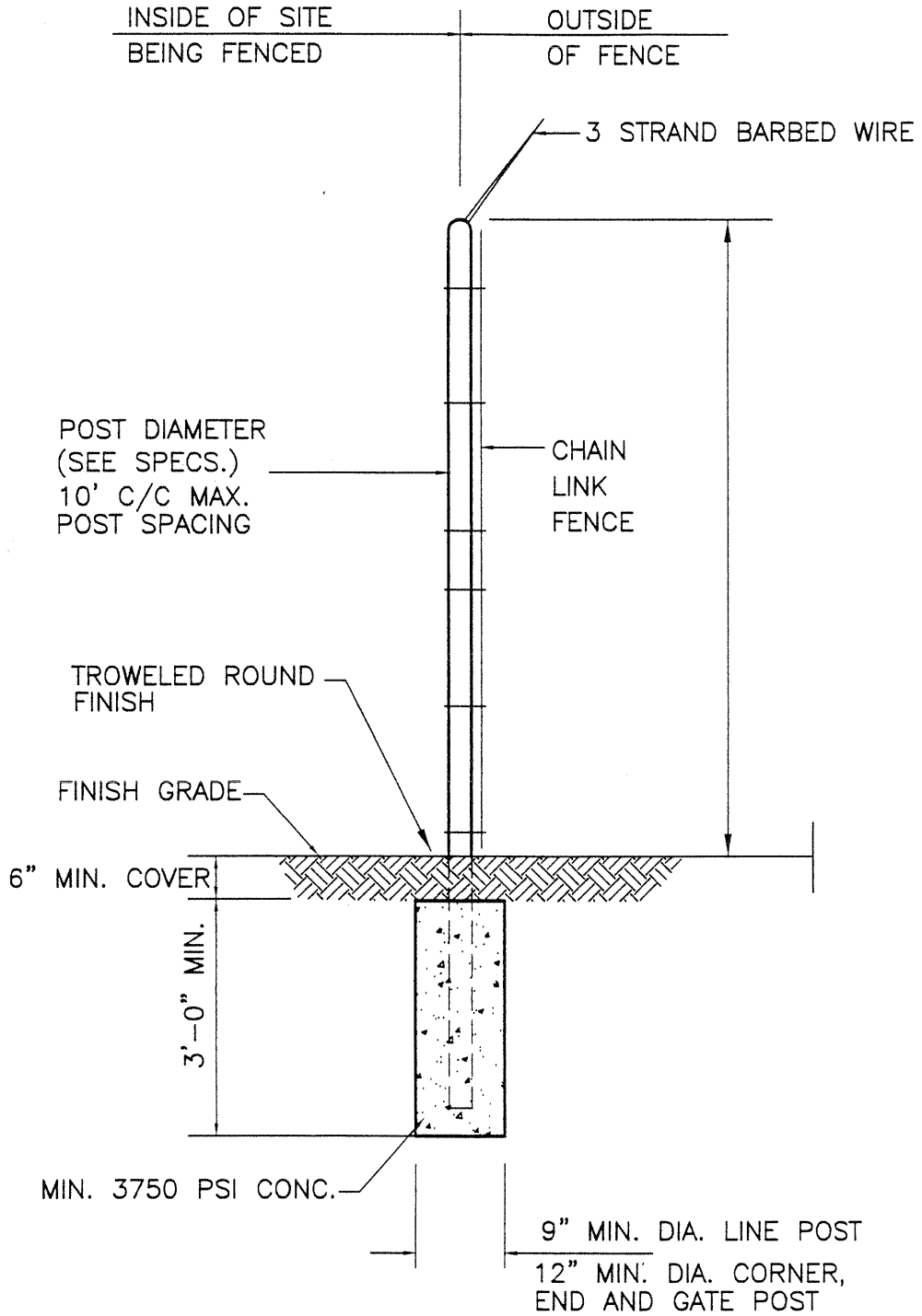
In Section 02830-1 Fencing and Gates, Item 2.01A shall be changed to read as follows: “**All new fencing required to provide the enclosures shown on the Drawings shall have a fence height of six (6) feet not including the three (3) rows of barbed wire on forty-five degree (45 °) “V” shaped vertical extension arms. Fencing shall be in accordance with the detail shown on the Drawings**”.

