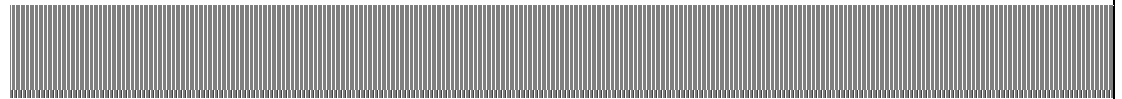

WATER TOWER PREQUALIFICATION PACKAGE

**Harbor at Hastings Site
1 River Street
Hastings-on-Hudson, New York**

December 2019



Prepared By:

**Louis Berger
Elmsford, New York**



TABLE OF CONTENTS

1. INTRODUCTION	1
2. GENERAL DESCRIPTION	1
2.1. Background.....	1
3. SITE CONDITIONS	2
3.1. Site Location	2
3.2. Remediation History	2
3.3. Previous Assessment Activities at Site	3
3.4. Water Tower Construction Details	3
4. PROPOSED WORK	4
4.1. Planning Documents.....	4

FIGURES

Figure 1 – Water Tower Photograph

Figure 2 – Selected Storage Location

ATTACHMENTS

Attachment A – Contractor Qualifications Statement

Attachment B – 2016 Consent Decree

Attachment C – Structural Survey

Attachment D – Lead-Based Paint Survey

Attachment E – Water Tower As-Builts

1. INTRODUCTION

The Village of Hastings-on-Hudson, New York (the Village) is requesting qualification packages from experienced demolition and restoration contractors for the disassembly of a historical water tower in the Village, lead paint abatement of the tower components, subsequent sealing of exposed surfaces, and transport of the Water Tower components to a storage site within the Village. This work will be performed under a Design-Build contract.

This document was prepared to outline the proposed work that will be required to disassemble the tower, perform lead paint abatement and subsequently seal the exposed surfaces, and store the Water Tower, which is currently located at the Harbor at Hastings Site (formerly Anaconda Wire and Cable). The plan for reinstallation of the Water Tower will be addressed at a later date, once environmental remediation of the Harbor at Hastings Site (hereafter referred to as the Site) has been completed; the reinstallation is independent of the proposed work.

Interested contractors should complete the attached form (Attachment A) detailing their qualifications and experience for performing this work along with organizational, financial, and health and safety information on their firm. It is anticipated that interviews will be conducted with firms submitting qualifications and that three to five firms will be selected to bid on the job. Work will be performed in the spring of 2020.

Do not submit any cost estimates for the work with the prequalification package. Submittal of cost estimates at this time will be grounds for rejection of the prequalification package.

2. GENERAL DESCRIPTION

2.1. Background

The Water Tower (Figure 1) proposed for removal and preservation was constructed circa 1916 for the National Conduit & Cable Company's operations at 1 River Street in Hastings-on-Hudson, New York.

In 1919, Anaconda Copper and Mining Company, a predecessor to Anaconda Wire and Cable Company (AWC), purchased part of the property and eventually merged into AWC. During World War II, AWC used polychlorinated biphenyl (PCB) mixtures to manufacture electric cables for shipboard use under a U.S. Navy contract. The Site went through several owners until 1998, when ARCO Environmental Remediation Limited (ARCO), an affiliate of Atlantic Richfield (AR), purchased the Site. Since 1998, AR and ARCO have facilitated environmental investigations and remediation efforts at the Site. The Site is currently being remediated by British Petroleum and its subsidiary ARCO.

The Water Tower is no longer in use; however, the Village wishes it to be preserved as a landmark. The Water Tower must to be disassembled and removed from its current site to accommodate remedial

construction activities at the Site, including contaminated soil excavation. After removal, the Water Tower components will be stored for future reassembly at a nearby, off-Site location in the Village.

3. SITE CONDITIONS

3.1. Site Location

The Water Tower is currently located on the Harbor at Hastings Site at 1 River Street, Village of Hastings-on-Hudson, New York. The Water Tower is located adjacent to the site shoreline and the Hudson River

3.2. Remediation History

The Site is designated as NY State Superfund Site #360022. The primary contaminants of concern at the Site are PCBs, including PCB containing dense non-aqueous phase liquid (NAPL) and PCB light NAPL in the groundwater, and PCBs and metals (primarily copper, lead and zinc) in the soil.

In November 1995, a Consent Order was signed by ARCO and New York State Department of Environmental Conservation (NYSDEC) to investigate the environmental conditions at the Site. In December 2003, ARCO, the Village, and the Hudson Riverkeeper Fund, Inc. entered into a judicial consent decree (CD) that provided, *inter alia*, for the remediation of PCB and other contamination detected at the Site. NYSDEC issued a Record of Decision (ROD) for the Site in March 2004. In March 2012, NYSDEC issued a ROD amendment for the Site (Amended ROD) and a separate ROD for the off-shore portion of the Site.

An Order on Consent between NYSDEC and ARCO was signed in November 2013 detailing ARCO's remedial obligations at the Site and incorporating the Amended ROD. The Consent Order was modified in 2016 to include provisions for preservation of the Water Tower. The CD initially executed in 2003 was modified by the Village, ARCO, and Riverkeeper to address the details of the 2012 Amended ROD and include provisions for preservation of the Water Tower. The Modification to the 2003 CD was signed by the parties in 2016 and "so ordered" and filed by the U.S. District Court in January 2017. The CD is included as Attachment B.

Since the Amended ROD was issued and modified CD was signed, ARCO has demolished the structures on the Site (with the exception of the Water Tower) to prepare for soil remediation. In addition, groundwater wells have been installed to facilitate recovery of PCB-containing NAPL waste from beneath the northwest corner of the Site. The majority of the Site is paved; however, there are areas of exposed soil near the Water Tower. Personnel conducting activities at the Site are required to maintain OSHA Hazardous Waste Operations (HAZWOPER) training and conduct their activities in accordance with a Site Safety and Health Plan and ARCO's safety and health procedures.

3.3. Previous Assessment Activities at Site

In accordance with the Water Tower preservation provisions of the 2016 CD, Louis Berger conducted an inspection of the Water Tower to determine if dismantling was feasible and to assess whether lead paint was present. The following investigations were conducted.

Structural Inspection: In November 2016, Louis Berger conducted a visual survey and where possible, hands-on inspection of the Water Tower's structural members and connections. An ultrasonic measuring device and basic caliper were used to determine the thickness of the tank's steel plates and other components for possible section loss due to corrosion. The Water Tower was found to be in overall good condition with mostly minor corrosion throughout and only minor loss of material on one of the posts and the tank. There were no observed missing rivets and pitting of material, due to corrosion, was not found. The inspection concluded that the Water Tower could withstand being dismantled, refurbished, and reinstalled. For the results and details of the structural survey, please refer to Attachment C.

Lead-Based Paint Survey: A limited environmental lead-based paint survey of the Water Tower was conducted in April 2017 by Louis Berger. The survey consisted of X-Ray Fluorescence analysis of suspect lead-based paint in areas that could be accessed without a personnel lift. The results showed that six of the seven painted surfaces that were investigated contained lead-based paint, and thus it is assumed that all paint on the Water Tower structure is lead-based paint. From the survey results, it was concluded that lead paint abatement would be required on the tower components prior to storage. For complete results and details see Attachment D.

3.4. Water Tower Construction Details

According to the available as-built plans (Attachment E), the Water Tower support structure consists of four riveted steel, laced posts/columns, each made up of two 12-inch channels with a 14-inch cover plate on the inside face of the post, and cross bars (lacing) on the outside face. The posts are constructed from three sections with splices and lateral support struts spaced at approximately 30-foot intervals to extend up about 90 feet in height. Lateral tower stiffness is provided at each bay of the three post sections with 1 ½-inch square steel cross rods. The Water Tower is anchored to a concrete foundation with one 2.5-inch diameter by 6-foot long anchor bolt at each post anchor.

The 75,000-gallon capacity tank, supported by the four posts, is made up of 5 steel welded cylindrical plates, with a total diameter of 22 feet, a height of 19 feet 4 inches and a conical shaped steel roof. The bottom two plates and top two plates of the tank have a thickness of ¼-inch and the middle plate has a thickness of 5/16-inch. A standard 24-inch diameter catwalk surrounds the lower end of the tank. The supply lines and control lines have been removed.

The available as-built plans indicate that the tower received a shop coat paint of standard Black Graphite and 3 field coats of standard Green Graphite.

The total weight of the Water Tower (when empty) is estimated at approximately 50,000 pounds.

4. PROPOSED WORK

Based on the initial survey, it is anticipated that the preservation and restoration of the Water Tower will involve multiple steps.

Disassembly of Tower:

It is understood that the Water Tower has been painted with lead-based paint and that the paint system is deteriorating. Lead paint abatement will initially be performed at limited locations where the steel plate will be torch cut or rivets must be removed, prior to disconnection.

Following spot abatement of lead paint to facilitate disassembly of the Water Tower, the structure will be disassembled, and the components staged on-Site in preparation for lead paint abatement.

Following tower disassembly and removal, foundation removal will be conducted by ARCO and its remedial construction contractors as a component of soil remediation following the disassembly of the tower structure. Foundation removal is not part of this work.

Lead Paint Abatement

ARCO has agreed to allow the Village's Water Tower disassembling contractor(s) to conduct lead paint abatement of the disassembled tower components at the Harbor at Hastings site. To minimize potential dispersion of contaminants, the Contractor shall be required to install a temporary tented containment area on one of the existing concrete pads at the Site for the lead paint abatement (alternative control measures subject to the Village and property owner approval may be acceptable). Sampling will be conducted before and after abatement to verify that abatement procedures have not impacted site conditions. Following abatement, exposed surfaces shall be sealed with a water proof metal sealer. After all work has been completed, the lead paint abatement work area at the Site shall be decontaminated.

Air monitoring shall be performed during all lead paint abatement activities.

Transport and Storage of Water Tower

The Water Tower and its components will be hauled approximately half a mile north on River Street to the Village's selected long-term storage location at the Tower Ridge Yacht Club and Marina. Figure 2 shows the location of the Village's selected storage site. ARCO has agreed to allow the Contractor to temporarily remove a section of the Site's fence line that borders the adjacent roadway if necessary to facilitate removal of the Water Tower components from the Site by avoiding overhead utility crossings. The Contractor shall be responsible for verifying that the structural integrity of the transportation route and storage location is suitable for the project.

4.1. Planning Documents

In addition to the activities outlined above, the selected Contractor shall be responsible for the preparation of the following items:

- Work Plan
- Health and Safety Plan
- Community Air Monitoring Plan (CAMP) for Lead



- Stormwater Management
- Evaluation of existing Utilities and Clearance Along the Transportation Route.

Figures



Water Tower Photograph

Figure 1



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

 Water Tower Storage Area

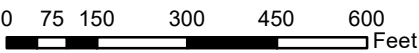


Figure 2

GYWXX Storage Location

Water Tower Prequalification Package

Attachments

Attachment A – Contractor Qualifications Statement

CONTRACTOR QUALIFICATIONS STATEMENT

SUBMITTED TO:

Aliza Gold
565 Taxter Road
Elmsford, NY 10523
aliza.gold@wsp.com.

On behalf of:

Mary Beth Murphy
Village Manager
Village of Hastings-on-Hudson

SUBMITTED FOR:

Water Tower Disassembly
Harbor at Hastings
1 River Street
Hastings-on-Hudson, New York 10706

SUBMITTED BY:

Name of Organization: _____
(Print or Type Name of Contractor)

Name of Individual: _____

Title: _____

Business Address: _____

Telephone No.: _____

The undersigned certifies under oath the truth and correctness of all statements and of all answers to questions made hereinafter.

(Note: Attach additional sheets as required.)

1. Contractor's General Business Information

Check if:

☐ Corporation ☐ Partnership ☐ Joint Venture ☐ Sole Proprietorship

If Corporation:

A. Date and State of Incorporation:

B. List of Executive Officers:

NAME

TITLE

If Partnership:

A. Date and State of Incorporation: _____

B. List of Executive Officers:

NAME

TITLE

C. Type of Partnership:

☐ General ☐ Publicly Traded

☐ Limited ☐ Other (described): _____

If Joint Venture:

A. Date and State of Incorporation: : _____

B. Name, Address and Form of Organization of Joint Venture Partners: (Indicate managing partner by an asterisk *):

If Sole Proprietorship:

C. Date and State of Incorporation: _____

D. Name and Address of Owner or Owners:

2. If your organizational structure has changed within the past five years, provide data as listed above in Item 1 for your previous organization.

3. How many years has your organization been in business as a demolition and restoration contractor? _____

4. Provide name of insurance company and verification that the Contracting Firm can, at a minimum, maintain the following insurance coverage:

A. Workers' Compensation and Employer's Liability - statutory limits for state of New York or the following, whichever is higher

- ☐ \$2,000,000 for each accident
- ☐ \$2,000,000 for each employee for disease
- ☐ \$10,000,000 for disease aggregate
- ☐ US Longshore and Harbor Worker's Compensation Act endorsement required
- ☐ Maritime Cover endorsement required for maritime workers or vessels

B. Commercial General Liability

☐ \$5,000,000 each occurrence

C. Commercial Auto Liability

☐ \$1,000,000 each accident

D. Environmental Liability - for duration of project

☐ Site Pollution Liability - \$5,000,000 for third party claims

☐ Pollution Liability - \$5,000,000 for each occurrence

☐ Professional Liability (errors and omissions) – \$5,000,000

E. Protection and Indemnity for vessels larger than 51 feet

☐ \$5,000,000 or declared value of vessel, whichever is higher

F. Insurance company shall maintain a minimum rating of A-VII by the A.M. Best Company or A by Standard & Poor's.

Insurance Company: _____

Insurance Company Agent: _____

Insurance Company Contact Information: _____

Insurance Agency Rating: _____

Note: Actual insurance requirements will be established in the contract and may vary from the above limits or policy requirements.

5. What percentage of your annual revenue comes from demolition and restoration activities? _____

If less than 25% of annual revenue, please identify other major service areas.

6. Do you plan to subcontract any part of this project? If so, on Schedule A, attached, list name of each firm, role(s) on project, major area of expertise of firm, estimated percentage of contract billings. Provide name, address and telephone number of 3 to 5 references for each subcontractor supplying more than 10 percent of contract billings. References should be for work similar to that the subcontractor will be supplying on the project.
7. Has any construction contract to which you have been a party been terminated by the owner; have you ever terminated work on a project prior to its completion for any reason; has any surety which issued a performance bond on your behalf ever completed the work in its own name or financed such completion on your behalf; has any surety expended any monies in connection with a contract for which they furnished a bond on your behalf? If the answer to any portion of this question is "yes", on Schedule B, attached, furnish details of all such occurrences including name of owner, architect or engineer, and surety, and name and date of project.
8. Has any officer or partner of your organization ever been an officer or partner of another organization that had any construction contract terminated by the owner; terminated work on a project prior to its completion for any reason; had any surety which issued a performance bond complete the work in its own name or financed such completion; or had any surety expend any monies in connection with a contract for which they furnished a bond? If the answer to any portion of this question is "yes", on Schedule B, attached, furnish details of all such occurrences including name of owner, architect or engineer, and surety, and name and date of project.
9. In the last five years, has your organization, or any predecessor organization, failed to substantially complete a project in a timely manner? If the answer to this question is "yes", on Schedule C, attached, furnish details of all such occurrences including name of owner, architect or engineer, name and date of project, proposed and actual completion date and reason for delay. Provide name, address and telephone number of a reference for each project listed.
10. On Schedule D, attached, list name, location and description of project; owner, architect or engineer; contract price; percent complete; and scheduled completion of the major construction projects your organization has in progress on this date. Provide name, address and telephone number of a reference for each project listed.
11. On Schedule E, attached, list name, location and description of project; owner, architect or engineer; contract price; date of completion; and percent of work with your own forces for major projects of the same general nature as this project which your organization has completed in the past five years, preferably remediation projects involving demolition, lead-paint abatement and

other restoration work at hazardous waste sites. Provide name, address and telephone number of a reference for each project listed.

12. On Schedule F, attached, list name and construction experience of the principal individuals of your organization directly involved in similar construction operations.

13. List the states and categories of construction in which your organization is legally qualified to do business.

14. Provide the following for your surety:

Surety Company: _____

Agent: _____

A. Address: _____

B. Telephone No.: _____

What is your approximate total bonding capacity?

- ☐ \$500,000 to \$2,000,000
- ☐ \$2,000,000 to \$5,000,000
- ☐ \$5,000,000 to 10,000,000
- ☐ \$10,000,000 or more

15. Provide the following with respect to an accredited banking institution familiar with your organization:

Name of Bank: _____

Address: _____

Account Manager: _____

Telephone No: _____

16. Provide the name, address and telephone number of an individual who represents a major equipment/material supplier whom the Owner may contact for a financial reference:

Name of Bank: _____

Address: _____

Account Manager: _____

Telephone No: _____

17. Provide the following information for the prime contractor and each of the major subcontractors:

Incident rates/OSHA 300 logs: _____

Experience Modification Rating: _____

18. Attach a financial statement, prepared on an accrual basis, in a form which clearly indicates Contractor's assets, liabilities and net worth:

Date of financial statement: _____

Name of firm preparing statement: _____

Dun & Bradstreet No. of the prime contractor and each major subcontractors on the project

19. Dated at _____ this _____ day of _____, 20____.

Contractor: _____

(Print or Type Name of Contractor)

By: _____

Title: _____

Schedules A, B, C, D, E, and F

(Seal, if corporation)

----- (Affidavit for Individual) -----

_____ being duly sworn, deposes and says that: a) the financial statement, taken from his/her books, is a true and accurate statement of his/her financial condition as of the date thereof, and b) all of the foregoing qualification information is true, complete, and accurate.

----- (Affidavit for Partnership) -----

_____ being duly sworn, deposes and says that: a) he/she is a member of the partnership of _____; b) he/she is familiar with the books of said partnership showing its financial condition; c) the financial statement, taken from the books of said partnership, is a true and accurate statement of the financial condition of the partnership as of the date thereof; and d) all of the foregoing qualification information is true, complete, and accurate.

