JOLIET JUNIOR COLLEGE
1901

(Business & Auxiliary Services)
1215 Houbolt Road
Joliet, Illinois 60431-8938

INSTRUCTIONS TO BIDDERS

Sealed proposals are invited for **WATERMAIN EXTENSION** pursuant to specifications.

PROPOSALS:

Proposals will be received and publicly read aloud by the Joliet Junior College District #525, Joliet, Will County, Illinois, at the place, date and time hereinafter designated. You are invited to be present if you so desire.

PLACE: Joliet Junior College District #525
Office of Facility Services
L-BUILDING Room #L1005
1215 Houbolt Road
Joliet, IL 60431-8938

DATE: **MAY 12, 2015**

FAXES ARE NOT ACCEPTABLE

TIME: **9:00 AM**

Proposals received after this time will not be accepted.

Proposals must be made in accordance with the instructions contained herein. They shall be submitted on the forms provided on the College's website in a sealed envelope addressed to the Director of Business & Auxiliary Services, L-Building Room L1005, plainly marked, with the Bidder's Name and Address and the notation:

BID: **WATERMAIN EXTENSION**

PRE-BID MEETING:

A mandatory pre-bid meeting will be held on **MAY 5, 2015** at **9:00 AM**. The meeting will be at the Main Campus, L Building, Room L1005, 1215 Houbolt Road, Joliet, IL. Bidders who do not attend the mandatory pre-bid meeting will have their bid returned unopened.

DELIVERY:

All prices must be quoted F.O.B., Joliet Junior College, 1215 Houbolt Road, Joliet, IL 60431 unless otherwise noted.

TAX EXEMPTION:

Joliet Junior College District #525 is exempt from Federal, State, and Municipal taxes.

SIGNATURE ON BIDS:

Joliet Junior College District #525 requires the signature on bid documents to be that of an authorized representative of said company.

Each bidder, by making his bid, represents that he has read and understands the bidding documents and that these instructions to bidders are a part of the specifications.

BIDDING PROCEDURES:

1. No bid shall be modified, withdrawn, or cancelled for sixty (60) days after the bid opening date without the consent of the College Board of Trustees.

2. Changes or corrections may be made in the bid documents after they have been issued and before bids are received. In such case, a written addendum describing the change or correction will be issued by the College to all bidders of record. Such addendum shall take precedence over that portion of the documents concerned, and shall become part of the bid documents. Except in unusual cases, addendum will be issued to reach the bidders at least five (5) days prior to date established for receipt of bids.

3. Each bidder shall carefully examine all bid documents and all addenda thereto, and shall thoroughly familiarize themselves with the detailed requirements thereof prior to submitting a proposal. Should a bidder find discrepancies or ambiguities in, or omissions from documents, or should they be in doubt as to their meaning, they shall, at once, and in any event, not later than ten (10) days prior to bid due date, notify the College who will, if necessary, send written addendum to all bidders. The college will not be responsible for any oral instructions. All inquiries shall be directed to the Director of Business & Auxiliary Services. After bids are received, no allowance will be made for oversight by bidder.

SUBSTITUTIONS:

1. Each bidder represents that his bid is based upon the materials and equipment described in the bidding documents.

2. Any dealer bidding an equal product must specify brand name, model number, and supply specifications of product. The Board shall be the sole judge of whether an article shall be deemed to be equal.

3. A bidder's failure to meet the minimum specifications as listed may result in disqualification of his bid.

REJECTION OF BIDS:

The bidder acknowledges the right of the College Board to reject any or all proposals and to waive informality or irregularity in any proposal received and to award each item to different bidders or all items to a single bidder. In addition, the bidder recognizes the right of the College Board to reject a proposal if the proposal is in any way incomplete or irregular. The College Board may also award, at its discretion, only certain items quoted on. The College Board also reserves the right to reject the proposal of a Bidder who has previously failed to perform properly or complete on time contracts of a similar nature or a bid of a Bidder when investigation shows that Bidder is not in a position to perform the contract.

ACKNOWLEDGEMENT OF ADDENDA:

Signature of company official on original document shall be construed as acknowledgement of receipt of any and all addenda pertaining to this specific proposal. Identification by number of addenda and date issued should be noted on all proposals submitted.

FAILURE TO ACKNOWLEDGE RECEIPT OF ADDENDA ON PROPOSAL SUBMITTED MAY RESULT IN DISQUALIFICATION OF PROPOSAL.

Bidders who obtain a copy of the bid from our web site are responsible for checking back on the site for any addenda issued.