In Section 02830-1 Fencing and Gates, Item 2.01F shall be changed to read as follows: “**“V” shaped extension arms supporting barbed wire shall be galvanized, inclined at forty-five degrees (45 °), and shall be capable of supporting a weight of 250 lbs. applied vertically at the tip. Install three (3) rows of two strand barbed wire consisting of 12-1/2 gauge wire with 14 gauge 4 point barbs spaced five (5) inches apart.**”

Add the attached Section 08320 – Floor Doors as this was left out of the original documents.

Add the attached Section 09900 – Painting as this was left out of the original documents.

B-A1-Z



STANDARD METAL FENCE DETAIL

NOT TO SCALE

B-A1-3



DESIGN ENGINEERS &
CONSULTING
ASSOCIATES, INC.

Date: October 24, 2007

1 Total Pages Faxed
TO: Mr. Steve Darmofal
Feller, Finch & Associates
Fax #: 419-893-2982

Project: Camden Pump Stations
Job No.: DECA #06119
Re: Addendum Items
 [X] Email copy to follow.

Remarks:

Please issue the following in addendum form to all Bidders on the above referenced project. This Addendum supplements and amends the original Plans and Specifications and shall be taken into account in preparing proposals and shall become part of the Contract Documents. Note: this Addendum is issued to bidders of record. It is the prime contractor's responsibility to forward this Addendum information to all affected suppliers and sub-contractors and/or make adjustments relative to the proposal.

ADDENDUM # E1

ITEM 1: Sheet E-2 (not re-issued at this time).

- A. The diagram for Pump Station #3 shall be revised by deleting the note indicating a 200 ampere NEMA 4X main disconnect, located to the left of the wood pole. This note should have been erased before issue.

***** End of Addendum Items *****

Attachments: None

Please do not hesitate to call if there are any questions.

From: Martin M. Braun, P.E.

File: 06119add102407.doc

415 CONANT STREET
MAUMEE, OH 43537
TEL. (419) 891-0022
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ENGINEERING@DECAGROUP.COM

B-A1-4

PART ONE - GENERAL

1.01 SCOPE

- A. Under this Section the Contractor shall furnish and install floor doors at the locations as shown on the Drawings and as listed in PART FOUR, if any.
- B. Floor doors shall be aluminum interior, exterior diamond plate, or interior recessed to receive carpet, composition or resilient flooring specified under other Sections.
- C. Door arrangements shall be either single leaf or double leaf hinged as shown on the Drawings.
- D. Additional product requirements are specified in Section 01350 Product Handling and Requirements.

1.02 SUBMITTALS

- A. Submittals shall be in accordance with the requirements of Section 01300 and shall include:
 - 1. Shop Drawings for Review:
 - a. The Contractor shall indicate all variances from the requirements of the Contract Documents.
 - b. Manufacturer's Literature.
 - c. Door Schedule.
 - d. Dimensional Drawing.
 - 2. Information for the Record:
 - a. The manufacturer shall guarantee proper operation and against defects in material and workmanship for a period of five years from the date of shipment. The provisions of this warranty shall not be construed as relieving or reducing the obligations of the Contractor outlined in General Conditions of these Specifications.

PART TWO - PRODUCTS

2.01 INTERIOR DOORS - NONRECESSED

- A. Door frames shall be 1/4-in. extruded aluminum with built-in neoprene cushion and strap anchors bolted to the exterior.
- B. Door leaf shall be 1/4-in. aluminum diamond plate reinforced with aluminum stiffeners as required to prevent distortion of the leaf when in any position. Cast steel hinges and pivot on torsion bars that counterbalance the door for easy operation shall be bolted to the underside.
- C. The doors shall open to 90 degrees and lock automatically in that position. A grip handle shall be provided to release the hold open arm and close the cover with one hand. Handle shall be

permanently attached and set flush with the surface when not in use.

- D. Doors shall be constructed to withstand a live load of 300 lbs/sf.
- E. Factory finish shall be mill finish. The manufacturer shall apply bituminous coating to the exterior portions of the frame and all aluminum in contact with concrete or mortar.
- F. Doors shall be as manufactured by Bilco or equal.

2.02 INTERIOR DOORS - RECESSED

- A. Door frames shall be 1/4-in. extruded aluminum with built-in neoprene cushion and strap anchors, bolted to exterior.
- B. Door leaf shall be 1/4-in. aluminum smooth plate reinforced with aluminum stiffeners as required to prevent distortion of the leaf when in any position. Door leaf shall have pivot on torsion bars that counterbalance the door for easy operation.
- C. Doors shall open to 90 degrees and lock automatically in that position. A grip handle shall be provided to release the hold open arm and close the cover with one hand. Handle shall be permanently attached and set flush with the surface when not in use.
- D. Doors shall be built to withstand a live load of 300 lbs/sf.
- E. Factory finish shall be mill finish. The manufacturer shall apply bituminous coating to the exterior portions of the frame and all aluminum in contact with concrete.
- F. Door leaf shall be recessed 1/8-in. to receive composition coverings or carpet where shown or noted on the Drawings, or listed by schedule.
- G. Doors shall be as manufactured by Bilco or equal.