----- (Affidavit for Corporation) -----

_____ being duly sworn, deposes and says that: a) he/she is _____ (title) of _____; (Full name of Corporation); b) he/she is familiar with the books of said corporation showing its financial condition; c) the financial statement, taken from the books of said corporation, is a true and accurate statement of the financial condition of said corporation as of the date thereof, and d) that all of the foregoing qualification information is true, complete, and accurate.

----- (Acknowledgment) -----

_____ being duly sworn, deposes and says that he/she is _____ (title) of _____ (Name of Contractor); that he/she is duly authorized to make the foregoing affidavit and that he/she makes it on behalf of () himself/herself; () said partnership; () said corporation.

Sworn to before me this _____ day of _____, 20____, in the Country of _____, State of _____.

(Notary Public)

My commission expires _____.

(Seal)

END OF CONTRACTOR QUALIFICATIONS STATEMENT

SCHEDULE A
MAJOR SUBCONTRACTORS

IF NONE, CHECK HERE: ☐

Name of Owner	Role on Project	Major Area of Experience	Estimated Percentage of Contract Billings	Reference/Contact Include Name, Address and Telephone

ADD ADDITIONAL PAGES AS NECESSARY

SCHEDULE B
TERMINATION

IF NONE, CHECK HERE: ☐

Name, Location, Date and Description of Project	Owner	Architect or Engineer	Surety	Termination Party	Reason for Termination

ADD ADDITIONAL PAGES AS NECESSARY

SCHEDULE C
PROJECTS NOT COMPLETED ON TIME

IF NONE, CHECK HERE: ☐

Name, Location and Description of Project	Owner	Architect or Engineer	Proposed Date Completed	Actual Date Completed	Reason for Delay	Reference/Contact Include Address and Telephone

ADD ADDITIONAL PAGES AS NECESSARY

SCHEDULE D
PROJECTS IN PROGRESS

IF NONE, CHECK HERE: ☐

Name, Location and Description of Project	Owner	Architect or Engineer	Percent Complete	Scheduled Completion	Reference/Contact Include Address and Telephone

ADD ADDITIONAL PAGES AS NECESSARY

SCHEDULE E
PROJECTS COMPLETED

IF NONE, CHECK HERE: ☐

Name, Location and Description of Project	Owner	Architect or Engineer	Date Completed	Contract Price	Percent with Own Forces	Reference/Contact Include Address and Telephone

ADD ADDITIONAL PAGES AS NECESSARY

SCHEDULE F
PERSONNEL

IF NONE, CHECK HERE: ☐

Name	Position	Date Started with This Organization	Date Started in Construction	Prior Positions and Experience in Construction

ADD ADDITIONAL PAGES AS NECESSARY

Attachment B – 2016 Consent Decree

**UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF NEW YORK**

HUDSON RIVERKEEPER FUND, INC.,

Plaintiff, and

VILLAGE OF HASTINGS-ON-HUDSON

Plaintiff, Intervenor,

v.

ATLANTIC RICHFIELD COMPANY,

Defendant

USDC SDNY
DOCUMENT
ELECTRONICALLY FILED
DOC #:
DATE FILED: 1/26/17

CIVIL ACTION NO.
94-2741

MEMO ENFORCED

2016 MODIFICATION TO THE 2003 CONSENT DECREE

Whereas, Hudson Riverkeeper Fund, Inc., now known as Riverkeeper, Inc. ("Riverkeeper"), the Village of Hastings-On-Hudson (the "Village") and Atlantic Richfield Company ("AR") entered into a Consent Decree (the "2003 Consent Decree") that was duly entered by this Court on December 19, 2003 in the above captioned litigation.

Whereas, the 2003 Consent Decree resolved claims brought by Riverkeeper and the Village against AR under the Resource Conservation and Recovery Act ("RCRA"), 42 U.S.C. § 6972(a)(1)(B) seeking the remediation of approximately 28 acres of land located at 1 River Street, Hastings-On-Hudson, New York and on the bank of the Hudson River. The property is the former location of a wire and cable manufacturing plant operated by the Anaconda Wire & Cable Company, and the Anaconda Wire & Cable Company used polychlorinated biphenyls ("PCBs") in the manufacture of shipboard cable for the United States Navy during World War II;

Whereas, the 2003 Consent Decree required AR to conduct certain actions to remediate PCB contamination on the upland portion of the property (known as "Operable Unit 1") depending on the nature and extent of a remedy selected by the New York State Department of Environmental Conservation ("DEC") and also required AR to take certain other actions with respect to the redevelopment of the property;

Whereas, in 2004 DEC selected a remedy for the Site consistent with Alternative 3 under Section 5.4(c) of the 2003 Consent Decree and set forth that remedy in a March 18, 2004 Record of Decision for Operable Unit 1 ("OU-1 ROD"). Operable Unit 1 refers to the uplands portion of the Property;

Whereas, in 2005 AR entered into a Consent Order with DEC pursuant to which AR agreed to proceed with the design and implementation of the remedy set forth in the OU-1 ROD;

Whereas, from 2005 through 2007, AR conducted further field investigation and proceeded with the remedial design work required to fulfill its obligations under the 2003 Consent Decree and 2005 Consent Order. During the course of the performance of that work, it became apparent to AR, Riverkeeper, the Village, and DEC that the remedy for OU-1 would need to be integrated with a remedy for PCBs found in sediments in the Hudson River along the shoreline of the Site. Such sediments are referred to as "Operable Unit 2" or "OU-2";

Whereas, from 2007 through 2011, AR conducted extensive field investigations into the scope, nature, and distribution of PCBs and metals found in sediments in the vicinity of the Site and also conducted a modified feasibility study evaluating potential remedial options that addressed contaminated Hudson River sediments and integrated the sediment remedy with the upland remedy for the Site;

Whereas, in March 2012 DEC issued a Record of Decision for the Hudson River sediments in OU-2 ("OU-2 ROD") as well as a Record of Decision Amendment for Operable Unit 1 ("OU-1 ROD Amendment"). The OU-2 ROD and the 2012 OU-1 ROD Amendment provide for an integrated protective remedy for both the upland property and the Hudson River sediments;

Whereas, in 2013 AR entered into a Consent Order with DEC ("2013 DEC Consent Order") requiring AR to design and implement the integrated remedy for the Site as set forth in the OU-1 ROD, the OU-1 ROD Amendment, and the OU-2 ROD;

Whereas, the Parties wish to amend the 2003 Federal Consent Decree to allow AR to conduct an integrated remedy for the Site consistent with the OU-1 ROD, the OU-1 ROD Amendment, and the OU-2 ROD;

NOW THEREFORE, the Village, Riverkeeper, and Atlantic Richfield agree to enter into this Consent Decree, which supersedes and replaces the 2003 Consent Decree and sets forth the obligations of the Parties hereto.

ARTICLE I: JURISDICTION

1.1 This Court has personal jurisdiction over the subject matter and parties to this action pursuant to 28 U.S.C. §§ 1331 and 1345, and 42 U.S.C. §§ 6972, 7002, and 9613(b). The parties to this Consent Decree agree to be bound by the terms of this Consent Decree and agree not to contest its validity in any subsequent proceeding to implement or enforce its terms.

ARTICLE II: VENUE

2.1 Venue is proper in this district under 42 U.S.C. § 6972, 42 U.S.C. § 9613(b), and 28 U.S.C. §§ 1391 and 1395, as it is the judicial district in which the releases or threatened releases occurred.

ARTICLE III: DEFINITIONS

3.1 For the purposes of this 2015 Consent Decree, the following terms shall have the following meanings:

(a) **"Acceptable Fill"** shall mean (i) soil or topsoil that meets DEC's restricted residential use soil cleanup objectives as set forth in 6 NYCRR Part 375-6.4(b)(2) and 375-6.7(d) and DEC Technical Guidance DER-10; (ii) uncontaminated gravel, stone, or other armoring material; (iii) uncontaminated construction and demolition debris from the Site consisting of recognizable concrete and concrete products, asphalt pavement, brick, glass, and/or rock or (iv) Operable Unit 1 soils or Operable Unit 2 sediments that may be solidified or stabilized and either meet DEC's restricted residential use soil cleanup objectives set forth in 6 NYCRR Part 375-6.4(b)(2) and 375-6.7(d) and DER-10 or are approved by DEC pursuant to a beneficial use determination pursuant to 6 NYCRR Part 360 and applicable DEC policies. With respect to Section 3.1(a)(ii) and (iii) above, the term "uncontaminated" shall mean material that is not mixed or commingled with other solid waste at the point of generation, processing or disposal, and that is not contaminated with spills of a petroleum product, hazardous waste, hazardous substance in excess of DEC's restricted residential use soil cleanup objectives as set forth in 6 NYCRR Part 375-6.4(b)(2) and 375-6.7(d) DEC Technical Guidance DER-10. Contamination from spills of a petroleum product does not include asphalt or concrete pavement that has come into contact with petroleum products through normal vehicle use of the roadway.

(b) **"Approval Period"** shall have the meaning set forth in Section 6.4(b) of this Decree.

(c) **"AR" or "the Company"** shall mean The Atlantic Richfield Company and its parents, subsidiaries, successors, assigns, and affiliates, including, but not limited to, ARCO Environmental Remediation, LLP and BP America, Inc.

(d) **"Clean Soils"** shall mean soil or topsoil that meets the definition of Acceptable Fill set forth in Section 3.1(a)(i) above.

(e) **"The Court"** shall mean the United States District Court for the Southern District of New York.

(f) **"Developable Portion of the Site"** shall mean the Site excluding (a) an area to become sloped shoreline and/or stable transition (including a vegetated riparian buffer area) extending in an easterly direction inland from the mean low tide water line of the Site to the first Site redevelopment finished grade contour line at +11 feet above Local Mean Sea Level ("LMSL"), as determined in an approved Remedial Design, with such contour line estimated to be approximately 80 to 100 feet from the mean low water mark (but not to exceed 110 feet from the mean low water mark) (and approximately 60 to 70 feet from the mean low water mark along the Northern Boat Slip and Southern Boat Slip), and running from the southern end of the Northwest Corner bulkhead to the Southern property boundary (b) the Northwest Corner, including the extension thereof

into the Hudson River; and (c) other areas of the Site where Site contours may require sloping or grading to create stable slopes matching the elevations of adjacent properties including the Metro North railroad.

(g) **"Effective Date"** shall mean the date on which the Court enters this Decree.

(h) **"EPA"** shall mean the United States Environmental Protection Agency.

(i) **"Hastings/Hudson River Environmental Trust Fund"** shall have the meaning set forth in Section 6.1 of this Decree.

(j) **"The Litigation"** shall mean *Hudson Riverkeeper Fund, Inc. v. Atlantic Richfield Company*, 94 Civ. 2741 (WCC) filed in the United States District Court for the Southern District of New York.

(k) **"Northern Boat Slip"** shall mean that area of the Site adjoining the cove on the northern portion of the Site.

(l) **"Northwest Corner"** shall mean that area of the Site located in the extreme northwestern corner of the Site and having an area of approximately 31,250 square feet. The Northwest Corner encompasses all portions of the Site between those points marked with the numbers 10-18 on Exhibit A and delineated by the corresponding GPS coordinates.

(m) **"Northern Remainder"** shall mean that portion of the Site located north of a line bisecting the Site and beginning at the shoreline from a point 350 feet south of the Shoreline Area and running perpendicular to the shoreline until it intersects the eastern boundary of the Site, except that the Northern Remainder shall not include the Northwest Corner or Shoreline Area. The Northern Remainder is depicted on Exhibit A.

(n) **"OU-1"** shall mean Operable Unit 1, i.e., the term used by DEC to describe the Site itself, and shall not include the Hudson River, the Hudson River bottom, or Hudson River sediments.

(o) **"OU-2"** shall mean Operable Unit 2, i.e., the term used by DEC to describe the Hudson River, the Hudson River bottom and/or Hudson River sediments.

(p) **"Parties"** shall mean, collectively, AR, Riverkeeper and the Village. AR, Riverkeeper and the Village each may individually be referred to sometimes herein as a Party.

(q) **"PCBs"** shall mean those chemicals known as polychlorinated biphenyls.

(r) **"Risk Contract"** shall have the meaning assigned in Section 7.4 of this Order.

(s) **"Remedial Design"** shall mean the Remedial Design document submitted to DEC for approval upon completion of the Remedial Design process as set forth in the 2013 DEC Consent Order.

(t) **"Riverkeeper"** shall mean Plaintiff Hudson Riverkeeper Fund, Inc. now known as Riverkeeper, Inc.

(u) **"Shoreline Area"** shall mean that area of the Site circumscribed by a line that can be described as follows: (i) starting from the intersection of the shoreline and the southwestern-most point in Northwest Corner and running generally south parallel to the shoreline for 300 feet; (ii) then running perpendicular to the shoreline for 50 feet, (iii) then running 300 feet parallel to the shoreline in a generally northern direction but 50 feet inland from the shoreline, and (iv) finally running 50 feet perpendicular to the shoreline until it meets the southwestern most point in Northwest Corner. The Shoreline Area has an area of approximately 15,000 square feet and is depicted on Exhibit A.

(v) **"Site"** shall mean that property above the mean low tide line currently owned by AR, consisting of approximately 28 acres of land located on the banks of the Hudson River at 1 River Street in Hastings-on-Hudson, New York. For the purposes of this Consent Decree, the Hudson River, the bottom of the Hudson River, and Hudson River sediments shall not be part of the Site.

(w) **"Sloped Shoreline"** shall mean an area to become sloped shoreline and/or stable transition (including estuarine plantings and other vegetation appropriate for habitat) extending in an easterly direction inland from the mean low tide water mark of the Site to the first Site finished redevelopment grade contour line at +11 feet above LMSL as determined in an approved Remedial Design and/or redevelopment plan, with such contour line estimated to be approximately 80 to 100 feet from the mean low tide water mark (but not to exceed 110 feet from the mean low water mark) (and approximately 60 to 70 feet from the mean low tide water mark along the Northern Boat Slip and Southern Boat Slip), and running from the southern end of the Northwest Corner bulkhead to the southern property boundary. The planting plans for the Sloped Shoreline and vegetated buffer shall be included in the draft Remedial Design and final Remedial Design.

(x) **"Southern Boat Slip"** shall mean that area of the Site adjoining the cove on the southern portion of the Site.

(y) **"Southern Portion"** shall mean those portions of the Site excluding the Northwest Corner, the Shoreline Area, and the Northern Remainder. The Southern Portion is depicted on Exhibit A.

(z) **"Village"** shall mean the Plaintiff-Intervenor the Village of Hastings-on-Hudson.

(aa) **"Village Trust Fund"** shall have the meaning set forth in Section 8.1 of this Decree.

(bb) **Walkway**" shall mean a jogging path, promenade, trail or comparable amenity.

ARTICLE IV: SITE REMEDY

4.1 Site Remedy.

(a) Subject to the terms and conditions set forth in this Consent Decree (including but not limited to, Section 4.9), AR agrees to cause environmental remediation to be performed at the Site in accordance with the OU-1 ROD as amended by the OU-1 ROD Amendment issued by DEC. The Parties agree that the manner and method of achieving the environmental remediation, including, but not limited to, the engineering design and implementation of the excavation, bulkhead and/or Sloped Shoreline, water treatment system, hydraulic controls, or support, restraining, cover, or control systems shall, unless otherwise provided herein, be left to AR's discretion, provided that the results of AR's actions meet the requirements of the OU-1 ROD as amended by the OU-1 ROD Amendment and applicable terms and conditions of this Consent Decree, and further provided that the Village and the Riverkeeper shall be afforded a reasonable opportunity to review and comment on the draft Remedial Design, including plans, design drawings and specifications contained therein, the draft Site Management Plan, the draft Final Engineering Report, and any other work plans or supplemental work plans submitted to DEC under the 2013 DEC Consent Order, and AR shall give consideration to any such comments. In exercising that discretion, AR shall design the remedy in accordance with sound engineering practices and the standards of care applicable to environmental remedial activities and, in so doing, may consider cost effectiveness of remedial activities, regulatory criteria that would be used by EPA or DEC to evaluate the implementation of any remedy, and consistency of design and approach with concurrent remedial obligations imposed on AR by DEC, EPA, or other governmental or regulatory agencies (including the ability to obtain all necessary permits, variances, or other governmental authorizations).

(b) In the event AR seeks a beneficial use determination from DEC pursuant to 6 NYCRR Part 360 with regard to the use of material as backfill (including but not limited to dredged soils or sediments), AR shall provide the Village a reasonable opportunity to review and comment on such request, including but not limited to comments to DEC with respect to such request. The Village shall be considered to be an interested party with respect to such a request.

(c) The Parties recognize and agree that the demolition of Building 52 on the site would effectuate remediation of soils contaminated with PCBs and other hazardous substances underneath and in the immediate vicinity of the building with minimum delay and potential exposure of the public to such contaminants. AR shall submit an application for the demolition of Building 52 to the Village for timely review and decision. The Village's failure to approve demolition of Building 52 is recognized by the Parties as a cause for renegotiation of this Consent Decree.

4.2 Consistency with Other Regulatory Obligations. The Parties agree that any remedy performed pursuant to this Article shall be performed in accordance with all applicable laws, statutes, ordinances, regulations, and permitting obligations and that AR shall expeditiously seek

to obtain all required governmental permits or authorizations to proceed with the activities described in this Article IV. In the event that any governmental agency refuses to authorize such actions, the Parties agree to invoke the force majeure provisions of Article X.

4.3 Excavation of Contaminated Soils in Northern Remainder and the Southern Portion. AR agrees that it shall excavate soils and fill material in the Northern Remainder and the Southern Portion in accordance with the criteria established for excavation in such areas in the OU-1 ROD as amended by the OU-1 ROD Amendment.

4.4 Excavation of Contaminated Soils in the Northwest Corner and the Shoreline Area. AR agrees that it shall excavate soils and fill material in the Northwest Corner and the Shoreline Area in accordance with the criteria established for excavation in such areas in the OU-1 ROD as amended by the OU-1 ROD Amendment.

4.5 Disposal of Excavated Soil and Fill. AR shall, as appropriate, treat and dispose of any soils, fill materials, water, wastewater, or other wastes generated pursuant to activities conducted under Sections 4.3 and 4.4. Any such treatment and disposal shall comply with all applicable laws and regulations, and any such disposal shall occur at an appropriate off-site disposal facility in accordance with applicable laws and regulation. AR shall use all reasonable efforts to maximize the use of barges and rail to transport material excavated from the Site and to bring equipment and material to the Site (e.g., for backfill) in effectuating the remediation, as well as to transport any sediment excavated from the Hudson River pursuant to the OU-2 ROD that are placed on the Site and not used as backfill in implementing the OU-1 ROD.