CLERICAL ERRORS:

If applicable, all errors in price extensions will be corrected by Joliet Junior College and totals for award determination corrected accordingly, unless the bidder specifies that no change be made in the total submitted. In this case, all incorrect price extensions will be noted at "lot", and award determination made on the basis of total price submitted.

SAMPLES:

Bidder may be required to furnish samples upon request and without charge to the College.

BID SECURITY:

A certified check or bank draft or bid bond, made payable to Joliet Junior College District #525, Will County, Illinois, **MUST** be submitted with the bid in the amount of **ten (10) percent of your total bid**. The bid security will be forfeited by the successful bidder in the event of the bidders failure to enter into a contract. Checks or drafts of unsuccessful bidders will be returned as soon as practicable after opening and checking the bids.

PAYMENTS:

Certified Payroll

1. With each pay application, contractors shall submit certified payroll in a format acceptable to Junior College District #525.

Partial Lien Waivers

1. The contractors' partial lien waiver, for the full amount of the payment, shall accompany the first payment application. Each subsequent payment application shall be accompanied by the contractor's partial waiver, and by partial waivers from all subcontractors and suppliers who were included in the immediately preceding payment application, to the extent of that payment.
2. Lien waivers from the Contractor and all subcontractors and suppliers shall accompany the first payment application when the amount of payment exceeds 50 percent of the total contract sum.

Final Lien Waivers: The contractor's request for final payment shall include:

1. The contractor's final lien waiver in the full amount of the contract.
2. Final lien waivers in the full amount of their contracts from all subcontractors and suppliers for which final lien waivers have not previously been submitted.

INSURANCE:

The successful bidder will be required to furnish a certificate of insurance in the following amounts:

The insurance coverage required here-in-under shall be the minimum amounts maintained by the Contractor and Subcontractors until all Work is completed and accepted by the Owner.

The Contractor will purchase and maintain "all risks" Builder's Risk property insurance subject only to such exclusions as have been specifically approved by the Owner in writing.

A. Workers Compensation

1. State: Statutory
2. Applicable Federal: Statutory
3. Employer's Liability:
   a. $1,000,000 per Accident
   b. $1,000,000 Occupational Disease

B. Commercial Comprehensive Liability

1. Each Occurrence: $2,000,000
2. Products/Completed Operations Aggregate: $2,000,000
3. Personal/Advertising Injury: $2,000,000
4. General Aggregate: $2,000,000
5. Policy shall include: $2,000,000
   a. Premises: Operations
   b. Independent Contractors Liability
   c. Products and Completed Operations: Maintained for minimum of one year after date of final Certificate for Payment, in full amount of the limits specified above.
   d. Contractual Liability
   e. Coverage for explosion (x), collapse (c), and underground (u).
6. The Commercial Comprehensive Liability policy shall include a contractual liability endorsement insuring the indemnity required by the contract. The indemnities shall be named as additional insured on the Contractor's Commercial Comprehensive Liability policy using Form CG 20 10 or its equivalent and shall name Joliet Junior College, its Board of Trustees, officers, employees and agents as additional insured's at a minimum. The Contractor hereby agrees to effectuate the naming of such additional insured's as unrestricted additional insured's on the Contractor's policy. The additional insured endorsement shall provide the following:
   a. That the coverage afforded the additional insurance will be primary insurance for the additional insurance with respect to claims arising out of operations performed by or on behalf of the Contractor.
   b. That the policy shall contain a thirty (30) day notice of cancellation prior to the effective date thereof.
   c. That the additional insureds have other insurance which is applicable to the loss, such other insurance will be on an excess or contingent basis.
   d. That the amount of the company's liability under the insurance policy will not be reduced by the existence of such other insurance.
   e. That the additional insureds will not be given less than thirty (30) days prior written notice of any cancellation thereof.
   f. That the Contractor agrees to indemnify the College for any applicable deductibles.

g. That the insurance policy from an A.M. Best rated "secured" Illinois State licensed insurer.
h. The Contractor shall provide the College with a copy of its insurance policy or in the alternative and subject to the College's agreement, an excerpt of a page from the actual policy evidencing the additional insureds as provided for herein.
i. Contactor acknowledges that failure to obtain such insurance on behalf of the College constitutes a material breach of the contract and subjects Contractor to liability for damages, indemnification and all other legal remedies available to College. The Contractor is to provide the College at all times with a certificate of insurance, evidencing the above requirements have been met. The failure of the College to object to the contents of the certificate or the absence of it shall not be deemed a waiver of any and all rights held by the College.
j. That enclosed is a copy of the endorsement providing additional insured's status and that the Contractor will furnish a Certificate of insurance evidencing the foregoing provisions.
k. Please include clause below in the policy:
It is agreed that Joliet Junior College, its Board of Trustees, officers, employees, agents and Ruettiger, Tonelli & Associates, Inc. are additional insureds on the policy.