2.03 EXTERIOR DOORS

- A. Doors shall have channel frames and shall be 1/4-in. aluminum with an anchor flange around the perimeter.
- B. Door leaf shall be 1/4-in. aluminum diamond pattern plate reinforced with aluminum stiffeners designed to withstand a live load of 300 lbs/sf and as required to prevent distortion of the leaf when in any position. Doors shall be equipped with heavy forged brass hinges, stainless steel pins, spring operators for easy operation, and automatic hold-open arm with release handle. A snap lock with removable handle shall be provided.
- C. A 1-1/2 in. drainage coupling shall be provided in the door frame. Drainage shall be piped by the Contractor to drain to outlet with 1-1/2 in PVC pipe.
- D. Hardware shall be stainless steel throughout.
- E. Factory finish shall be mill finish. The manufacturer shall apply bituminous coating to the exterior portions of the frame and all aluminum in contact with concrete.
- F. Doors shall be as manufactured by Bilco or equal.

PART THREE - EXECUTION

3.01 GENERAL

- A. The Contractor shall install the floor doors in the locations as shown on the Drawings and as listed in PART FOUR. Installation shall be in accordance with the manufacturer's recommendations.
- B. Doors shall be modified by the manufacturer as required when necessary to suit the installation shown on the Drawings.
- C. Doors shall be installed to open in the direction shown on the Drawings or as ordered by the Engineer. Any apparent errors in opening directions shall be brought to the Engineer attention for final determination.
- D. The bituminous coating on door frames shall be touched up by the Contractor if the coating is damaged.

PART FOUR - SPECIAL PROVISIONS

4.01 DOOR SCHEDULE

- A. All access floor doors shown on the Drawings shall be provided and installed complete.

PAINTINGPART ONE - GENERAL

1.01 DESCRIPTION

- A. Under this Section the Contractor shall thoroughly clean all surfaces and furnish all necessary materials and labor to accomplish all field painting, except as excluded herein, or that is specifically included under other Sections of the Specifications.
- B. Unless otherwise noted in PART FOUR herein, specified in another Section, or noted on the Drawings, the work shall encompass the field painting of all new work including wood, and all metal surfaces (except aluminum, bronze, copper, stainless steel and machined or finished surfaces) that are not covered by earth or masonry; all gray mix masonry and concrete surfaces unless excluded in PART FOUR or by Drawing notation; all machinery and drives; and all pipe (except copper, stainless steel, glass, or that excluded by Drawing notation); and all pipe insulation. Work shall include the furnishing, painting, and lettering of all signs necessary for the proper completion of the work of this Contract.
- C. Field painting of new work, in general, shall consist of the mil coats specified (seal coats and prime coats not included), although additional coats may be called for under certain brands of paint depending on specific conditions.
- D. Mechanical equipment, furniture, laboratory equipment, and similar items that have been specified with baked-on enamel, porcelain, or similar standard manufacturer finish, shall not require field painting unless otherwise noted in PART FOUR. Any injury or damage to such finished surfaces on new equipment prior to final acceptance of the work shall be remedied before final acceptance.
- E. Unless otherwise specified herein, all paint, primers, varnishes, sealers or other coatings shall be delivered to the job site in their original, unbroken containers not exceeding five gallons in capacity. Each container shall have the manufacturer's stamp and contents clearly marked thereon. Agitator barrels may be used for shipment and storage of coating materials provided the Engineer's approval has been received. No coating material containers shall be opened until the Engineer's field representative has inspected and approved the material containers.
- F. The mixing, thinning and application of all coatings herein specified or approved, shall meet the recommendations of the respective manufacturers in full.
- G. It is the intent of the Contract to require a finished and workmanlike appearance on all surfaces. All surfaces that can corrode shall be properly protected as specified.
- H. Existing work shall be painted as specified herein and as noted on the Drawings.