4.6 Installation of a Bulkhead and Sloped Shoreline.

(a) Consistent with the OU-1 ROD Amendment, AR shall install a new bulkhead around the Northwest Corner. The bulkhead installed pursuant to this Section 4.6 shall consist of steel sheet pile or equivalent with a design life as approved by DEC, and the bulkhead shall be installed such that a future dock or pier of suitable design and construction could be constructed by a developer, owner, or other party out to water depths greater than 15 feet off the northwest corner and connected to the Northwest Corner through a gangway, floating walkway, or other similar structure without jeopardizing the structural integrity of the Northwest Corner bulkhead or the integrity of the site remedy. The shoreline along the Shoreline Area, Northern Remainder and Southern Portion of the Site may consist of either a steel sheet pile bulkhead or a sloped natural shoreline. The Sloped Shoreline shall be designed to include appropriate grading and armoring to protect against erosion. AR shall also construct the riparian vegetated buffer and design the Sloped Shoreline such that an additional vegetative buffer could be further installed in the vicinity of the Sloped Shoreline/Developable Area interface, with the precise location of any such vegetative buffer to be determined in the Remedial Design. AR shall initially seed any such area of additional vegetation with grass.

(b) The Village has received a grant from DEC for waterfront planning. Consistent with the OU-1 ROD, the DEC-approved schedule for design and implementation of the OU-1 ROD, and the long term protection of the remedial actions implemented pursuant to the OU-1 ROD, AR and the Village shall cooperate and coordinate regarding the design of the Sloped Shoreline

to provide reasonable flexibility in design elements to accommodate potential redevelopment modifications that may correspond to reasonable future waterfront uses, including but not limited to the location of waterfront uses, the location of the Walkway, and the steepness of the slope.

(c) A portion of the Sloped Shoreline area shall be designed for use as a Walkway and shall be graded such that the grade is substantially flat. The Walkway location and grade elevations shall be included in the draft and final Remedial Design and shall be subject to Village approval, not to be unreasonably withheld. Any such area shall also be designed to be consistent with the designation of Open Space pursuant to Section 7.1(f)(ii).

(d) AR shall incorporate a proposed planting plan for the Sloped Shoreline (including the vegetated riparian buffer therein) in the draft and final Remedial Design, which shall be subject to the Village's review and comment. AR and the Village shall cooperate in good faith to reach agreement on the planting plan.

(e) AR shall design the Sloped Shoreline along the Northern Boat Slip to include a concrete ramp or other similar boat launch ("Boat Launch") suitable for launching non-motorized light recreational watercraft. The location of the Boat Launch within the Northern Boat Slip shall be subject to Village approval, not to be unreasonably withheld, and AR and the Village shall cooperate in good faith to reach agreement on the exact location of the Boat Launch. Consistent with the establishment of other institutional controls in Section 7.1, AR shall establish a right of public access to the Boat Launch that runs with the land, and such right may be effectuated through the adoption of an appropriate easement, access agreement, designation of open space, designation of a public street, or other such land use control.

(e) The parties recognize that a future developer, owner, or other party may desire to raise the elevation of a reasonable area within the Developable Portion of the Site to an elevation greater than +11 above LMSL. AR shall endeavor to design the Sloped Shoreline taking reasonable account of the possibility that some of the Developable Portion of the Site (or of the base of buildings constructed on the Developable Portion of the Site) may subsequently be raised to an elevation up to +14 LMSL. In the design of the Sloped Shoreline, without materially increasing the costs of remediation, AR shall endeavor to avoid creating unnecessary obstacles to such future placement of fill.

4.7 Removal of Water Tower. AR's draft and final Remedial Design shall include plans for the demolition of the Water Tower in a safe and efficient manner to effectuate the remedy. Demolition shall proceed as follows:

(a) Within 90 days of the Effective Date of this modification to the Consent Decree, AR shall obtain and provide to the Village an independent third party estimate of the expected costs of demolition of the Water Tower ("Water Tower Demolition Costs").

(b) Within 90 days of the Effective Date, the Village may elect to conduct an inspection of the Water Tower for the purposes of providing an independent determination of whether the Water Tower's condition is such that it may reasonably be preserved. Any contractor retained by the Village for such inspection shall carry workers' compensation and employer's liability

insurance as well as commercial general liability insurance in amounts to be required by the Village and shall name AR as an additional insured on such insurance. If the Village determines that the Water Tower cannot reasonably be preserved or otherwise decides it does not wish to preserve the Water Tower, then the Village may direct AR to demolish the Water Tower.

(c) If the Village has not directed AR to demolish the Water Tower, at any time before 60 days prior to AR's submittal of the final Remedial Design to DEC for approval, the Village or any citizen's group may present to AR a plan for dismantling, storing, restoring, and reconstructing the Water Tower ("Water Tower Preservation Plan"), provided that such plan meets the following criteria:

(1) Any work conducted pursuant to the Water Tower Preservation Plan must be conducted by one or more qualified contractor(s) retained by the party or organization presenting the plan and such contractors must be:

- (i) experienced demolition and restoration contractors.
- (ii) trained, certified, and qualified to work on hazardous waste sites;
- (iii) capable of meeting AR's health and safety requirements; and
- (iv) fully insured and bonded at levels consistent with AR's insurance and bonding requirements for AR contractors attached as Exhibit B.

(2) The Water Tower Preservation Plan must include the contractor's health and safety plan for AR's review and approval, not to be unreasonably withheld.

(3) Both the group and the contractors being retained must release and indemnify AR for any claims related to the work being performed, provided that such indemnification shall be subordinate to any insurance coverage naming AR as an insured or additional insured.

(4) The work must be completed on a schedule that will not interfere with or delay AR's remediation schedule and work. At a minimum, dismantling and removal must be completed before the date set forth in the final Remedial Design for the initiation of on-site remediation construction, and restoration of the Water Tower shall not occur until AR's on-site remediation construction work is complete.

(5) The party presenting the Water Tower Preservation Plan must demonstrate that it has sufficient funds to pay for the work under the Plan, minus (a) any funds that have been contributed to the Trust Fund by the Village and/or that a third party has raised and has reasonably demonstrated are specifically earmarked and committed to the Water Tower refurbishment and reconstruction and (b) the matching funds that would be provided by AR pursuant to Section 8.3 of this Consent Decree.

(d) AR shall have the right to review and approve any Water Tower Preservation Plan submitted to it, with such approval not to be unreasonably withheld.

(e) If AR approves a Water Tower Preservation Plan, the party presenting the plan shall be responsible for completing the Water Tower dismantling, removal and preservation. AR shall contribute the Water Tower Demolition Costs to the party presenting the Plan. The party presenting the plan shall be required to demonstrate that it has raised all remaining funds to carry out the Water Tower Preservation Plan and shall be otherwise responsible for the full costs of the work.

(f) If AR reasonably rejects a Water Tower Preservation Plan or if no Water Tower Preservation Plan is timely presented to AR, AR shall move forward with timely demolition of the Water Tower, and the Village shall timely review any permit application for demolition of the Water Tower. The Village's failure to approve demolition of the Water Tower is recognized by the Parties as a cause for renegotiation of this Consent Decree.

4.8 **Construction of Hydraulic Controls.** AR shall install hydraulic controls in the Northwest Corner area consistent with the OU-1 ROD as amended by the OU-1 ROD Amendment.

4.9 **Contact Barrier and Cover.** AR shall place Acceptable Fill upon the Site as follows:

(a) Upon completion of excavation pursuant to the OU-1 ROD as amended by the OU-1 ROD Amendment;

(i) AR shall place Acceptable Fill in excavated areas to return such excavated areas to either their original grade or in areas that will become part of the Sloped Shoreline, the design grade for the Sloped Shoreline.

(ii) Acceptable Fill pursuant to Section 3.1(a)(iii) shall be placed only to return excavated areas to their original grade and the Acceptable Fill placed in areas that will become part of the Sloped Shoreline shall not include construction and demolition debris as defined in Section 3.1(a)(iii).

(iii) Acceptable Fill placed in the Developable Portion of the Site shall be sufficiently crushed, if necessary, so as (x) not to materially inhibit pilings or other structural support to be driven through it, (y) to inhibit subsidence that would materially impair reasonable future use, and (z) to support topsoil that would maintain vegetation placed on top of it. The Acceptable Fill should be placed in lifts and compacted such that the fill is substantially non-yielding so as not to materially create impairment to future commercial or residential use of the Developable Portion of the Site.

(iv) Acceptable Fill placed as part of the Sloped Shoreline shall consist of either Clean Soils or gravel, stone, or other armoring materials meeting the criteria of Section 3.1(a)(ii). Such Acceptable Fill placed along the shoreline shall be sized and placed to provide for slope stability, protect against erosion, and allow for habitat restoration to the extent practicable. Recognizing that armoring may need

to be removed and replaced to install piles or other structural support, such Acceptable Fill shall not materially inhibit pilings or other structural support to be installed through it. Such Acceptable Fill also shall not create significant subsidence conditions that would materially impair reasonable future uses consistent with protecting the integrity of the remedy such as light boathouses/boat storage buildings, a public seating area, or ancillary facilities such as a small café for the service of light foods, restrooms and similar services, recognizing that such structures may need to be placed on piles.

(v) AR shall place a permeable demarcation layer consistent with the approved Remedial Design which may consist of either a layer of synthetic material such as Geogrid, a demarcation snow fence, or another suitable material, over the Developable Portion of the Site after completing the placement of Acceptable Fill required in Section 4.9(a)(i).

(vi) In addition to the placement of Acceptable Fill to return the Site to grade as set forth in Section 4.9(a)(i), AR shall place two additional feet of Clean Soils across the entire Developable Portion of the Site, unless the placement would create significant mounding which is likely to inhibit proper drainage. The top two feet shall be Clean Soils unless the placement of other Acceptable Fill is approved in writing by the Village. The Village may request that AR place more than two feet of Clean Soils in certain locations, and less in other locations, (such that the overall volume of Clean Soils required by this subparagraph is unchanged), and AR shall comply with such request provided it is not in contravention of the OU-1 ROD as amended by the OU-1 Amended ROD or is approved by DEC. The Clean Soils should be graded to inhibit erosion and placed in lifts and compacted such that the Clean Soils are compacted and substantially non-yielding. Along the Sloped Shoreline and other such areas bordering adjacent properties where stable grades may need to be created and maintained, AR shall place sufficient Clean Fill to create such stable grades.

(vii) AR shall promptly seed, fertilize and maintain the Clean Soils Cover after its placement to reduce sedimentation and erosion, and make any repairs necessary to maintain the Clean Soils Cover, until additional Clean Soils have been placed on the Site pursuant to Section 4.9(b).

(b) Prior to or concurrent with Site redevelopment, AR shall cause Clean Soils to be placed across the Site in accordance with the following criteria:

(i) Clean Soils shall be placed in the Developable Portion of the Site in a volume sufficient to raise the elevation to a minimum of +11 feet above LMSL, subject to the restrictions and provisions of Section 4.9(a)(iii). In the event that any regulatory agency, including but not limited to DEC or the U.S. Environmental Protection Agency, does not allow the Developable Portion of the Site to be raised to a minimum of +11 feet above LMSL, the Parties recognize that such a determination is a cause for renegotiation of this Consent Decree.

(ii) The uppermost 6 inches of Clean Soils placed on the Developable Portion of the Site that will not be covered by roads, buildings, pavement, or other impermeable surfaces shall consist of a 6 inch layer of topsoil that will be seeded, fertilized and maintained to reduce sedimentation and erosion, and AR shall make any repairs necessary to maintain the Clean Soils Cover, subject to Section 7.2.

(iii) Both the volume and grading of Clean Soils placed in the Developable Portion may be adjusted to allow for contouring to provide for appropriate Site drainage, the placement of utilities, and the placement of roads, sidewalks, or other paved areas, subject to the approval of the Village.

(iv) Any trenches for new utilities or excavation of existing utilities shall be over-excavated to remove soils containing contaminants above the restricted residential use soil cleanup objectives as set forth in Part 375-6.7(d) on all sides to a width adequate for future maintenance without requiring future excavation of soils outside this clean corridor created for utilities.

(v) Any new utilities shall be surveyed to identify the location thereof, which survey shall include GPS coordinates for incorporation into a Village GPS system.

(c) AR may fulfill its obligation pursuant to Section 4.9(b) by:

(i) Placing Clean Soils on the Developable Portion of the Site in accordance with the requirements set forth in Section 4.9(b); or

(ii) Causing a redeveloper or other third party to place Clean Soils on the Developable Portion of the Site in accordance with the requirements set forth in Section 4.9(b) and in conjunction with a Village-approved and zoned redevelopment plan for the Site; or

(iii) Issuing a promissory note to a future redeveloper or, if there is no redeveloper, issuing a promissory note or other financial assurance reasonably acceptable to the Village, in an amount sufficient for the purchase and placement of Clean Soils on the Developable Portion of the Site in accordance with the requirements set forth in Section 4.9(b) and in accordance with a Village-approved and zoned redevelopment plan for the Site.

(d) To the extent that AR desires to use debris from the demolition of Building 52 (or from previously demolished structures on the Site for including in the Acceptable Fill, AR shall first segregate potentially hazardous materials contained in the debris (including, but not limited to, PCBs, asbestos and lead painted matter), conduct all appropriate characteristic testing of such materials, remove and dispose of any hazardous or otherwise unsuitable materials, and then crush any remaining suitable materials for reuse, consistent with Section 3.1(a) (iii).

4.10 **Remedial Monitoring:** AR shall pay the reasonable costs for the Village to retain independent consultants (which may include counsel) to conduct periodic inspections of the site, review the principal elements of remediation, have access to AR's consultants' data, conduct other consultative or advisory tasks during the course of the development of Work Plans and implementation of a remedy pursuant to this Consent Decree and/or the OU-1 ROD as amended by the OU-1 ROD Amendment, and provide advice and guidance to the Village with regard to AR's implementation of the remedy (collectively, "Monitoring"). For the purposes of this Section 4.10, the reasonable costs incurred by the Village for such Monitoring shall not exceed the sum of Three hundred thousand, dollars (\$300,000.00) through the first five years after approval by the Court of this modification to the Consent Decree. The Hastings Monitoring Trust Account (the "Monitoring Trust Account") established pursuant to Article V of the 2003 Consent Decree shall remain in full force and effect for purposes of this Article IV. No later than thirty days after approval by the Court of this modification to the Consent Decree, AR shall pay into the Hastings Monitoring Trust Account the sum of Three hundred thousand dollars (\$300,000.00). The Village may draw upon such account for Monitoring through and until the DEC has issued AR a written statement that the remedial construction on the Site required by the agency has been satisfactorily completed. At any time more than five years after court approval of the modification to this Consent Decree but prior to DEC's notice of completion remedial construction, if the Monitoring Trust balance is less than \$25,000 the Village and AR shall meet in good faith to negotiate one or more additional payments by AR into the Monitoring Trust sufficient to address the Village's reasonably estimated remaining Monitoring costs. If at the time of written notification of completion by DEC there are funds remaining in the Monitoring Trust that are in excess of the expenses incurred by the Village for Monitoring, any such excess funds shall be transferred to the Village Trust Fund established under Article VIII of this Consent Decree; AR and the Village shall cooperate in taking actions necessary to effectuate such transfer.

4.11 **Timing of Implementation of the Remedy.** AR shall implement the remedy set forth in the OU-1 ROD as amended by the OU-1 ROD Amendment in accordance with a schedule approved by DEC pursuant to the March 2013 Consent Order between DEC and AR. The Village or Riverkeeper may seek to have the Court enforce the terms of this Consent Decree and direct remediation pursuant to this Article IV if the design of the remedy is not proceeding on a reasonably expeditious schedule or if implementation of the remedy is not proceeding on a reasonably expeditious schedule after the Remedial Design is complete.

4.12 **Performance of AR's Obligations Under Article IV.** AR may hire, retain, or otherwise contract with contractors, subcontractors, remediation firms or companies, insurers, or other third party entities to perform its obligations under Article IV of this Consent Decree. Any such third party shall be provided a copy of this Consent Decree upon entering into such agreement with AR. Retention of any third party by AR shall not relieve AR of responsibility to perform its obligations hereunder.

4.13 **Payment of Riverkeeper Costs Associated With Consent Decree.** Within thirty (30) days of the entry of this Consent Decree, AR shall pay Riverkeeper \$100,000 and the Village

\$40,000 in reimbursement for attorney fees and expenses related to the modification of this Consent Decree.

ARTICLE V: DISMISSAL WITH PREJUDICE

5.1 **Dismissal With Prejudice of Riverkeeper and Village Claims.** All counts, claims, and allegations that the Riverkeeper and Village asserted, or could have asserted, against AR in the Litigation were dismissed with prejudice pursuant to the 2003 Consent Decree, subject only to the provisions of Section 6.2 of such Consent Decree, which shall remain in effect.

5.2 **Limited Jurisdiction Retained By Court.** The Court shall retain jurisdiction to enforce this Consent Decree and to resolve any disputes arising out of this Consent Decree, including, but not limited to, disputes regarding its interpretation, implementation, or the performance or breach of the Parties of their obligations hereunder. The Court may issue all relief necessary, including injunctive relief or specific performance, to give effect to the terms and conditions of this Consent Decree.

ARTICLE VI: ENVIRONMENTAL TRUST FUND

6.1 **Establishment of the Hastings/Hudson River Environmental Trust Fund.** The Hastings/Hudson River Environmental Trust Fund (the "Trust Fund") and Trust Agreement established pursuant to Article VIII of the 2003 Consent Decree shall remain in full force and effect for purposes of this Article VI of this Consent Decree. Pursuant to the 2003 Consent Decree, AR previously placed one million four hundred thousand dollars (\$1,400,000.00) into the Trust Fund. The Parties further agree that a federally chartered bank in the United States shall continue to serve as the Agent to administer the Trust Fund.