C. Business Auto Liability (including owned, non-owned and hired vehicles).

1. Bodily injury
   a. $1,000,000 per person
   b. $2,000,000 per accident
2. Property damage: $1,000,000 OR
3. Combined Single limit: $1,000,000

D. Umbrella

1. Umbrella Excess Liability: $4,000,000
2. If the Contractor's Workers Compensation, Commercial General Liability and Business Auto policies do not have these minimum limits, an Umbrella policy written by an insurance company acceptable to the Owner may be used to meet the minimum limits required.

All such policies of insurance shall be written by companies approved by the College and Certificates of Insurance shall be furnished to the College. The College shall be listed as an additional insured under such policies. Each policy shall require at least 30 days notice to the College in the event of cancellation. The contractor agrees to indemnify, defend, and hold harmless the College from and against all suits or claims, which may be based upon any injury to or death of any person or persons or damage to property, which may occur or which may be alleged to have occurred in the course of the performance of this Agreement by the Contractor, whether such sum claim shall be made by an employee of the Contractor, by a third person or their representatives, or whether or not it shall be claimed that the said injury, death, or damage or cause through a negligence act or omission of the Contractor; and the all charges of attorneys and all costs and other expenses arising there from or incurred in connection therewith; and if any judgment shall be rendered against the College in any such action or actions, the Contractor, at its own expense, shall satisfy and discharge the same.

PERFORMANCE BONDS:

The successful bidder on this proposal must furnish a performance bond and a labor and material payment bond made out to Junior College District #525, prepared on an approved form, as security for the faithful performance of their contract, within ten (10) days of their notification that their bid has been accepted. The surety thereon must be such surety company or companies as are authorized and licensed to transact business in the State of Illinois and have an A-XIV best rating. Attorneys in fact who sign bid bonds must file with each bond a certified copy of their power of attorney to sign said bonds. The performance bond is an amount equal to one hundred and ten percent (110%) of the contract sum. Such bonds shall be in force from the date of signing of the contract until one year after issuing of final certificate of payment. The cost of the bonds shall be included in the bidder's proposal.

LAWS AND ORDINANCES:

In execution of the work, the Contractor shall comply with applicable state and local laws, ordinances and regulation, the rules and regulations of the Board of Fire Underwriters, and OSHA standards.

SEX OFFENDER REGISTRATION REQUIREMENT NOTIFICATION:

Illinois Compiled Statutes (730 ILCS 150/2) requires that any person who is required by law to register as a sex offender and who is either a student or an employee at an institution of higher education, must also register with the police department of the institution they are employed by or attending. For purposes of this act, a student or employee is defined as anyone working at or attending the institution for a period of five (5) days or an aggregate period of more than thirty (30) days during a calendar year. This includes persons operating as or employed by an outside contractor at the institution. Anyone meeting the above requirements is required to register at the Campus Police Department located in G1013, within five (5) days of enrolling or becoming employed. Persons failing to register are subject to criminal prosecution.

DAMAGE AND NEGLIGENCE:

The Contractor agrees to indemnify and save harmless the College and employees from and against all loss, including costs and attorney's fees, by reasons or liability imposed by law upon the College for damages because of bodily injury, including death at any time resulting therefrom, sustained by any person or persons or on account of damage to property including loss of use thereof as provided in the General Conditions and Supplementary Conditions.

College shall not be responsible for damages, delays, or failure to perform on its part resulting from acts or occurrences of force majeure. "Force majeure" means any (a) act of God, landslide, lightning, earthquake, hurricane, tornado, blizzard, floods and other adverse and inclement weather conditions; (b) fire, explosion, flood, acts of a public enemy, war, blockade, insurrection, riot or civil disturbance; (c) labor dispute, strike, work slow down, picketing, primary boycotts, secondary boycotts or boycotts of any kind and nature, or work stoppages; (d) any law, order, regulation ordinance, or requirement of any government or legal body or any representative of any such government or legal body; (e) inability to secure necessary materials, equipment, parts or other components of the project as a result of transportation difficulties, fuel or energy shortages, or acts or omission of any common carriers; or (f) any other similar cause or similar event beyond the reasonable control of College.

INVESTIGATION OF BIDDERS:

The College will make any necessary investigation to determine the ability of the bidder to fulfill the proposal requirements. Joliet Junior College reserves the right to reject any proposal if it is determined that the bidder is not properly qualified to carry out the obligation of the contract.