PART TWO - PRODUCTS

2.01 MATERIALS

- A. The Contractor shall submit for review by the Engineer, all paints and procedures prior to shop or field painting any item or structure. The coating materials and the manufacturers listed herein and in the Painting Guide are identified by reference to trade names and catalog numbers of a particular manufacturer, but without intent to particularize the products of that manufacturer. The Contractor may submit, for the Engineer's review, other similar and equal coating products and procedures of other manufacturers.

2.02 COLOR CODE

- A. The colors and shades specified are identified by reference to the catalog numbers of a particular manufacturer, but without the intent to particularize the products of that manufacturer. Colors used shall be similar and equal to the colors of the Master Color Card as furnished by the Tnemec Company, Incorporated.

- B. The Contractor shall paint all new and noted piping, piping insulation and equipment with colors as specified. All stripes shall be painted two inches wide, and except for safety guards shall be spaced four feet on centers.

Piping	Color(s)	Tnemec No.
Raw Water	Olive Green	AV22
Settled Water	Aqua	AX72
Filter Water	Aqua w/Blue Stripes	AX72/BR18
Potable Water	Dark Blue	BR18
Wash Water	Light Blue	BB42
Non Potable Water	Blue w/Black Stripes	BR18/AB05
Wastewater	Gray	BK33
Wastewater Effluent	Same as non-potable water	BR18/AB05
Backwash Water	Light Brown	AH22
Sludge Recirculation	Dark Brown	AK12
Sludge Draw-off	Dark Brown w/Yellow Stripes	AK12/BY57
Sludge Waste	Dark Brown w/2" Orange Band	AK12/CA26
Sludge Primary	Dark Brown w/2" Black Band	AK12/AB05
Drain Lines	Light Brown w/2" Black Stripes	AK22/AB05
Natural Gas	Orange w/Black Stripes	CA26/AB05
Digester Gas	Orange/Brown Stripe	CA26/AK12
Sanitary Vents	Aluminum w/Brown Stripes	Aluminum/AK12
Gas Vents	Aluminum w/Orange Stripes	Aluminum/CA26
Fuel Vents	Aluminum w/Black Stripes	Aluminum/AB05
Heating - Water	White w/Blue Stripes	AA90/BR18
Heating - Steam	White	AA90
Heating - Digester Water	White w/Green Stripes	AA90/BS28
Heating - Digester Steam	White w/Dark Green Stripes	AA90/Bu20
Compressed Air	Dark Green	BU20
Acid	Yellow w/2" Red Band	BW56/CC13
Alum/Primary Coagulant	Red	CC12
Ammonia	White/Orange Stripe	AA90/CA26
Carbon Slurry	Black	AB05
Caustic	Yellow w/Green Stripe	BY57/BU20
Chlorine	Yellow	BX51
Fluoride	Light Blue w/Red Stripe	BB42/CC12
Lime Slurry	Light Green	AU52
Ozone	Yellow w/Orange Stripe	BY57/CA26
Phosphate Compounds	Light Green w/Red Stripe	AU52/CC12
Polymers/Coagulant Aids	Orange w/Green Stripe	CA26/AU52
Potassium Permanganate	Violet	BP14
Soda Ash	Light Green w/Orange Stripe	AU52/CA26
Sulfur Dioxide	Light Green w/Yellow Stripe	AU52/BY57
Safety Guards	Black & Yellow Stripes	AB05/BY57
Fuel Storage Tanks	Aluminum	Aluminum
Machinery/Equipment/Misc	Owners Choice	

PART THREE - EXECUTION

3.01 PREPARATION OF SURFACES

- A. All unpainted metal surfaces, prior to sealing and/or painting, shall first be thoroughly cleaned of all rust, mill scale, grease, oils, mud, dirt and other foreign matter. Cleaning shall be accomplished by wire brushes, chisels, hammers, or washing with water or other suitable liquid, as is necessary or as directed. Abrasive blasting in an approved manner at point of manufacture is required on structural steel and rough steel castings or forgings. No abrasive blasting shall be permitted on or near mechanical or electrical equipment after assembly or installation. Abrasive blasting, where specified "in field" shall be applied at job site before material and equipment is erected.
- B. Refinishing of existing surfaces, prior to painting, shall be cleaned of all loose paint, rust or other oxidation, grease, oils, dirt and other material detrimental to poor adherence of new coating(s) to the surface being

refinished. Surface preparation shall be completed in accordance with recommendations of the coating material manufacturer except that sand, shot, and water blasting will not be permitted.