6.2 **Hastings/Hudson River Environmental Trust Fund Priorities.** Funds deposited in the Hastings/Hudson River Environmental Trust Fund shall be used for the following purposes in order of priority:

(a) To pay all administrative costs and fees incurred by the Trust Agent related to the Trust Agent's performance of its duties and obligations, or exercise of its rights, under the Trust Agreement.

(b) To fund environmental projects that meet the criteria set forth in Section 6.3 below.

Use of trust funds for actions taken pursuant to Sections 6.3(b) shall occur upon designation of such funds for release from the trust account pursuant to the procedures set forth in Section 6.5 of this Agreement.

6.3 **Hastings/Hudson River Environmental Trust Fund Project Criteria.** The use of Hastings/Hudson River Environmental Trust funds for environmental projects (including post-approval planning for such projects) pursuant to Section 6.2(b) above shall be limited to projects that meet the following criteria:

(a) Any such project must improve public access, use, or enjoyment of the Hudson River or improve the ecology of the Hudson River. Such projects might include, but are not limited to, acquisition and/or improvement of open space, creation of walking or hiking trails along the Hudson, construction of boat launches or ramps, creation of habitat for Hudson River Valley wildlife, the improvement or creation of wetlands, and/or the restoration of indigenous fauna along the Hudson River.

(b) In the use of escrow funds for environmental projects pursuant to Section 6.2(b), priority shall be given to projects meeting the criteria of Section 6.3(a):

(i) First to projects on the Site itself;

(ii) Second to projects within the Village of Hastings-on-Hudson.

(iii) If no such projects described in the preceding subsections are approved within the first two calendar years after the completion of the placement of Acceptable Fill pursuant to Section 4.9(a) of this Consent Decree, then third, projects located outside the Village of Hastings-on-Hudson but along the Hudson River between Yonkers and the Tappan Zee Bridge may be considered; and

(iv) If no such projects described in the preceding subsections are approved within the first three calendar years after the completion of the placement of Acceptable Fill pursuant to Section 4.9(a) of this Consent Decree, then finally, projects located along the Hudson River between the Tappan Zee Bridge and the Bear Mountain Bridge may be considered.

6.4 Designation of Projects for Funding. Either the Riverkeeper or the Village may propose a project for funding from the Hastings/Hudson River Environmental Trust Fund pursuant to this Article VI.

(a) To propose a project, the proposing Party shall send written notice of the project to all other Parties and to the Trust Agent. The notice shall outline the nature of the project, describe how the project meets the criteria of this Article VI, establish a request for the total amount of costs to be funded for the project, provide a schedule relating the amount of funds requested to the project's goals, activities, or results, identify those persons or entities who shall perform the project, and contain a timetable for project implementation.

(b) Proposals for funding of projects shall be submitted to all Parties no later than January 1 of each calendar year to be considered for funding in that calendar year. Beginning on January 1 of each calendar year, each Party shall have 60 days to review all proposed projects and to approve or object to each proposed project by sending written notice to the other Parties and the Trust Agent (the "Approval Period"). Any Party that does not respond to a proposal for funding within 60 days shall be deemed to have approved such proposal. Any proposal for funding submitted to all Parties after January 1 of a given calendar year shall be considered for funding beginning January 1 of the

following calendar year, unless the Parties agree in writing pursuant to the procedures set forth in Section 6.4(d) and (e) to fund the project on an earlier timeframe.

(c) Any such proposed project shall be approved, and the Trust Agent shall be instructed to release funds in accordance with the specifications and needs of the project, upon approval in writing from all Parties.

(d) Any project that has secured the approval of all three parties shall be deemed approved. Any project that has secured the approval of only one Party to this Agreement shall be deemed to have been rejected and shall not be eligible for funding.

(e) If any project secures the approval of two Parties to this Agreement, but not the approval of a third, the Objecting Party shall submit a written statement specifying the reasons for the objections to the Approving Parties within 30 days after the expiration of the Approval Period, to which the Approving Parties may choose to respond in writing, and the Parties shall have 90 days after the submission by the Objecting Party to negotiate, during which they may modify, revise, or change the project in order to reach agreement. If no agreement can be reached, the Parties agree that the project, together with any statements of support or objection shall be deemed approved but that the Objecting Party may appeal its approval to the Court within three months of the submission by the Objecting Party. To appeal successfully, the Objecting Party must prove to the Court that the project (or the elements of the project to which the Objecting Party objects) contravenes the Trust Fund project criteria or priorities established in Sections 6.2 and 6.3 above. Any decision by the Court shall be final and may not be appealed by the Parties.

ARTICLE VII: SITE USE AND MAINTENANCE

7.1 Deed Restrictions. Upon completion of the remediation or prior to sale of the Site, whichever is earlier, AR shall place restrictions on the deed to the Site that restrict future use of the Site as set forth in Sections 7.1(a) through 7.1(f).

(a) the height of any buildings remaining on the Site or to be constructed on the Site in the future shall not exceed 65 feet above the finished elevation of the Developable Portion of the Site (which height the Village may further restrict consistent with applicable law), and all new buildings shall be constructed with a minimum of a 100 foot setback from the current River low tide water line (and 60 feet from the eastern edges of the coves, unless a variance or other local land use approval from this setback has been obtained from the Village. Notwithstanding the foregoing, the restriction shall not prohibit community and/or commercial facilities, such as boathouses/boat storage building, public seating area and ancillary facilities (such as a café) for the service of light foods, restrooms and similar services, from being constructed within 60 feet of the coves and/or within the Northwest Corner. The Sloped Shoreline shall constitute part or all of the setback.

(b) New pilings, pillars, or other subterranean support structures shall not be installed (i) through the contact barrier or cover in the Northwest Corner, and this area shall be designated as open space pursuant to Section 7.1(f) below.

(c) Utilities shall be placed through Acceptable Fill, or in appropriately designed utility corridors intended to prevent future utility workers performing maintenance or repair in these specific areas from coming into contact with any remaining contaminated soil.

(d) Wells shall not be installed to make use of groundwater at the Site for drinking, irrigation, or domestic purposes. Wells may be installed for the purposes of monitoring or managing groundwater or other environmental conditions.

(e) Detached single family residential homes shall not be constructed on the Site.

(f) The Company shall designate as open space not to be developed ("Open Space") and allow public access to the following:

(i) The Northwest Corner, including the "extension" thereof created pursuant to the OU-1 ROD Amendment (constituting approximately 2 acres);

(ii) Approximately 2.5 acres consisting of a strip of land 30 feet in width on average and paralleling the Hudson River for the length of the Site and meeting the following criteria:

(a) The 2.5 acre strip of land shall be located between the elevation LMSL +8 mark of the Sloped Shoreline and a line no further inland than 110 feet from the mean low water mark;

(b) Some or all of the 2.5 acre strip of land may be located within the area designated as the Sloped Shoreline;

(c) The designated 2.5 acres of Open Space shall be substantially flat and shall be suitable for, and intended for, the future construction of a Walkway; and

(d) The final location of the 2.5 acres of Open Space shall be identified in the Remedial Design, subject to the approval of the Village, not to be unreasonably withheld, and any permitting or approvals necessary from other governmental authorities.

(iii) An additional 1.75 acres consistent with the location of Open Space on a development proposal for the Site formally submitted to the Village for its approval.

(g) The Company may designate as Open Space and, once designated, allow public access to, up to an additional 8 acres, at such time as, and conditioned upon the

agreement of AR and the Village on, a development plan for the Site. Any such Open Space that may be designated pursuant to this Section 7.1(g) may be donated to a qualified land trust or other tax qualified recipient or to the Village. Such Open Space shall be identified and designated in accordance with future development and shall be subject to any further agreements reached between the Village and AR pursuant to Section 7.4.

7.2 Village Responsibility for Open Space Maintenance. The Village shall assume responsibility for the following matters with respect to the Open Space designated pursuant to Section 7.1(f) above: (i) planting vegetation (with the exception of any vegetation required to be planted by AR as part of the OU-1 ROD as amended by the OU-1 ROD Amendment; (ii) mowing, pruning, trimming and similar upkeep activities associated with all vegetation planted on any Open Space; and (iii) enforcement of the institutional controls (*i.e.*, the deed restrictions) set forth in the Sections 7.1(b) through 7.1(d) above. Nothing herein shall be construed as imposing on the Village any responsibility for maintenance of the bulkhead or cap, including the Sloped Shoreline, required to be installed by the Company in accordance with Sections 4.6, 4.8, 4.9 and 7.3.

7.3 Bulkhead and Cover Maintenance. AR shall maintain the bulkheads, the Sloped Shoreline armoring and erosion control, as well as the contact barrier and hydraulic controls described in Section 4.8 and 4.9 above in good and effective condition for a period of one hundred (100) years from completing the construction of the remedy described in Article IV above and shall provide adequate financial assurance for such obligation. Such maintenance shall include, but is not be limited to, testing directly or otherwise measuring the effectiveness of the components of the bulkhead to determine whether any components require repairs or replacement.

(a) AR may elect, at any time after the Effective Date, to fulfill its obligations under this Section 7.3 by establishing a trust, insurance policy, or other financial assurance mechanism to provide for adequate funding for the maintenance of the bulkhead, Sloped Shoreline armoring and erosion control, contact barrier, and hydraulic control, the choice of which shall be at the Company's discretion but consistent with sound and accepted fiscal practices. The existence of any such financial assurance mechanism shall not relieve the Company of its independent obligations under this Section to maintain the bulkhead, Sloped Shoreline armoring and erosion control, contact barrier, and hydraulic controls.

(b) Upon election of a financial assurance mechanism under Section 7.3(a) above, AR shall send prompt written notice to the Village and Riverkeeper of the type, nature, scope, terms, and parties to the financial assurance mechanism selected.

7.4 Continued Cooperation with Respect to Remediation and Future Site Development.

(a) The Village and AR shall continue to work in good faith to cooperate on future site remediation and redevelopment. In this regard, the Village shall provide AR with access to any portion of the Site or any river bottom or sediments for which the Village currently

has or in the future obtains an ownership interest for the purposes of performing and maintaining the Site remedy or conducting further environmental investigation with respect to upland or sediment conditions. AR shall coordinate with the Village to make sure that further environmental investigation or remediation performed by AR on such property owned, now or in the future, by the Village does not unreasonably interfere with other activities on such property.

(b) For a period of one year after the Effective Date of this Consent Decree, AR and the Village shall meet on a periodic basis and engage in good faith negotiations to explore possible mechanisms for redevelopment of the Site. Redevelopment mechanisms to be discussed include, but are not limited to, a possible transfer of certain assets and responsibilities to either the Village or a designee approved by the Village and AR, such as:

- (1) Title to the property;
- (2) A trust fund, insurance policy, or other financial assurance mechanism established under Section 7.3 for maintenance of the bulkhead, the Sloped Shoreline and Site cover, along with primary responsibility for maintaining the bulkhead and Site cover;
- (3) Primary responsibility for enforcing the deed restrictions set forth in Section 7.1, and any other use or institutional restrictions that DEC may require as part of the OU-1 ROD as amended by the OU-1 ROD Amendment; and
- (4) Such other responsibilities as the parties may agree to transfer.

In connection with any transfer of some or all of the assets and responsibilities set forth above, the Company and the Village may evaluate reaching an agreement with a mutually acceptable remedial management contractor and an insurance company providing for the performance of a remedy within the scope of the OU-1 ROD and amended by the OU-1 ROD Amendment and insurance coverage for the associated risks of that remedy (the "Risk Contract"). Failure to reach agreement on the terms of the Risk Contract or on the transfer of responsibilities under this paragraph shall not constitute a breach of this Consent Decree nor shall it affect the other terms of this Decree.

7.5 Nothing in this Consent Decree is intended to affect the rights of the owner of the Site, or other designated party, with respect to the installation of docks, piers, walkways or other structures connected to the Shoreline (including the Northern and Southern Coves), including but not limited to the installation of piling and other support structures (except in the Northwest Corner), and extending into the Hudson River to the extent applicable permits or other approvals are obtained from agencies with jurisdiction.

ARTICLE VIII VILLAGE TRUST FUND.

8.1 Establishment of Village Trust Fund. In consideration of the numerous design changes between the 2004 OU-1 ROD and the 2012 amendment of that ROD, which include the potential elimination of steel sheet bulkheading and its replacement with a Sloped Shoreline along most of the Hudson River, the "build-out" of the Northwest Corner, the elimination of the slurry wall in the Northwest Corner, the potential use of dredged soil and/or sediments as fill on the Site, and the proposed demolition of Building 52 and the Village desire to restore, if practicable, or re-create the Water Tower, within 90 days after the Effective Date of this Consent Decree, the Village and AR shall execute and deliver to each other a Trust Agreement, establishing an interest bearing trust account for the performance or funding of Village undertakings as set forth in this Article VIII. The trust account shall be referred to as the "Village Trust Fund". The Parties further agree that a federally chartered bank in the United States shall serve as the Agent to administer the Village Trust Fund pursuant to the Trust Agreement.

8.2 Initial Payment To Village Trust Fund. Within 60 days after the execution of the Trust Agreement, AR shall pay into the Village Trust Fund the sum of one million three hundred thousand dollars (\$1,300,000.00) to be used for the restoration of Quarry Park and the creation of a trail linking the Site and Quarry Park.

8.3 Subsequent Water Tower Matching Fund Payment to Village Trust Fund. AR shall contribute additional matching funds into the Village Trust Fund for the purposes of (a) refurbishment and reconstruction of the Water Tower if a Water Tower Preservation Plan has been approved or (b) construction of a replica Water Tower on an adequate foundation if no Water Tower Preservation Plan has been approved. The restored or replica Water Tower shall be constructed no earlier than the completion of the placement of Acceptable Fill in Section 4.9(a). In determining AR's contribution to the Village Trust Fund pursuant to this Paragraph 8.3, AR shall contribute one (1) dollar to the Village Trust Fund for every one (1) dollar the Village contributes to the Trust Fund and/or that a third party raises and can demonstrate is specifically earmarked and committed to the Water Tower refurbishment and reconstruction, or a replica Water Tower, with AR's total contribution hereunder not to exceed one million three hundred fifty thousand dollars (\$1,350,000.00) or 50% of the actual costs of construction of the restored or replica Water Tower, whichever is less. One third of AR's estimated matching funds shall be contributed at the time the Village or a third party enters into a contract to construct the restored or replica Water Tower, one third shall be contributed upon initiation of construction, and the remainder shall be contributed upon completion of the restored or replica Water Tower and submittal of final cost documentation.

8.4 Subsequent Payment for Historical Legacy Projects. Within 30 days after the completion of the placement of Acceptable Fill pursuant to Section 4.9(a), AR shall pay into the Village Trust Fund the sum of fifty thousand dollars (\$50,000.00) to be used for the preservation of historical documents, photographs, or other materials related to the history of the site and the presentation of that history to the public.

8.4 Other Trust Fund Projects. In addition to the specific projects identified in Section 8.2 (or if the Village determines that any specific project cannot be undertaken), the Village may draw upon such Trust Fund for projects or undertaking that, after obtaining concurrence from

AR, are otherwise beneficial to the Site and in the public interest. AR shall cooperate with the Village in these undertakings.

ARTICLE IX: DISPUTE RESOLUTION

9.1 **Notice of Breach.** If any Party believes that any other Party is in breach of this Consent Decree, it shall send prompt written notice to the Party believed to be in breach. Such notice shall state with particularity the nature, manner, and substance of the breach. The alleged breaching Party shall thereafter be afforded an opportunity to respond within 20 days of receipt of the notice of breach. Any such response shall be in writing, shall be sent to all Parties, and shall state, with particularity, any objections to or defenses to the notice of breach and/or any plans and timetables for implementation of a cure of the breach. If the allegedly breaching Party does not respond as set forth in this Section 9.1, the Party giving notice may take action pursuant to Section 9.3 below. If the allegedly breaching Party does respond pursuant to this Section 9.1, the Parties agree to follow the procedures set forth in Section 9.2 below before any Party initiates action under Section 9.3 below.

9.2 **Negotiation of the Alleged Breach.** Upon receipt of the written response from the allegedly breaching Party, all Parties shall agree to attempt to resolve the alleged breach by means of informal negotiations between the Parties for a period of up to 30 days. The Parties may extend the negotiating period in writing and by mutual consent if the Parties believe that an extension to negotiations may allow for resolution of the alleged breach. The Parties shall forebear from seeking judicial resolution pursuant to Section 9.3 below during any negotiating period pursuant to this Section 9.2. Such informal negotiations, and any documents exchanged pursuant thereto, shall be subject to Federal Rule of Evidence 408. Further, any documents exchanged pursuant to negotiations under this Section 9.2 shall be treated and held as confidential by the Parties and shall not be subject to discovery or disclosure to third parties. If the Parties resolve the alleged breach through negotiation, any such resolution shall be memorialized in writing and shall be signed by the Parties and submitted to the Court as a modification to this Consent Decree.

9.3 **Judicial Resolution.** If the allegedly breaching Party does not respond pursuant to Section 9.1 or the Parties are unable to resolve the alleged breach pursuant to Section 9.2, any Party may petition the Court or file any appropriate legal action with the Court to seek to enforce or to seek relief from the Consent Decree. The prevailing Party in any such action shall be entitled to recover its legal fees and costs, as well as consulting fees and costs, incurred in (a) the prosecution or defense of any action filed pursuant to this Section 9.3, and (b) the engagement of good faith negotiations pursuant to Section 9.2 above.

ARTICLE X: FORCE MAJEURE

10.1 **Force Majeure.** Force Majeure, for the purposes of this Agreement, is defined as an event arising from causes entirely beyond the control of any Party or Parties (or their agents, contractors, subcontractors, representatives, or assigns) which could not have been overcome by reasonable due diligence and which delays or prevents the performance of any obligation under this Agreement, including, but not limited to, the obligations to perform remedial activities under

Article V. Examples of events which may constitute force majeure include the refusal of any federal, state, or local governmental authority to grant a permit or license necessary for the completion of actions required under this Consent Decree, floods, hurricanes, tornadoes and other extraordinary weather events, earthquakes and other natural disasters, terrorist attacks, war and other national emergencies. Examples of events that are not force majeure events include, but are not limited to, normal inclement weather, increased costs or expenses, or financial difficulty of any Party.