APPRENTICESHIP AND TRAINING PROGRAMS:

The bidder and all bidder's subcontractors must participate in applicable apprenticeship and training programs approved by and registered with the United States Department of Labor Bureau of Apprenticeship and Training. The apprenticeship and training programs(s) must be in the same trade in which the firm shall be performing work on behalf of the College under the Contract. This provision shall not apply to federally funded construction projects if, in the opinion of College, such application would jeopardize the receipt or use of federal funds in support of such project.

A STATEMENT TO THE ABOVE EFFECT HAS BEEN ADDED TO THE BID FORM. BIDDERS MUST BE A MEMBER OF AN APPROVED APPRENTICESHIP PROGRAM PRIOR TO BID OPENING ON THE PROJECT. FAILURE TO LIST REQUIRED INFORMATION MAY RESULT IN DISQUALIFICATION OF BID".

SUBCONTRACTORS:

Bidders must state on the proposal form all subcontractors he intends to use for this project. Failure to do so may be cause for rejection of bid.

PREVAILING WAGE RATE:

The successful bidder must pay not less than the prevailing hourly wage rate determined by the Illinois Department of Labor for the county where the contract is executed and the craft or type of worker needed to execute the contract. See the prevailing wage scale attached.

If, during the course of work under this contract, the Department of Labor revises the prevailing rate hourly wages to be paid under this contract for any trade or occupation, Owner, will notify Contractor and each Subcontractor of the changes in the prevailing rate of hourly wages. Contractor shall have the sole responsibility and duty to ensure that the revised prevailing rate of hourly wages is paid by contractor and all Subcontractors to each worker to whom a revised rate is applicable. Revisions to the prevailing wage as set forth above shall not result in an increase in the Contract Sum.

In compliance with the Office of the Attorney General the following is also required of all bidders:

Payment of Prevailing Wage:

- The Act requires that all laborers, workers and mechanics employed by or on behalf of a public body in the construction of public works be paid the general prevailing rate of hourly wages (including allotments for training and approved apprenticeship programs, health and welfare, insurance, vacation and pension benefits) for work of a similar character in the locality in which the work is performed. See 820 ILCS 103/3. The Act contains all relevant definitions, including those for the terms "public body", "public works" and "general prevailing rate of hourly wages", which will assist you in the understanding its requirements and your responsibilities. See 820 ILCS 130/2.
- The Illinois Department of Labor publishes the current prevailing wage rate. See http://www.state.il.us/agency/idol/rates/rates.htm. The rate is revised regularly and such revision takes effect immediately.

Specifications and Contractual Language:

- Public bodies must insert a provision or stipulation requiring the payment of the prevailing wage rate into every public works resolution or ordinance, call for bids, project specification and contract. See 820 ILCS 130/4(a).
- Contractors and subcontractors must insert a provision or stipulation regarding the payment of the prevailing wage rate into every public works project and bid specification, subcontract, and contractor's bond. See 820 ILCS 130/4(b), (c).
- Contractors or construction managers who have been awarded public works contracts must post the relevant prevailing wage rate(s) at a location on the project site that is easily

accessible by workers. See 820 ILCS 130/4(f).

Record-Keeping Responsibilities:

- All contractors and subcontractors must create and keep for at least three years, records of all laborers, mechanics, and other workers employed by them on a public works project. See 820 ILCS 130/5(a) (1).
- These records must include each worker's name, address, telephone number (if available), social security number, classification(s), hourly wages paid in each pay period, number of hours worked each day, and the starting and ending times of each work day. Each contractor and subcontractor is required to make these records available for inspection by the public body's agents or Illinois Department of Labor officials at a reasonable time and place upon seven business days notice. See 820 ILCS 130/5(a) (1), (b).

Certified Payroll Records:

- A contractor or subcontractor participating in a public works project must also submit a Certified Payroll the public body every month. This Certified Payroll must consist of a complete copy of the records required to be kept under Section 5(a)(1) of the Act, discussed above (with the exception of daily work starting and ending times). See 820 ILCS 130/5(a)(2).
- The monthly Certified Payroll shall also include a statement signed by the contractor or subcontractor submitting that: (1) the records re true and accurate; (2) the hourly rate paid to each worker is not less than the general prevailing wage rate required; and (3) the contractor or subcontractor is aware that filing a Certified Payroll that he or she knows to be false in a class B misdemeanor. See 820 ILCS 130/5(a)(2).
- The Act requires that a public body shall keep all Certified Payrolls submitted pursuant to the Act for at least three years. See 820 ILCS 130/5(a)(2). The retention of these monthly Certified Payroll submissions for three years by public bodies is crucial to the State of Illinois' efforts to enforce the Act and will be of particular interest to the Attorney General's office in the coming months.