- C. All masonry and concrete surfaces shall be thoroughly cleaned of all dirt, dust, curing compounds, oils and other foreign matter prior to coating. If paint manufacturer recommends or requires etching of concrete surfaces prior to painting, surfaces shall be treated with a ten percent muriatic acid solution in an approved manner.
- D. All new cast iron fittings, ductile cast iron pipe, and valves shall receive one shop coat of the primer specified in the Painting Guide. Before field priming, the surfaces must have all loose rust and scale removed.
- E. The following specifications shall be adhered to when preparing surfaces:
 - 1. Metal
 - a. Submerged : SSPC-SP-10 Near White Blast
 - b. Non_Submerged : SSPC-SP-3 Power Tool Cleaning
 - c. Non_Submerged Splash, Fumes, etc. : SSPC-SP-6 Commercial Blast Exposed to
 - d. Non_Submerged Exposed : SSPC-SP-6 Commercial Blast
 - e. Galvanized : SSPC-SP-1 Solvent Cleaning
 - 2. Concrete
 - a. Submerged : SSPEC-SP-7 Brush-Off, Blast, or Acid Etch to Achieve Medium Grade Sandpaper Texture.
 - b. Floors : Acid Etch to Achieve Medium Grade Sandpaper Texture.
 - 3. Wood
 - a. Hand sand
- F. All concrete, masonry, or metal surfaces shall be clean, dry, and at a temperature of not less than fifty degrees Fahrenheit at the time of applying the paint coating.

3.02 PAINTING GUIDE

- A In order to establish standards for the coating of various surfaces subjected to different conditions, a painting guide is provided to convey the general intent of this Contract in regard to surface finishes and corrosion protection.

SURFACE		NO. OF COATS	DRY MIL THICKNESS EACH COAT	TYPE
1.	Submerged metal, except aluminum, bronze & metal surfaces in line 7	1 primer 2 finish	3.0 4.0	Tnemec Series 66 Tnemec Series 66 Hi-Build Epoxoline
2.	Submerged concrete	2 finish	4.0	Series 66 Hi-Build Epoxoline
2a.	Below grade Concrete	2 finish	8.0	Series 46 H.B. Tnemecol-Tar
3.	Non-Submerged ferrous metal equipment, etc.	1 primer 1 touchup 1 finish	3.0 4.0	Tnemec Series 66 Hi-Build Epox. Tnemec Series 66 Hi-Build Epox. Tnemec Series 66 Hi-Build Epox.
3a.	Galvanized metals, metal deck, etc.	1 primer 1 finish	4.0 4.0	Tnemec Series 66 Epoxoline Tnemec Series 66 Hi-Build Epoxoline
3b.	Insulated pipe and fittings	1 primer 2 finish	2.0 2.0	Tnemec Series 66 Epoxoline Tnemec Series 6
3c.	Submerged or intermittently submerged steel, i.e. troughs, weirs, etc.	1 primer 2 finish	3.0 4.0	Tnemec Series 66 Epoxoline Tnemec Series 66 Epoxoline
4.	Interior concrete non-submerged, block & masonry	1 primer 2 finish	6.0 4.0	Series 54-562 mod. epoxy masonry filler Series 66 Epoxoline
5.	Concrete floors & walks non-submerged	2 finish	3.0	Tnemec Series 66 Epoxoline
6.	Metal exposed to temperatures above 250°.	2 finish		Tnemec 43-38 Aluminum
7.	Non-submerged surfaces exposed to acids and chemicals			
	a. Metal	1 primer 2 finish	3.0 4.0	Tnemec Series 66 Epoxoline Tnemec Series 66 Epoxoline
	b. Concrete	2 finish	4.0	Tnemec Series 66 Epoxoline
	c. Wood 1. Mild exposure	1 primer 2 finish	2.0 1.5	36-603 Undercoat Series 23 Endurton
	2. Severe exposure	2 finish	4.0	Series 66 Epoxoline
8.	Gypsum Wallboard	1 primer 2 finish	2.0 4.0	Series 51-792 PVA Sealer Series 113 H.B. Tnem-Tufcoat
9.	PVC Piping	1 Primer 1 Finish	2.0 2.0	Series 66 Hi-Build Epoxoline Series 73 (exter.) Series 66 (int.)

- B. Where abrasive blasted "in field", apply first coating on same day.

3.03 APPLICATION

- A. The paint on all metal surfaces shall be well rubbed or forced into the metal or undercoats of paint by suitable stiff, round or oval brushes, bridled if the bristles are too long or flexible. Flat brushes when allowed, shall not be wider than four inches. Where required, erection marks shall be painted on surfaces.