10.2 **Obligations As a Result of a Force Majeure Event.** If any Party believes a force majeure event has occurred that will delay or prevent the performance of any obligation of that Party under this Agreement, the Party invoking the force majeure event shall (a) take reasonable measures to mitigate the impact of the force majeure event, and (b) send written notice within 15 days after the occurrence of the event to all other Parties. Such written notice shall describe the nature of the force majeure event, the obligations affected by the event, the degree to which such obligations are affected, and the steps taken, if any, to mitigate the impact of the force majeure event on the invoking Party's obligations under this Agreement. Upon receipt of such notice, the Parties shall engage in the dispute resolution procedures outlined in Section 9.2 above and, only after exhausting such procedures, may any Party invoke the dispute resolution procedures described in Section 9.3 above.

ARTICLE XI: FURTHER ASSURANCES AND NOTICE

11.1 **Further Assurances.** The Parties further agree to perform such acts and to prepare, execute, and file all documents or stipulations reasonably required to perform the covenants set forth in this Consent Decree, to satisfy the conditions contained herein, or to give full force and effect to this Consent Decree.

11.2 **Notice.** Any notices or other documents required or permitted to be given under the terms of this Consent Decree shall be deemed delivered (i) when received, if personally delivered, (ii) upon receipt of a telecopy, or (iii) one (1) business day after delivery thereof to a nationally recognized overnight delivery service which provides receipt of service (other than an overnight delivery service offered by the United States Postal Service), addressed to the Parties as follows:

If to Riverkeeper:

Director, Hudson River Program
Riverkeeper, Inc.
20 Secor Road
Ossining, NY 10562

and

Supervising Attorney.
Pace Environmental Litigation Clinic, Inc.
78 North Broadway
White Plains, NY 10603

FAX: (914) 422-4437

If to the Village:

Mayor
7 Maple Avenue
Hastings-on-Hudson, NY 10706

Village Manager
7 Maple Avenue
Hastings-on-Hudson, NY 10706

and -

Mark A. Chertok, Esq.
Sive, Paget & Riesel, P.C.
460 Park Avenue, 10th Fl.
New York, NY 10022
FAX: 212-421-2150

If to AR:

Paul Johnson
Operations Project Manager
Atlantic Richfield Company
MC 200-1E
150 W. Warrenville Road
Naperville, IL 60563
paul.johnson4@bp.com

John Frankenthal
Liability Business Manager
Atlantic Richfield Company
MC 200-1E
150 W. Warrenville Road
Naperville, IL 60563
John.frankenthal@bp.com

James Lucari, Esq.
Atlantic Richfield Company
c/o BP Legal
501 Westlake Park Boulevard
Houston, Texas 77079
james.lucari@bp.com

and

Michael Daneker
Arnold & Porter
601 Massachusetts Ave., N.W.
Washington, D.C. 20001
michael.daneker@aporter.com
FAX: 202-942-5999

Notwithstanding the limitations on modification to this Agreement set forth in Section 12.1, any Party may change the person who is to receive notice on its behalf by sending written notice of such change to all other Parties.

ARTICLE XII: MISCELLANEOUS PROVISIONS

12.1 **Modification of the Consent Decree.** This 2015 Modification to the 2003 Consent Decree may be modified only in writing and only by mutual consent of all the Parties and approval of the Court. Any modification shall be filed with the Court.

12.2 **Successors and Assigns.** This 2015 Modification to the 2003 Consent Decree shall be binding upon and shall inure to the benefit of the successors, assigns, parents, subsidiaries, and affiliates of each Party. No assignment or delegation of the obligations or rights hereunder will release the assigning Party from its obligations under this Agreement. Without prior consent of the Village or Riverkeeper, and without prior approval of the Court, AR may hire, retain, or contract with contractors, subcontractors, insurers, environmental remediation firms, or other entities or third parties to perform its obligations under this 2015 Modification to the Consent Decree.

12.3 **Third Party Beneficiaries.** Other than those successors, assigns, parents, subsidiaries, and affiliates of the Parties hereto (and as set forth in Section 12.2), this 2015 Modification to the 2003 Consent Decree is not intended for the benefit of any third party and shall not be enforceable by any third party.

12.4 **Governing Law.** This 2015 Modification to the 2003 Consent Decree shall be interpreted and enforced under the laws of New York by a federal court for the Southern District of New York. Any action pertaining to this Decree shall be commenced and prosecuted in the United States District Court for the Southern District of New York.

12.5 **Construction.** This 2015 Modification to the 2003 Consent Decree shall not be construed or resolved against any Party by reason of any conclusion that this Decree has been drafted by that Party. The 2015 Modification to the 2003 Consent Decree is the result of review, negotiation, and compromise by each Party.

12.6 **Authority to Enter Into Agreement.** Each person signing this 2015 Modifications to the Consent Decree represents and warrants that he or she is duly authorized to execute said agreements by the Party on whose behalf it is indicated that the person is signing.

For Atlantic Richfield Company

Robert Genovese

By: ROBERT GENOVESE

Title: PRESIDENT

Date: 1-DEC-2016

For Riverkeeper, Inc.

Paul Gallay

By: Paul Gallay

Title: President of Hudson Riverkeeper

Date: 8/17/16

For the Village of Hastings-on-Hudson

By: PJ [Signature]

Title: MAYOR

Date: 8/12/16

So Ordered on this 25 day of Jan, 2019

[Signature]

Honorable
United States District Court
For the Southern District of New York

Attachment C – Structural Survey

PROJECT SCOPE

This project consists of the inspection and condition assessment of the water tower located on the Atlantic Richfield Co. (AR) Harbor-at-Hastings Site (site), located in the Village of Hastings-on-Hudson, NY. The existing water tower must either be dismantled or demolished to accommodate construction activities for the Superfund remediation of the former Anaconda Wire and Cable Co., including excavation of PCB- and metal-contaminated soils to depths of 9 to 12 feet below grade and restoration of a sloped shoreline.

The existing water tower may be restored or replaced with a replica following the completion of the soil remediation and site redevelopment activities. The water tower is not used as a functioning water tower, but the Village of Hastings-on-Hudson (Village) is exploring its preservation as an aesthetic element of the view shed of the Hudson River and Palisades Cliffs, and as an emblem of the Village. The Village's primary study question, addressed through this assessment, is whether the existing water tower structure can withstand being dismantled, restored, and re-erected.

The following tasks were conducted for this project by Louis Berger U.S. (Louis Berger):

- Attended an on-site coordination meeting with AR on 13 September 2016 to review Louis Berger's proposed assessment activities and AR's safety orientation and procedures for site activities.
- Prepared a site- and activity-specific Health and Safety Plan for the structural evaluation task and incorporate AR's comments on the plan.
- Conducted the water tower structural evaluation field work on 11 November 2016.
- Prepare this evaluation report indicating the condition and findings of the water tower and recommendations.

WATER TOWER DESCRIPTION

The water tower was constructed circa 1916 for the National Conduit & Cable Company, which later became the Anaconda Wire and Cable Company (Photo No. 1). As per the as-built plans the structure consists of four (4) riveted steel, laced posts/columns, each made up of two 12-inch channels with a 14-inch cover plate on the inside face of the post, and cross bars (lacing) on the outside face. The posts extend up approximately 90 high and are each constructed from three sections with splices and lateral support struts spaced at approximately 30-foot intervals. Lateral tower stiffness is provided at each bay of the three post sections with 1 1/8-inch square steel cross rods.

The 75,000 gallon capacity tank, supported by the four posts, is made up of 5 steel welded cylindrical plates with a diameter of 22 feet and a conical shaped steel roof. The bottom two plates and top two plates of the tank have a thickness of 1/4-inch and the middle plate has a thickness of 5/16-inch. The water tower is anchored to a concrete foundation with one 2.5-inch diameter by 6-foot long anchor bolt at each post anchor. The as-built plans indicate that the tower received a shop coat paint of standard Black Graphite and 3 field coats of standard Green Graphite. The current total weight of the water tower is estimated at approximately 50,000 pounds.

INSPECTION PROCEDURE

The inspection was performed by a three-person team (two structural engineers and a Health and Safety Officer), plus the operator for the personnel lift, on the morning of 11 November 2016. The team leader, a registered professional engineer, was responsible for planning the inspection procedures so that the water tower structural components were properly inspected. The weather was sunny with a 60 degrees F temperature and winds between 9 and 20 mph. Ten photographs documenting the inspection are attached to this report.

A visual inspection of the structural members and their connections was performed using a 135-foot personnel lift (Photo No. 2). Where access was possible, a hands-on inspection was performed including recording the thickness of structural members and the water tank using an ultrasonic measuring device and a basic caliper, to determine possible section loss due to corrosion.

Glossary of Inspection Terminology

- 1) **Corrosion**
 - a) Minor (or light) - A light surface rust.
 - b) Moderate - Rust that is loose and flaking with some pitting. This scaling, or exfoliation, can be removed with some effort by use of a scraper or chipping hammer. Element exhibits measurable but not significant loss of section.
 - c) Severe - Heavy, stratified rust or rust scales with extensive pitting. Removal requires exerted effort and may require mechanical means. Significant loss of section.
- 2) **Pack Rust** - Rust collected between two interfacing surfaces, usually two steel plates. Pack rust can be minor, moderate, or severe as described above. Pack rust can severely deform the steel members due to the expansive nature of rust.
- 3) **Pitting** - Formation of cavities due to corrosion. Minor, moderate, and severe pitting categories are used based upon depth and density of cavities.
 - a) Minor - Typically less than ¼ inch diameter and 1/32 inch deep.
 - b) Moderate - ¼ inch to ½ inch diameter and up to ⅛ inch deep.
 - c) Severe - Greater than ½ inch diameter and over ⅛ inch deep.

SUMMARY OF FINDINGS

The existing water tower is overall in good condition exhibiting mostly minor corrosion throughout, with only minor loss of material and no observed missing rivets. Pitting of material due to corrosion was not found. The original field paint coatings have peeled off, revealing the shop graphite primer coating that partially remains throughout the tower structure.

The tower anchors are in overall good condition with the northwest and southwest anchors exhibiting moderate pack rust at the stiffener plates and moderate corrosion on the base plate (Photos Nos. 3 & 4). The anchors for the northeast and southeast posts are partially buried by the soil and exhibit moderate corrosion on the stiffener plates (Photos Nos. 5 & 6). The horizontal rods located at the level of the anchor base have been removed or have become loose (Photo No. 4); however, the current state of these rods does not compromise the structural integrity of the water tower.

The posts are in good condition, exhibiting minor to moderate corrosion overall. Only the

northeast post is exhibiting moderate corrosion on one of the channels near the base of the post. The layers of corrosion were removed to record the thickness of the channel web, which revealed approximately 10 percent section loss of the web area (Photo No. 7). The post splice connection plates, struts and bracing channels, and cross rods are all in good condition, exhibiting only minor corrosion (Photo No. 8) and the connection to the tank is also in good condition (Photo No. 9). The tank is in overall good condition, exhibiting minor corrosion with approximately 10 percent section loss on the tank's cylindrical plates (Photos Nos. 9 & 10).

CONCLUSION AND RECOMMENDATIONS

As noted in the Summary of Findings, the water tower is in overall good condition with only minor corrosion throughout and some section loss on one of the posts and the water tank. These losses are considerably small given the age of the structure and are not considered significant. In addition, the water tank no longer stores water and the stresses on the steel members are significantly less than that for which they were designed. As such, given the condition of the water tower, it should be able to withstand being dismantled and re-erected if properly performed by a competent Contractor who can demonstrate pertinent project experience.

As stated in the Project Scope, the Village may either restore the water tower or replace it with a replica following the completion of the site cleanup. If The Village decides to dismantle, restore, and re-erect the water tower, Louis Berger recommends that the project scope include at a minimum, but not be limited to:

- A lead paint survey of the water tower structure and lead paint abatement in compliance with all applicable regulations, as necessary, for dismantling, restoration, and re-installation.
- Identification and application of an appropriate finish to preserve the water tower structural elements from additional corrosion after re-installation.
- Construction of a new water tower foundation and cleaning and painting of all four anchors up to 3 feet from each anchor base plate.

Please contact Len Warner with any questions regarding this report at (914) 798-3721.



Photo No. 1: View of the Water Tower looking west.



Photo No. 2: View of the Water Tower and personnel lift looking west.



Photo No. 3: Northwest post anchor exhibiting moderate pack rust at the stiffener plates and moderate corrosion on the base plate. Note concrete foundation.



Photo No. 4: Southwest post anchor exhibiting moderate pack rust at the stiffener plates and moderate corrosion on the base plate.



Photo No. 5: Northeast post anchor partially buried and exhibiting moderate corrosion on the stiffener plates.



Photo No. 6: Southeast post anchor partially buried and exhibiting moderate corrosion on the stiffener plates.



Photo No. 7: Northeast post exhibiting moderate corrosion. The layer of corrosion was removed from a testing location to record the thickness of the channel web, revealing approximately 10 percent loss of web area.



Photo No. 8: Typical post splice connection plates, struts bracing channels and cross rods exhibiting minor corrosion.



Photo No. 9: View of connection between tank and post in good condition.



Photo No. 10: View of tank lower section exhibiting minor corrosion.
Note recording of tank plate thickness using the ultrasonic measuring device.

Attachment D – Lead-Based Paint Survey

April 6, 2017

Mr. Fran Frobel
Village Manager
Village of Hastings-on-Hudson
Municipal Building
7 Maple Avenue
Hastings-on-Hudson, NY 10706

Subject: Report of Limited Environmental Lead Based Paint Survey Services for the Proposed Water Tower Dismantling Project in Hastings-on-Hudson.

Dear Mr. Frobel:

Louis Berger (Berger) has completed a limited environmental lead based paint survey of the water tower located at the Atlantic Richfield Co. (AR) Harbor-at-Hastings Site (site) in the village of Hastings-on-Hudson, NY. The survey was conducted on April 5, 2017 by Drew Cheskin, a NYS EPA Licensed Lead Risk Assessor (cert # NY-R-11931-1). The survey included visual observation and X-Ray Fluorescence (XRF) analysis of suspect lead based paint (LBP) for the upcoming proposed water tower dismantling project.

The readings of painted surfaces were taken using an RMD LPA-1 XRF Lead Paint Spectrum Analyzer. The LPA-1 method of measurement is based on the spectrometric analysis of lead K-shell X-ray fluorescence within a controlled depth of interrogation. The LPA-1 Analyzer uses a Co-57 radioactive source and an advanced, solid-state, room temperature, radiation detector to generate and detect the x-ray fluorescence spectrum of a painted surface. The spectrum is then analyzed by a microprocessor to eliminate the effects of substrate and other factors such as scattering to allow an accurate determination of the amount of lead on a surface. The LPA-1 automatically analyzes spectrometric data in real time and differentiates the lead signal from the spectrum. The x-ray fluorescence properties are determined through calibration process and are used for automatic substrate correction and calculation of the lead content of a painted surface.

Berger tested the following suspect paints to be impacted by the current scope of work (SOW);

Sample No.	Component	Substrate	Color	Condition	LEAD Result (mg/cm ²)
1	Positive Calibration	NA	NA	NA	0.9
2	Positive Calibration	NA	NA	NA	0.9
3	Positive Calibration	NA	NA	NA	0.9
4	Negative Calibration	NA	NA	NA	-0.1
5	Negative Calibration	NA	NA	NA	-0.0
6	Negative Calibration	NA	NA	NA	-0.0
7	NE Structural Post, S Side	Metal	Grey	Poor	0.1
8	NE Structural Post, N Side	Metal	Grey	Poor	4.2
9	NE Structural Post, E Side	Metal	NA ¹	NA ¹	-0.1
10	SE Structural Post, E Side	Metal	Grey	Poor	>9.9
11	SE Structural Post, S Side	Metal	Grey	Poor	>9.9
12	NW Structural Post, E Side	Metal	Grey	Poor	>9.9

Sample No.	Component	Substrate	Color	Condition	LEAD Result (mg/cm ²)
13	NW Structural Post, N Side	Metal	Grey	Poor	>9.9
14	NW Structural Post, S Side	Metal	Grey	Poor	>9.9
15	Positive Calibration	NA	NA	NA	0.9
16	Positive Calibration	NA	NA	NA	0.9
17	Positive Calibration	NA	NA	NA	0.9

¹ Bare Metal Structural Post Was Tested, No Paint Present

Six (6) of seven (7) painted surfaces tested were confirmed to contain lead-based paint. A single test of the bare metal on a structural post showed no indication of lead contained within the metal itself. Regulatory levels established by the EPA identify lead-based paint as containing 0.5% lead content by weight or 1.0 mg/cm². Surfaces coated with lead-based paint can create dust-lead, soil-lead or airborne-lead hazards if the paint is turned into dust or fumes by blasting, abrasion, scraping, sanding or torch cutting. Any work which disturbs painted surfaces containing lead needs to be performed in accordance with the Occupational Safety and Health Administrations (OSHA) 29 CFR 1926.62 Lead in Construction Standard and EPA's 40 CFR 745 regulations. Personal air monitoring should be conducted when disturbing lead based paints and lead containing materials as per 29 CFR 1926.62 (OSHA).

It is our hope that the information provided in this letter has met the project requirements. Thank you for the opportunity to provide you and your staff with our continued services. Please contact me via email at acheskin@louisberger.com or at 914-798-3733 if you have any questions or require any additional information.

Sincerely,



Louis Berger U.S., Inc.

Drew Cheskin
Manager, Emergency Management & IH Services

Attachment C1 – Consultant & Inspector Certifications
Attachment C2 – XRF Data
Attachment C3 – Photolog

ATTACHMENT D1

CONSULTANT & INSPECTOR CERTIFICATIONS

United States Environmental Protection Agency

This is to certify that

The Louis Berger Group, Inc.

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226

In the Jurisdiction of:

All EPA Administered Lead-based Paint Activities Program States, Tribes and Territories

This certification is valid from the date of issuance and expires December 11, 2019

LBP-2612-1

Certification #

November 25, 2016

Issued On



Michelle Price, Chief

Lead, Heavy Metals, and Inorganics Branch

United States Environmental Protection Agency

This is to certify that



Andrew Brian Cheskin

has fulfilled the requirements of the Toxic Substances Control Act (TSCA) Section 402, and has received certification to conduct lead-based paint activities pursuant to 40 CFR Part 745.226 as:

Risk Assessor

In the Jurisdiction of:

New York

This certification is valid from the date of issuance and expires June 01, 2018

NY-R-11931-1

Certification #

May 18, 2015

Issued On



John Gorman, Chief

Pesticides & Toxic Substances Branch

Certificate of Achievement

This is to certify that

Andrew Cheskin
The Louis Berger Group

on the 12 th day of February 2009 successfully completed the factory training for

RMD's LPA-1 Lead Paint Inspection System

including, but not limited to the topics of Radiation Safety, DOT Regulations, and the Proper Use of the Instrument.


Sia Afshari, Product Manager RMD
44 Hunt St., Watertown, Massachusetts



ATTACHMENT D2

XRF DATA

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ATTACHMENT D3

PHOTOLOG

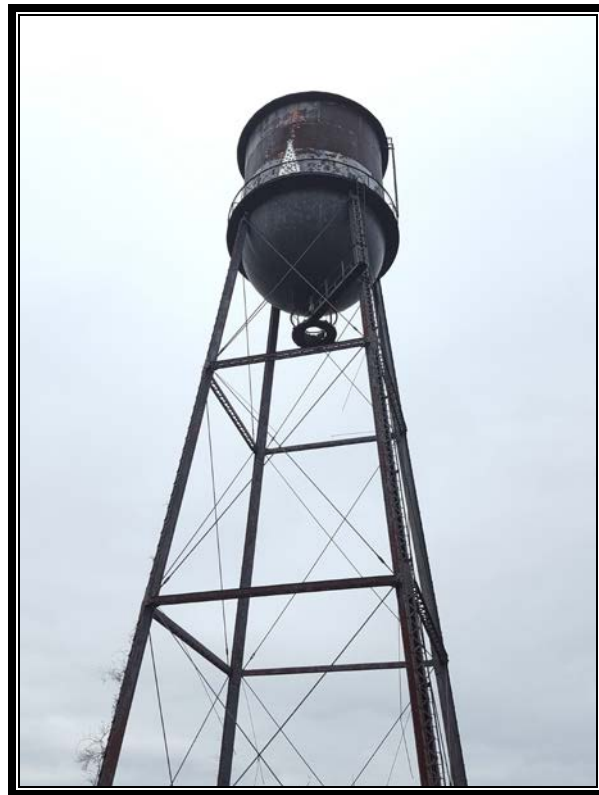


Photo #1: Hastings-on-Hudson Water Tower



Photo #2: Northwest Structural Post

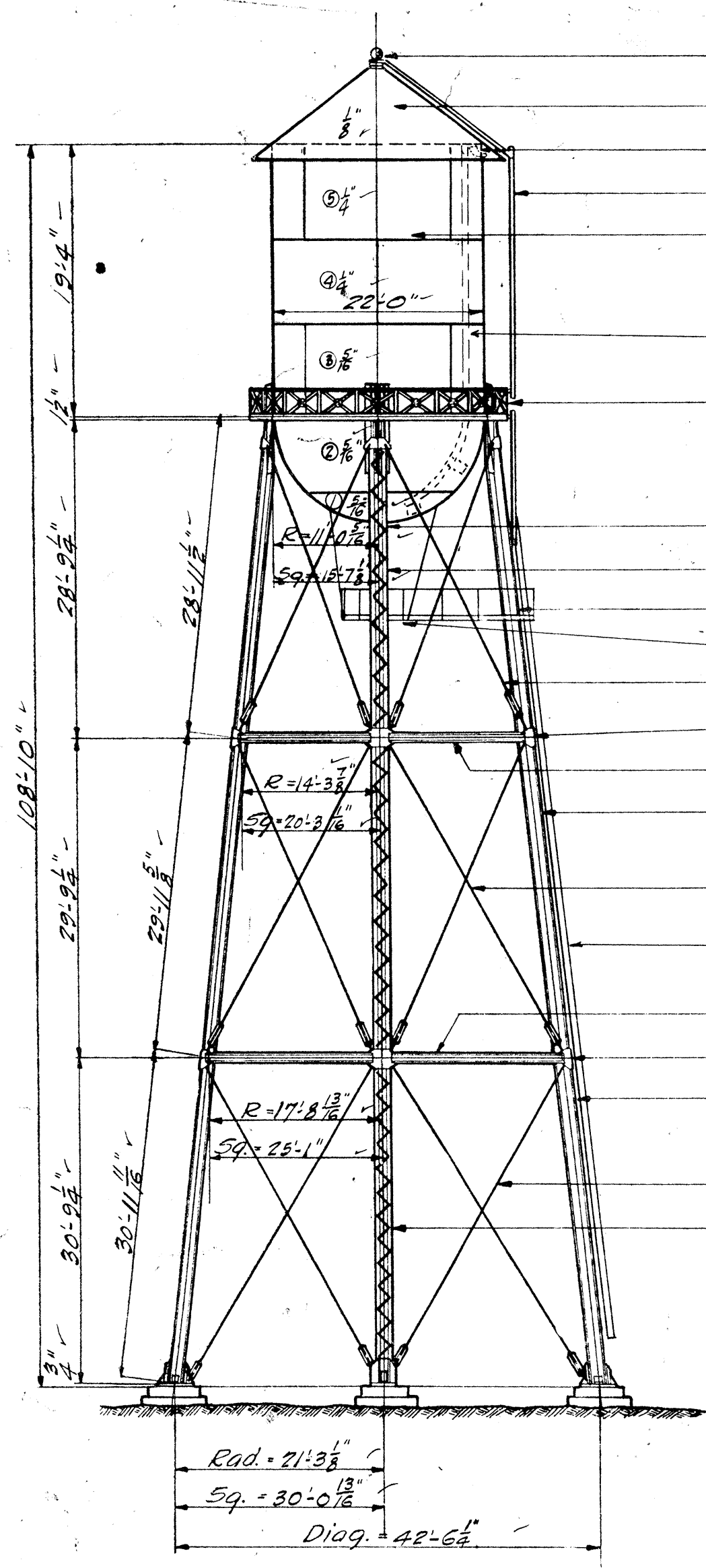


Photo #3: Northeast Structural Post



Photo #4: Southeast Structural Post

Attachment E – Water Tower As-Built



- Std. 12" C.I. Finial Patt. No. 501
- Std. Conical Steel Roof with L at edge.
(Place Door in Roof to Right of Ladder)
- Std. 3 Overflow Patt. No. 1333
- Std. Revolving Ladder.
- Std. 75,000 Gallon Tank.
- 22'0" Diam. x 19'4" High.
- Std. Inside Ladder.
- Std. 24" Balcony and Hand Rail.

- Std. 8" C.I. Expansion Joint Patt. No's 2197-2196
- Riser Pipe 8" C.I. Flgd. — They Furnish.
- 4 Posts = 2 E 12" @ 20 1/2" x 29' 11 1/2"
- 1 Cov pl. 14" x 16" x 28' 3 1/2"
- Special Platform.
- 8 Tower Rods = 18 x 32' 7" B to B.
- 4 Struts = 2 E 6" @ 8" x 20' 3 1/2" C to C.
- 4 Pipe Rods = 3" @ 14' 10" E to E.
- 4 Posts = 2 E 12" @ 20 1/2" x 29' 11 1/2"
- 1 Cov pl. 14" x 16" x 29' 11 1/2"
- 8 Tower Rods = 18 x 37' 5 1/2" B to B.
- Std. Ladder on 1 Post
- 4 Pipe Rods = 3" @ 18' 2 3/4" E to E.
- 4 Struts = 2 E 7" @ 9 3/4" x 25' 1" C to C.
- 4 Posts = 2 E 12" @ 25" x 31' 0 5/8"
- 1 Cov pl. 14" x 16" x 29' 10 1/2"
- 8 Tower Rods = 18 x 39' 7 3/4" B to E.
- Frost Case 3 Ply for 8" 3 & 22" Pipes

Paint - 1 Shop Coat Std. Black Graphite and
1 Field Coat Std. Green Graphite except
inside of Tank which has 1 Shop Coat of
H. & M. Primer and 1 Field Coat of H. & M.
Brine Resisting Paint.

Frost Case - 2 Field Coats Std. Green Graphite.

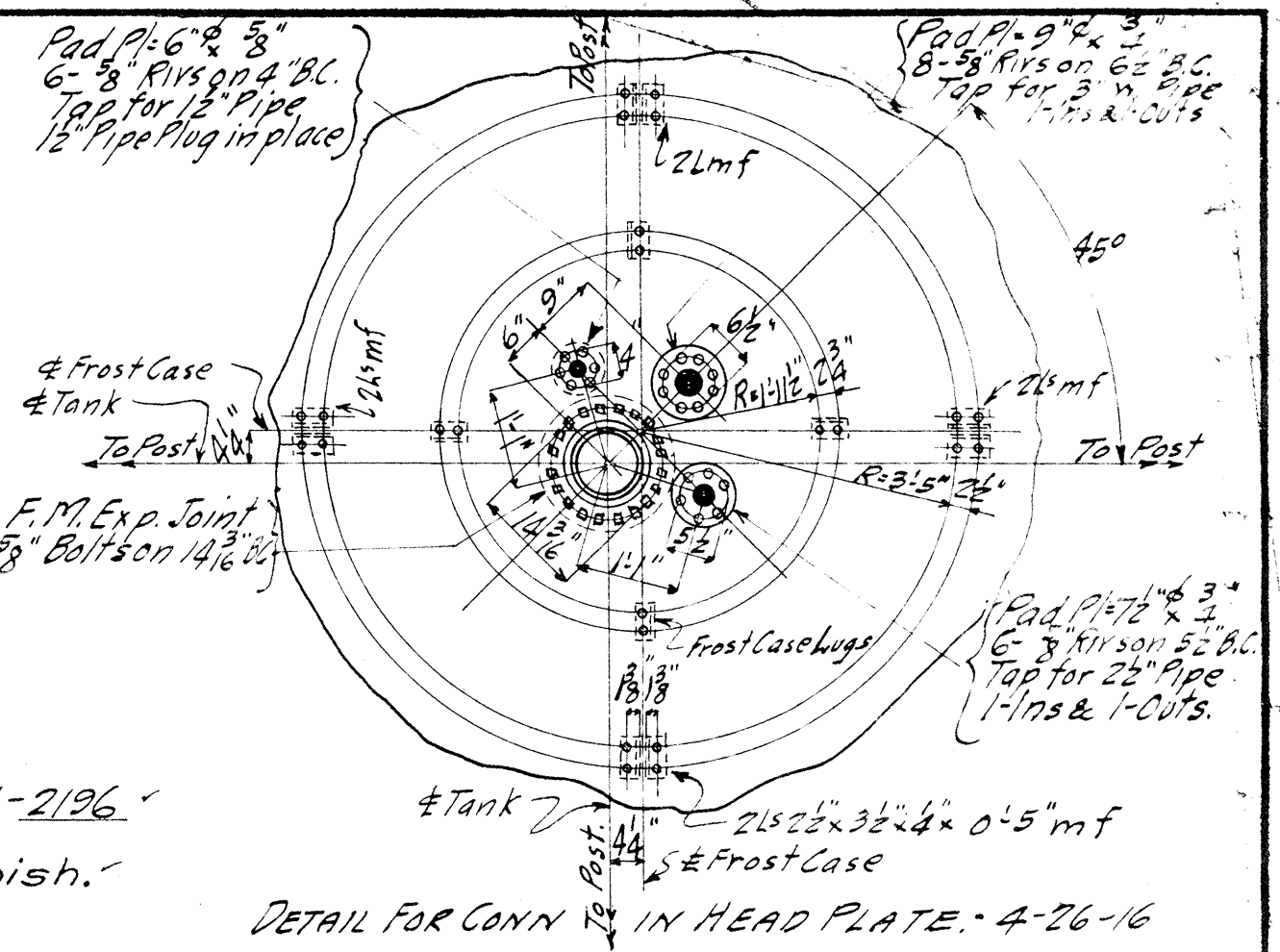
Foundation Std. — They Furnish.

4 Anchor Bolts = 2 1/2" x 6' 0" long.

22" Bored Hole in Ctr. of Shoe.

Inspection, None.

Factory Mutual & F.I.A.



DRAWINGS	
Index	Description
Sheet 1	General Plan
1-340	Roof
2-360	Tank
3-320	Balcony & Hand Rail
4-	Nº2 Plates
5-214	Top Posts
6-222	Inter. Posts
7-224	Lower Posts
8-220	Struts
9-171	Overflow
0-100	Revolving Ladder
Sh #3	Walkway & Platforms
0-104	Inside Ladder
0-101	Post Ladder
9-111	Pins
9-102	Expansion Joint
F-200	Frost Case F-500