- B. No painting shall be performed when the temperature is below fifty degrees F, upon wet, damp or frosty surfaces, in wet, foggy weather; nor in damp atmosphere such as occurs in tunnels, galleries or elsewhere except by permission of the Engineer and in the manner that the Engineer may approve. If permitted, Contractor shall be solely responsible for the results of such painting. Sufficient heating and ventilating shall be provided at the Contractor's expense to keep the atmosphere and surfaces to be painted dry and warm until the paint has properly cured. Any defective painting shall be scraped off and repainted as the Engineer may order. Previous coats of paint must dry before the addition of new coats, which in general, will be according to the manufacturer's recommendations for the specific conditions. Before acceptance, all damaged surfaces of paint shall be cleansed and repainted or touched up as ordered by the Engineer. All paint shall be applied in strict conformance with manufacturer's specifications.
- C. Each coat of paint shall be tinted to make it distinguishable from proceeding coats.
- D. It is not the intent of these specifications to permit spray painting or application by means of a roller, and if such is done it shall require written authority of the Owner and shall be carried out in full accordance with the paints and equipment submitted for approval and as recommended by the paint manufacturer.

3.04 PROTECTION

- A. During the construction period, electrical, mechanical, and other equipment, apparatus and surfaces shall be protected from paint drippings by means of tarpaulins, burlap, wooden housings or other approved means of protection. After equipment, apparatus and piping has been erected and tested, or when ordered by the Engineer and just prior to the acceptance of the work, it shall be given the final coats of paint as herein provided.

3.05 SHOP PAINTING

- A. Shop painting shall be performed to the extent and as required under other Sections of this Contract. If not there particularized, it is intended generally that all exposed metal surfaces shall be given a minimum of one protective coat of paint, varnish, or rust protective material, which shall be compatible with and is acceptable to the approved manufacturer of the specified field paint.

3.06 FIELD PAINTING OF NEW WORK

- A. The colors for new buildings or structures are to be selected by the Owner except that all piping and machinery shall be painted according to the above specified color code.
- B. Unless otherwise shown or specified, surfaces shall be painted as follows:
 - 1. Metal Surfaces
 - a. All metal and pipe surfaces shall be painted in accordance with 1. of the Painting Guide that are or can be submerged, are in contact with water or wastewater during operation, or are in manholes. Also included are all manhole rings and covers, valve boxes, manhole steps, and similar items.
 - b. Exposed metal surfaces (other than brass, aluminum or finished surfaces), such as structural steel work, steel stairs, pipe railings, storage tanks, silencers, and similar items shall be painted in accordance with the Painting Guide.
 - c. Machinery castings such as pumps and related drives, speed reducers, gear boxes, and similar items shall be painted in accordance with the Painting Guide. Finish colors shall match the Color code of these specifications.
 - d. All exposed piping, if not otherwise specified, shall be painted to meet the requirements of the Color Code, and paints and painting shall be in accordance with the Painting Guide. This includes hangers, supports, valves, valve operators, and floor stands.
 - e. Galvanized metal surfaces, unless otherwise specified or directed, shall be painted. Galvanized surfaces to be painted shall be primed with one coat of primer especially prepared by paint manufacturer for galvanized surfaces and for the final coats, in accordance with the Painting Guide.
 - f. Weirs and accessories shall be painted in accordance with the Painting Guide.

- g. Surfaces that are subjected to frequent splashing or spilling of acids, chemicals and other corrosive substances shall be painted in accordance with the Painting Guide unless service requires special paints.
- h. Boiler breechings, flues, uninsulated metal surfaces that are exposed to heat, shall be painted in accordance with the Painting Guide.
- i. All electrical control equipment shall be painted at the point of manufacture with the manufacturer's standard corrosion resisting finish under the various items of the work. After installation, control equipment shall be painted with machinery enamel in accordance with the Painting Guide.
- j. Pipe insulation shall be painted with an approved seal coat finish in accordance with the Painting Guide.

2. Masonry and Concrete Surfaces

- A. The masonry and concrete surfaces required to be painted shall be coated with paints listed in the Painting Schedule, or an approved equal.

PART FOUR - SPECIAL PROVISIONS

4.01 MASONRY BLOCK

- A. Exposed colored (other than gray mix masonry) masonry block shall NOT be painted, however, a clear protective block sealer shall be applied to the exterior surface of all block exposed to the elements.

END OF SECTION