WWB 00771

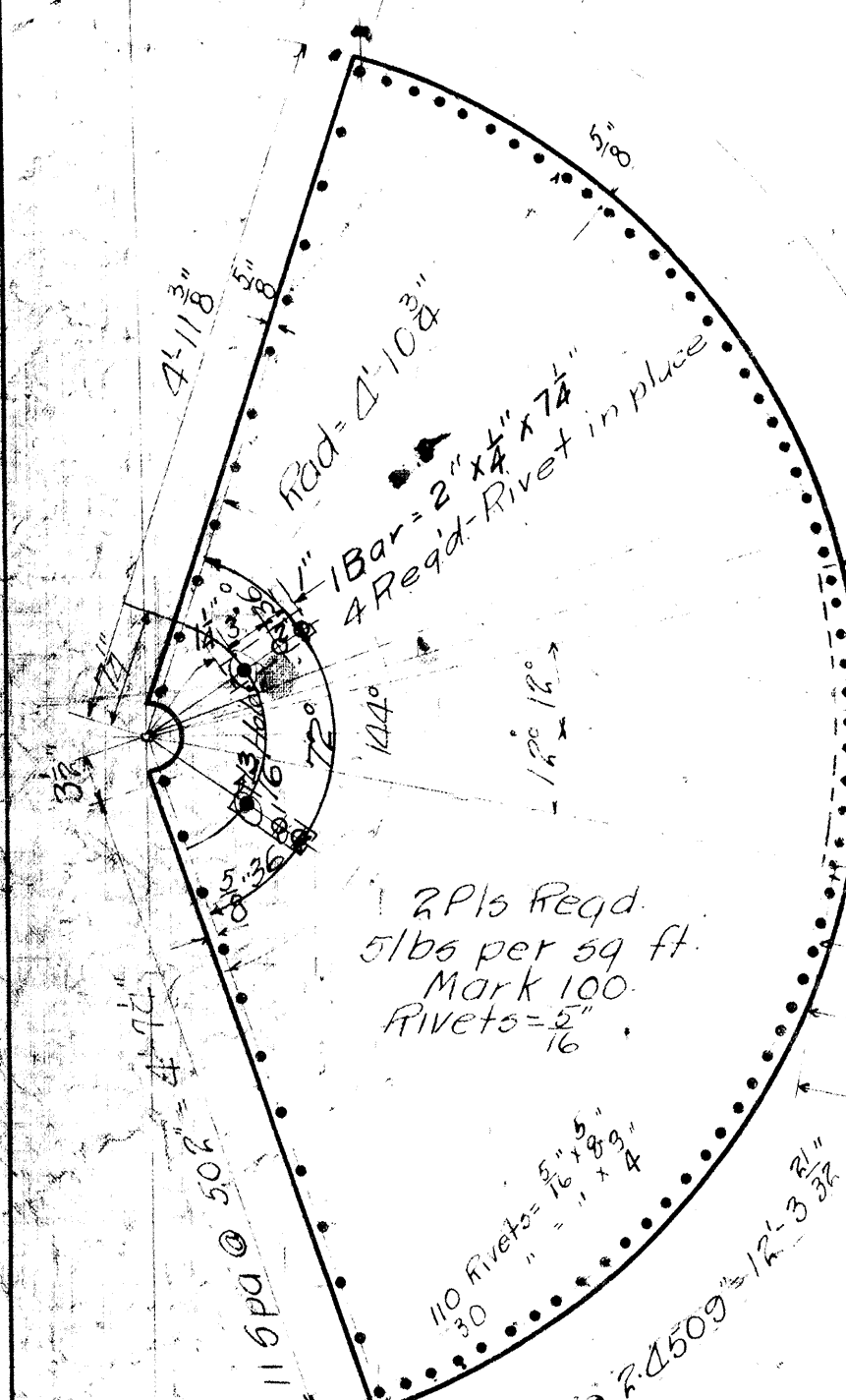
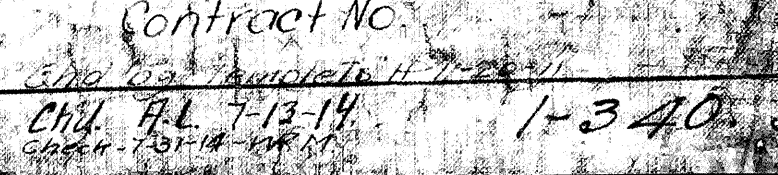
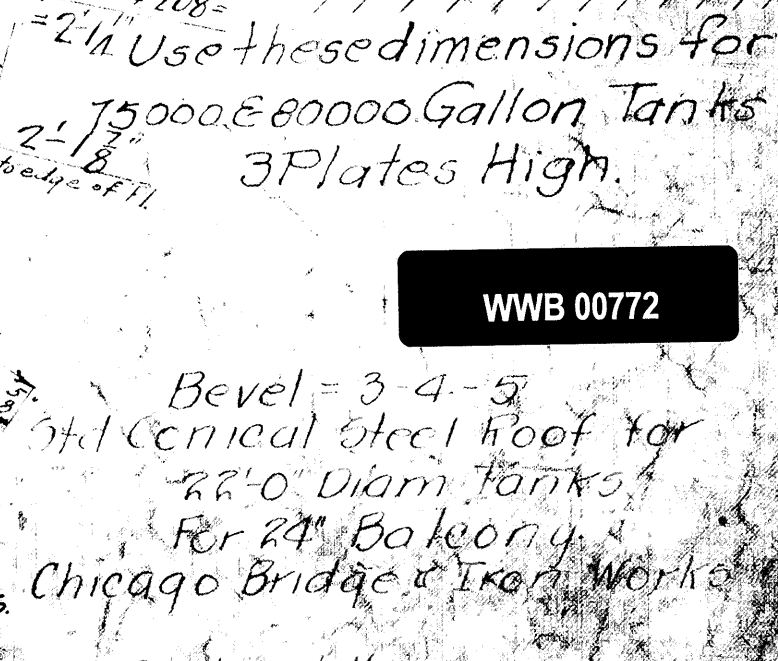
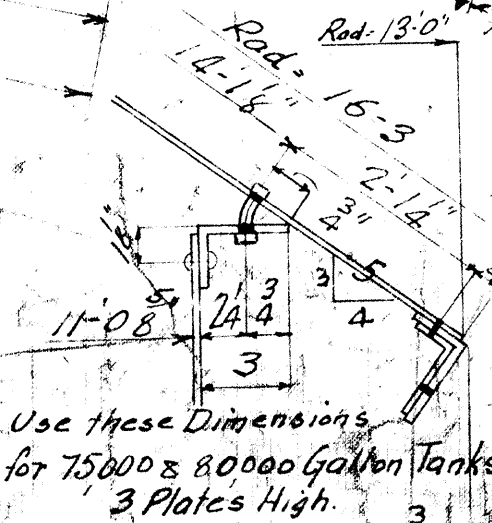
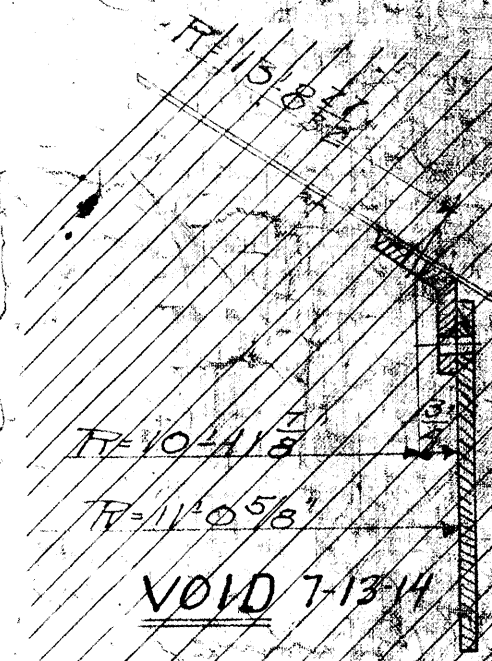
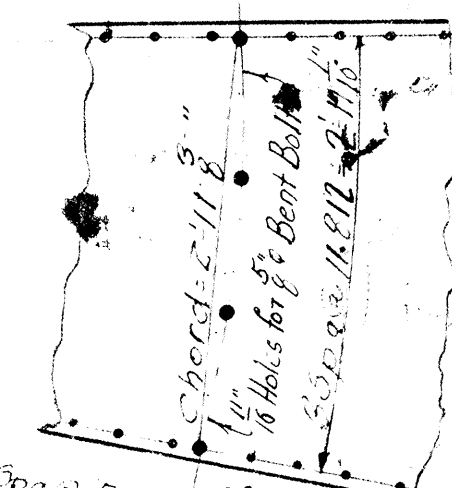
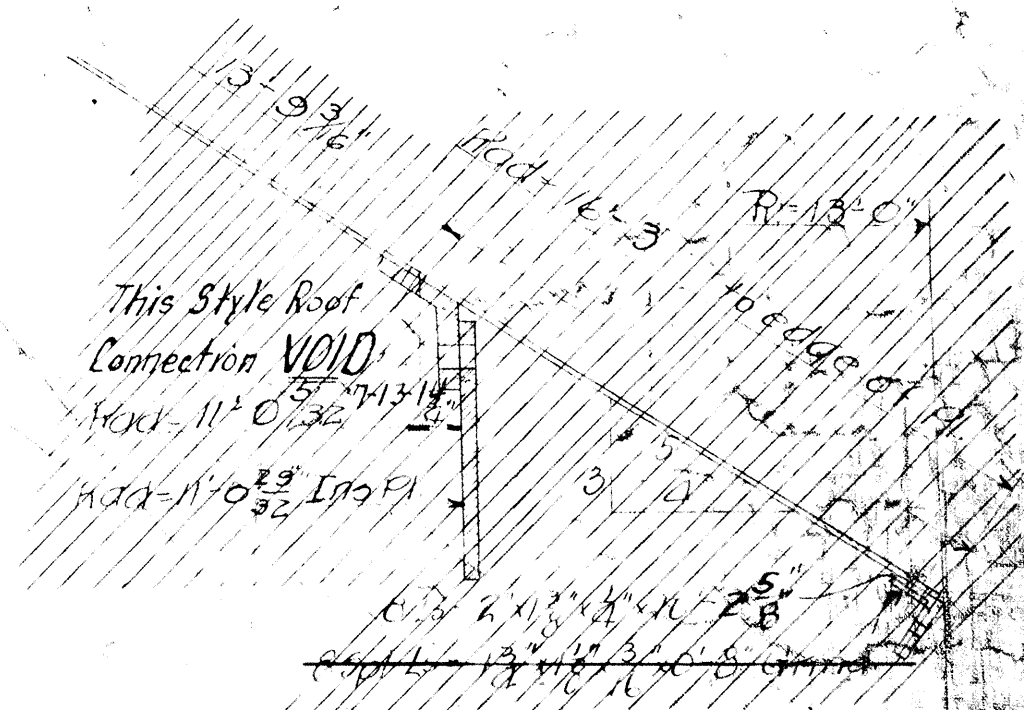
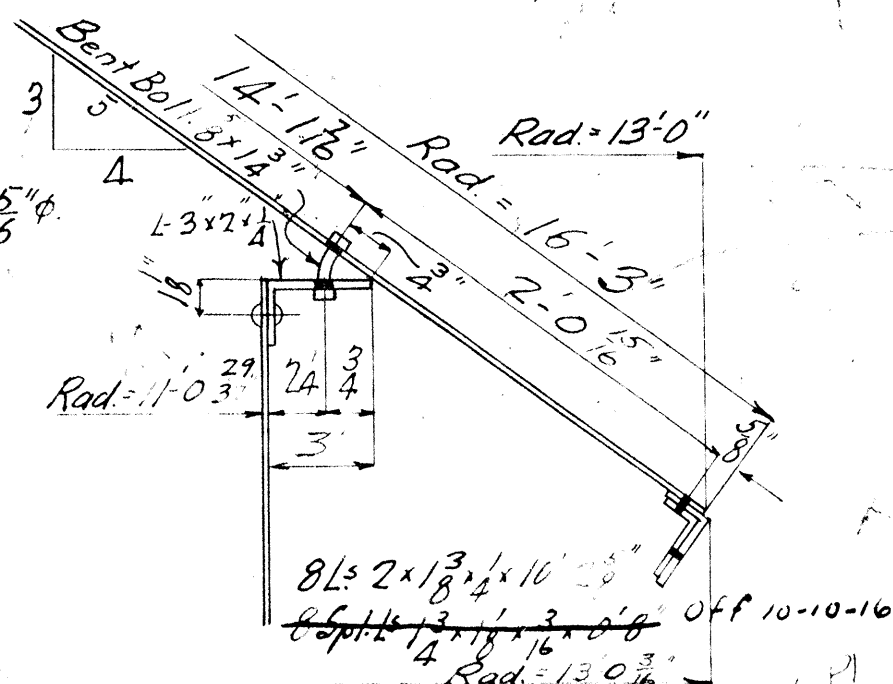
GENERAL PLAN
75,000 GALLON TANK & TOWER
TOTAL HEIGHT = 108'10"
FOR NATIONAL CONDUIT & CABLE CO.
HASTINGS-ON-HUDSON, N.Y.
Chicago Bridge & Iron Works
CONTRACT Nº 7799

Pipe Added 4-26-16-A.V.M.

Sheet 1.
DR. A.W.W. 228-16
CHD. W.B. 3-2816

0-7799

5 lbs. per Sq. Foot. Rivets = $\frac{5}{16}$ " ϕ
Order 12 Plates 57" x 5" x 11'-7".



2 Pls Req'd.
5/lbs per sq ft
Mark 100.
Rivets = $\frac{5}{16}$ "

Wt. - 24 Pieces - 3468[#]
Wt - 8 b⁺ - 221[#]

No. 10-10-16	No	Mark	Description	Length
23	2	Root	Pls = Eker + 5"	Mark 100
13 2-15	24	"	" = 5 lbs per sq ft	11' 10"
15	1	Door	" = 24" x 18"	2' 4"
6	2	"	L5 = 1 1/2" x 1 1/2" x 3/16"	2' 11"
5	1	"	" = " x " x "	2' 5"
	2	Hinges & 1 Hasp for Door.		
23	8	Root	L5 = 2' x 1 1/2" x 3/16"	10' 2 1/2"
10-10-16	2	Split	" = 12" x 18" x 3/16"	0' 8"
	3	Bars	2" x 1/2"	0' 7 1/2"

77 Shop Rivets

Rivets		
No	Diam	Length
770	$\frac{2}{16}$ "	$\frac{5}{16}$ "
190	"	$\frac{3}{16}$ "
30	"	$\frac{1}{8}$ "

LC05-50175 (Bem.)

No.	Diam	Length
72	9/16"	1 3/4"

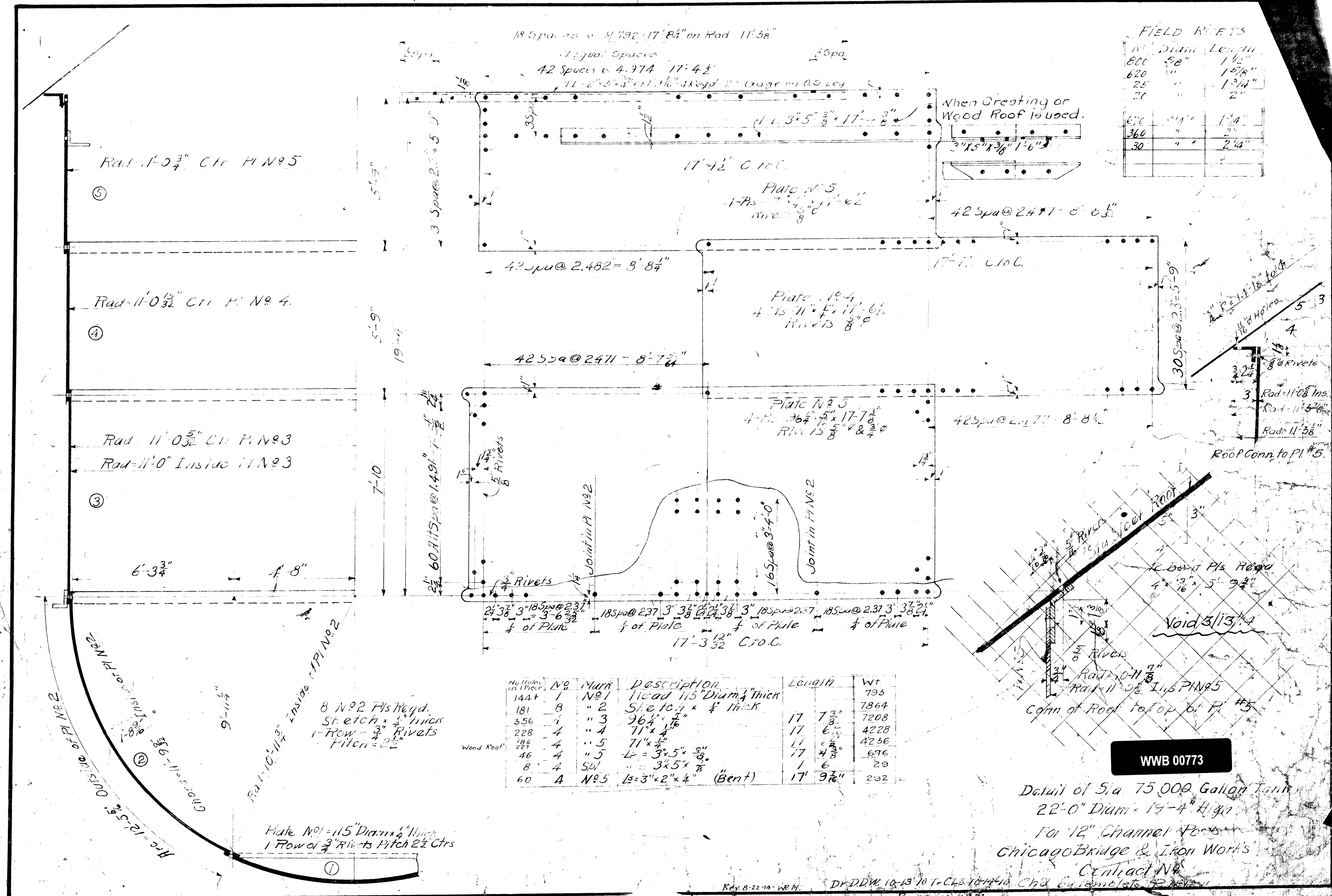
Use these Dimensions
for 75000 & 80000 Gallon Tanks
3 Plates High.

WWB 00772

Bevel = 3-4-5
Std. Conical Steel Roof for
22'-0" Diam Tanks
For 24" Boleony
Chicago Bridge & Iron Works

Contract No.

1-340

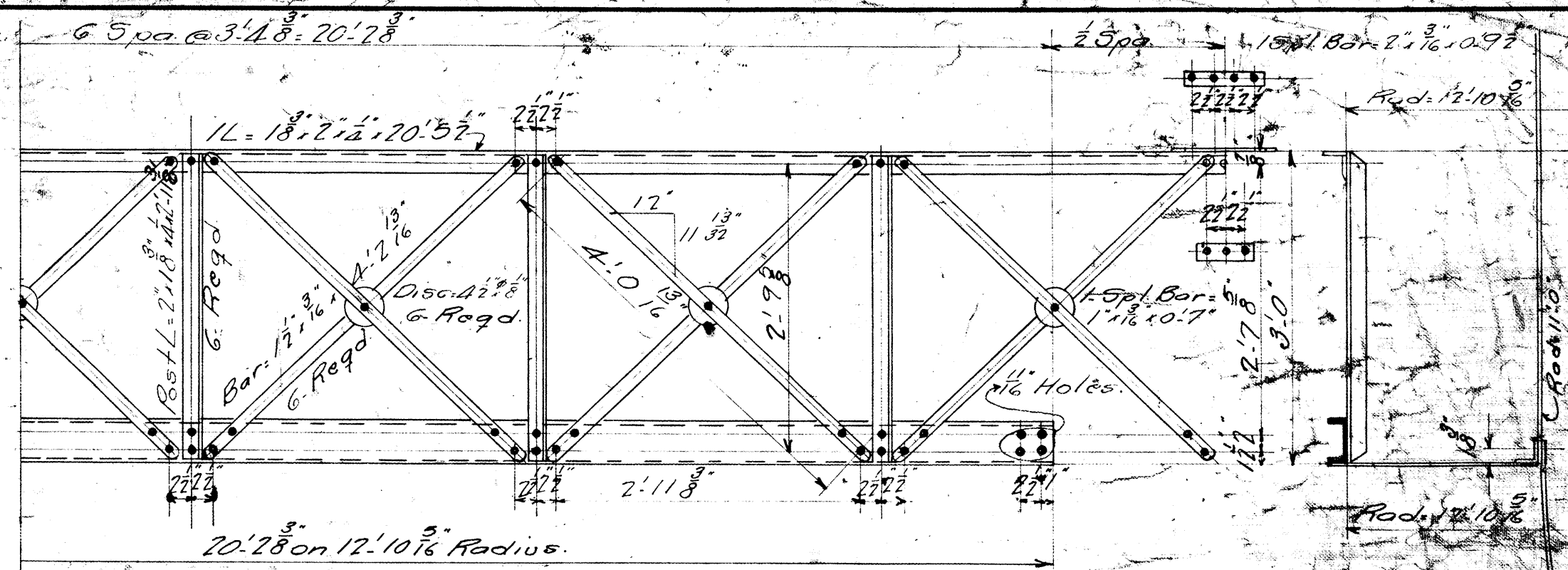


FIELD RIVETS

N	Diam	Length
800	5/8"	1 1/2"
620	"	1 5/8"
25	"	1 3/4"
30	"	2"
670	3/4"	1 3/4"
360	"	2"
30	"	2 1/4"

No Holes in Piece	No	Mark	Description	Length	Wt
144+	1	N#1	Head 1 1/2" Diam 1/4" thick		793
181	8	" 2	Sheet 1/4" x 1/4" thick		7864
356	4	" 3	96 1/2" x 1 1/2"	17	7208
228	4	" 4	71" x 1/4"	17	4228
185	4	" 5	71" x 1/4"	17	4236
46	4	" 5	L = 3' x 5' x 3/8"	17	676
8	4	Spl	" = 3' x 5' x 3/8"	1	29
60	4	N#5	15' x 3' x 2" x 1/4" (Bent)	17	202

Detail of Sta 75 000 Gallon Tank
 22'-0" Diam x 19'-4" High
 For 12" Channel Posts
 Chicago Bridge & Iron Works
 Contract No.
 Index R-360



1 Section of Balcony Hand Rail
4. Regd.
9/16 Holes for 2 Bolts

Hand Rail Wt. 625#

No. Holes	No.	Description	Length
3	4	Rail B = 2" x 1/2"	20' 5 1/2"
3	4	Post L = 1" x 3/4"	2' 11 3/8"
3	4	Sp. Bars = 1" x 3/4"	0' 7"
4	4	" = 2" x 1/2"	0' 9 1/2"
4	4	Lattice = 1 1/2" x 3/4"	4' 2 1/2"
1	24	Discs = 4 1/2" Dia.	

Bolts for Hand Rails

No.	Diam.	Length
240	1/2"	1"
40	"	1 1/4"

Field Rivets

No.	Diam.	Length
60	5/8"	1 3/4"
60	"	2"

Balcony Girder Wt. 2572#

No. Holes	No.	Description	Length
82	8	Pis = 5' x 3" x 1/2"	
24	4	L = 5' x 6" x 3/4"	20' 5 1/2"
18	12	Pis = 3" x 1/2"	1' 11 1/2"
4	4	L = 2 1/2" x 2 1/2" x 1/2"	16' 2 1/2"
4	2	" = 6" x 6" x 3/4"	0' 12 1/2"
8	4	Pis = 6 1/2" x 3"	0' 10 1/2"
4	4	Bars = 2" x 3"	1' 0"
10	4	L = 5" x 3" x 1/2"	0' 9 1/2"

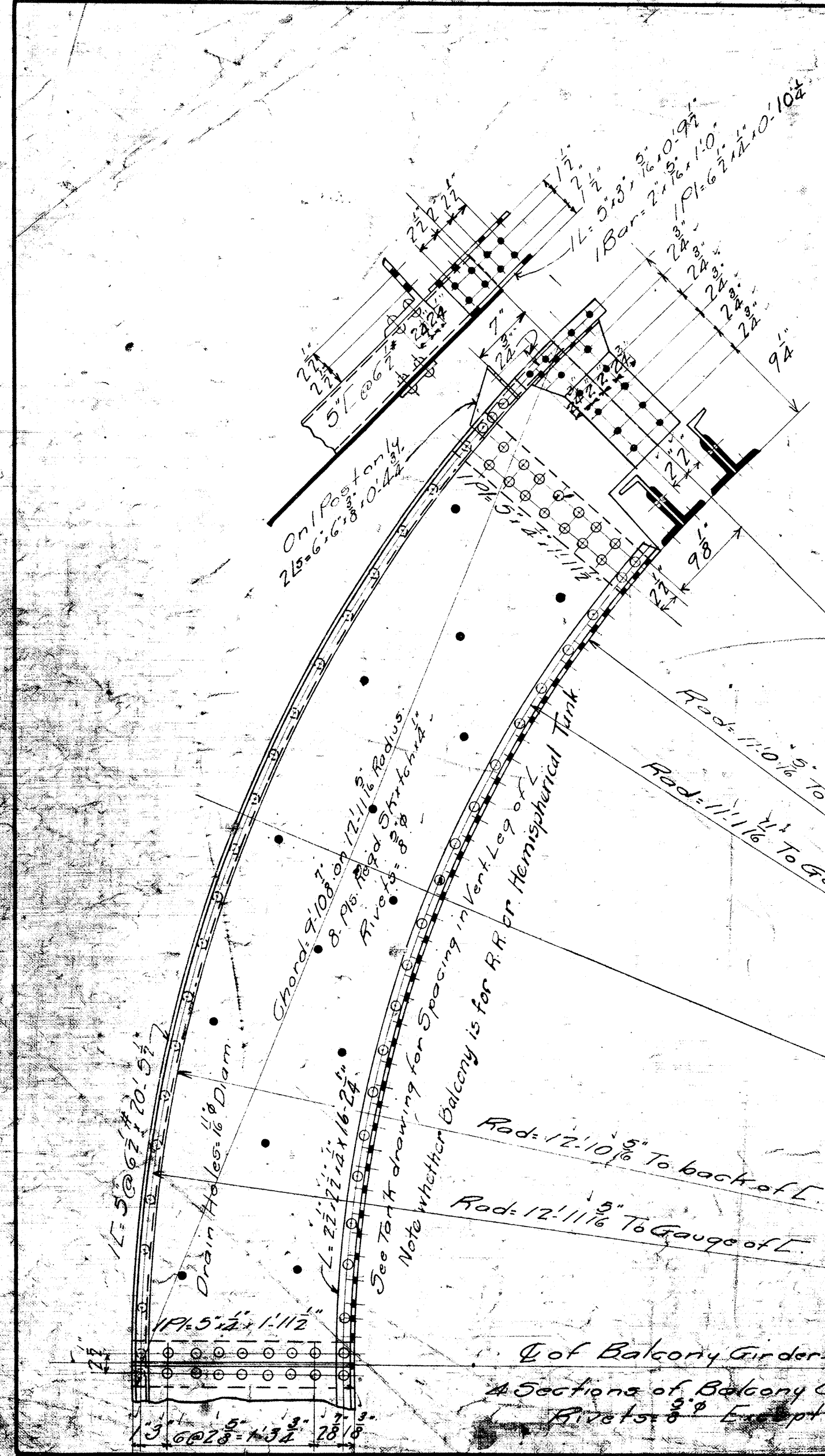
8" Shop Rivets

WWB 00774

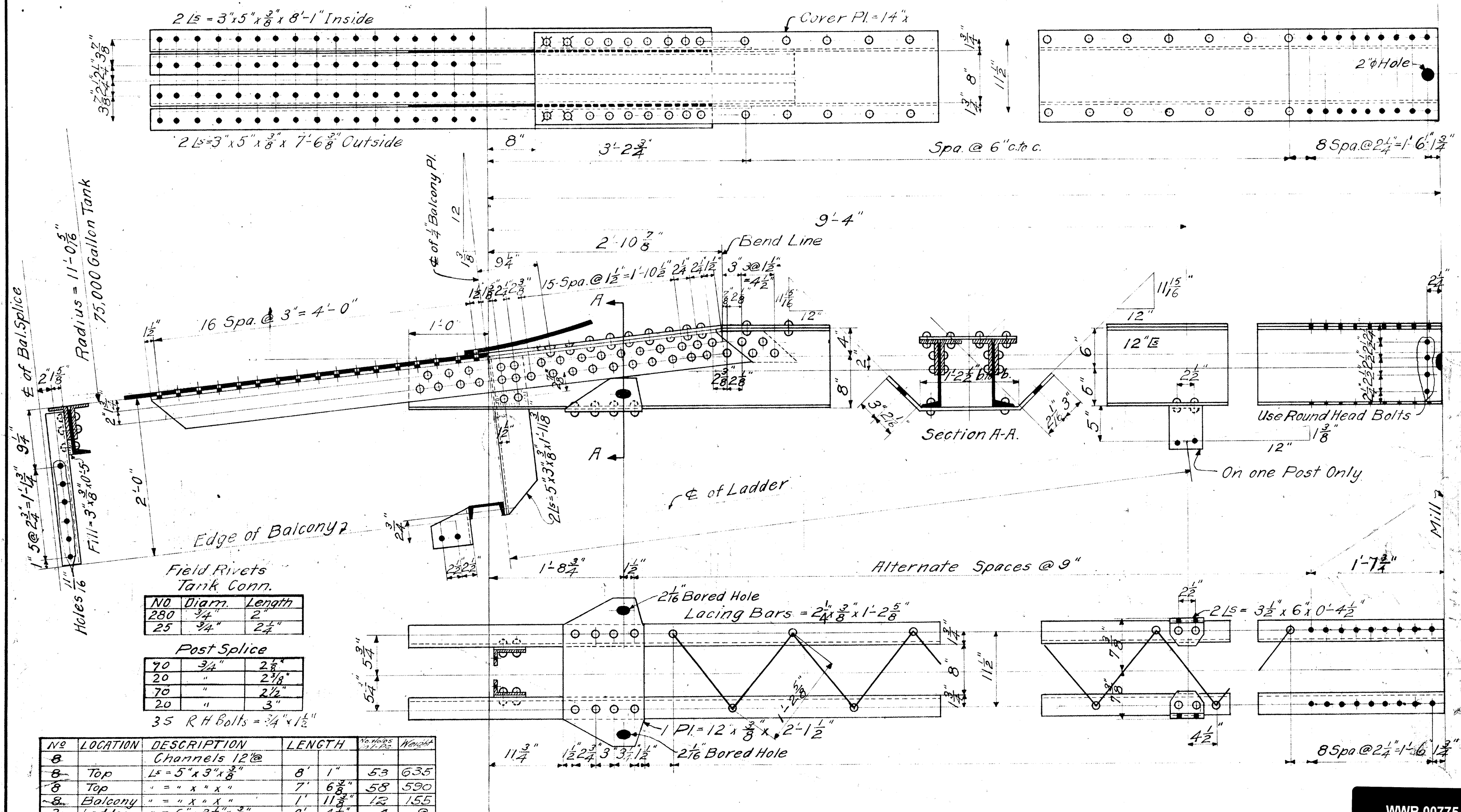
Patented
June 25, 1907

Std 24' Balcony
Hand Rail
For 22.0' Diam Tanks
17 Channel Posts

Chicago Bridge & Iron Works
Contract No. 110 by American Bridge Co.



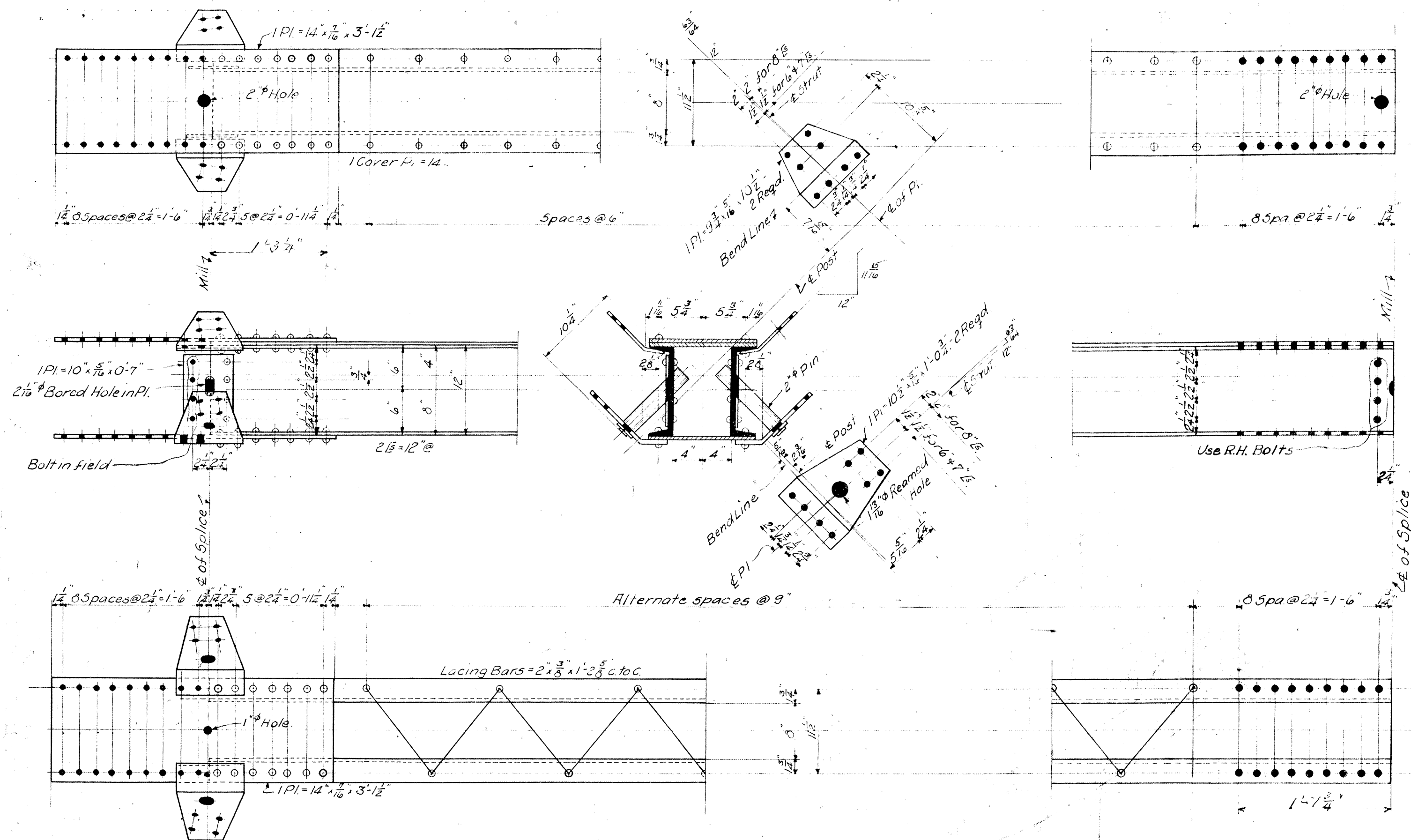
4 Sections of Balcony Girder Road
Rivets: 8" Except noted



WWB 00775

Dr. Tr. - FEB-5-8-14

Change Bal. 1. Revised 7-23-17 A.W.W.



No	Description	No. Holes	Wt.	Length
8	Channels - 12" e			
4	Cover Pls - 14" x			
8	Spl. Pls = 7" x 1/2"	9	50	0' 10"
8	" = 14" x 1/2"	31	525	3' 12"
8	Wing " = 9" x 1/2"	8	65	0' 10 1/2"
8	" = 10 1/2" x 1/2"	9	90	1' 0 3/4"
	Lacing Bars = 2 1/2" x 3/8"	2	@ 3 3/4"	1' 2 3/4"

No.	Diagn.	Length
70	3/4"	2 3/4"
20	"	2 3/4"
70	"	2 3/4"
20	"	3"
35	R 4 Bolts 3/4" x 1 1/2"	

Total Wt. of Details = 730#
 No. of Lacing Bars = 4 (Length of L) - (3' - 5")
 No. of Detail Rivets in 1-Post Sect. = 0

" " Grasshopper " " 1- " " = No. of Lacing + No. in Cor. PL + 1
 " " Hand " " 1- " " = 16

Holes and Wts = N.Y. 820-4

5-11-14.

4 Sections of Inter Post Reqd

12" Channels with 14" Cover Pl

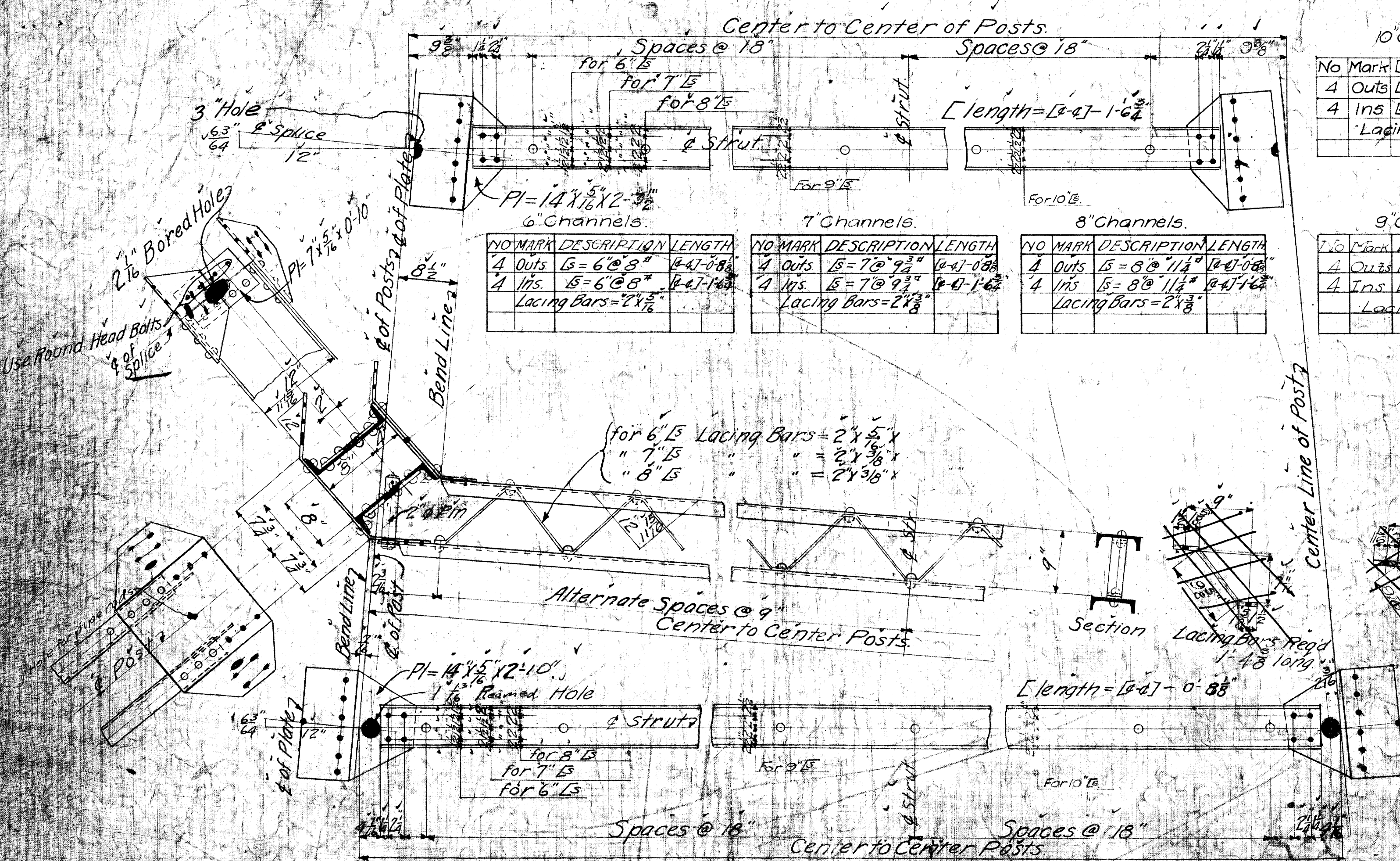
Bevel of Post = 1/8" x 12"

Rivets = 3/4" - Open Holes = 1 1/16"
 Except as noted.

WWB 00776

Details of Std. Inter. Post
 For 75,000 Gallon Tank
 12" E with 14" Cor. Pl.
 For Factory Mutual Tanks.
 Chicago Bridge & Iron Works.
 Contract No.

Index 6-222.



10" Channels.

No	Mark	Description	Length
4	Outs	Ls = 10" x 15"	L-47-0-88"
4	Ins	Ls = 10" x 15"	L-47-1-64"
			Lacing Bars = 22 x 3/8"

9" Channels.

No	Mark	Description	Length
4	Outs	Ls = 9" x 13 1/4"	L-47-0-85"
4	Ins	Ls = 9" x 13 1/4"	L-47-1-62"
			Lacing Bars = 22 x 3/8"

6" Channels.

No	Mark	Description	Length
4	Outs	Ls = 6" @ 8"	L-47-0-88"
4	Ins	Ls = 6" @ 8"	L-47-1-62"
			Lacing Bars = 2 x 5/16"

7" Channels.

No	Mark	Description	Length
4	Outs	Ls = 7" @ 9 3/4"	L-47-0-88"
4	Ins	Ls = 7" @ 9 3/4"	L-47-1-62"
			Lacing Bars = 2 x 3/8"

8" Channels.

No	Mark	Description	Length
4	Outs	Ls = 8" @ 11 1/4"	L-47-0-88"
4	Ins	Ls = 8" @ 11 1/4"	L-47-1-62"
			Lacing Bars = 2 x 3/8"

WWB 00778