Failure to comply with the Act's Requirements:

- No public works project may be instituted unless the provisions of the Act have been met. The Illinois Department of Labor is empowered to sue for injunctive relief against the awarding of any public works contract, or continuation of work under any such contract, if it is not in compliance with the Act's prerequisites. Contracts that are not in compliance with the Act's prerequisites are void as against public policy. See 820 ILCS 103/11.

Please note that this is not a complete list of all relevant requirements and prerequisites under the Act. All contractors and subcontractors rendering services under this contract must comply with all requirements of the Act, including but not limited to, all wage, notice and record keeping duties. For a full understanding of all of the Act's requirements and prerequisites, as well as the text of the Act and all related regulations, please see the Illinois Department of Labor's website at www.state.il.us/agency/idol/laws/Law130.htm.

BLACKOUT PERIOD:

After the College has advertised for bids, no pre-bid vendor shall contact any College officer(s) or employee(s) involved in the solicitation process, except for interpretation of bid specifications, clarification of bid submission requirements or any information pertaining to pre-bid conferences. Such bidders or sub-bidders making such request shall be made in writing at least seven (7) days prior to the date for receipt of bids. No vendor shall visit or contact any College officers or employees until after the bids are awarded, except in those instances when site inspection is a

prerequisite for the submission of a bid. During the black-out period, any such visitation, solicitation or sales call by any representative of a prospective vendor in violation of this provision may cause the disqualification of such bidder's response.

OTHER:

This contract is subject to and governed by the rules and regulations of the Illinois Human Rights Act. The Customer reserves the right to request additional information after your proposal has been submitted.

BID QUANTITIES:

The College Board will reserve the right to increase or decrease, within reasonable limits, such quantities as need requires and at the unit price stated.

BID AWARDS:

The successful contractor, and/or any contractor shall not proceed on this bid until it receives a purchase order from the college. Failure to comply is the risk of that contractor.

TERMINATION OF FUNDING:

JJC's contractual obligations will be subject to termination and cancellation without penalty, accelerated payment, or other recoupment mechanism as provided herein in any fiscal year for which the Illinois General Assembly or other legally applicable funding source fails to make an appropriation to make payments under the terms of this Contract. In the event of termination for lack of appropriation, the Vendor shall be paid for services performed under this Contract up to the effective date of termination. JJC shall give notice of such termination for funding as soon as practicable after JJC becomes aware of the failure of funding.

CHANGES TO CONTRACT AFTER BID AWARD:

There shall be no deviations from any work without a written change order. All change orders must be approved by the Director of Business & Auxiliary Services or Vice President of Administrative Services as well as executed by the successful contractor.

If a change order or aggregate of change orders are 10% or more of the contract price, and such change orders are not approved, in writing, by either the Director of Business & Auxiliary Services or Vice President of Administrative Services, the successful contractor shall not be entitled to any type of compensation for services or materials provided.

GENERAL:

Joliet Junior College is committed to a policy of non-discrimination on the basis of sex, handicap, race, color, and national or ethnic origin in the admission, employment, educational programs, and activities it operates. Inquiries should be addressed to the Director of Human Resources.

The contractor (or vendor) shall agree to save and hold harmless the Joliet Junior College District #525, the members of its College Board, its agents, servants and employees, from any and all actions or causes of action, or claim for damages, including the expense of defending suit, arising or growing out of the performance of, or failure to perform its contract.

Janice Reedus
Director of Business & Auxiliary Services

JOLIET JUNIOR COLLEGE
ILLINOIS COMMUNITY COLLEGE DISTRICT #525
(Business & Auxiliary Services)
1215 Houbolt Road
Joliet, Illinois 60431-8938
Telephone: (815) 280-6640
Fax: (815) 280-6631

INFORMATION PERTAINING TO OUR BIDS CAN BE FOUND AT THE FOLLOWING WEBSITE:
http://www.jjc.edu/info/purchasing

QUESTIONS PERTAINING TO OUR BIDS CAN BE EMAILED TO:
purchasing@jjc.edu

SCOPE OF WORK

1. Description of Work Included:

Except for those items (if any) specifically noted in the section below entitled "Work Excluded From This Bid Package", the work of this Bid Package shall INCLUDE, but is not necessarily limited to, all of the following:

a. All items of work required by, and/or specified in, those sections of the Specifications which are listed herein under Section **F** SPECIFICATIONS – Specific Sections.
b. All items of work related to the "Scope of Work", which are shown on the Drawings listed herein under Section **G** CONTRACT DRAWINGS.

Perform complete all **"Water Main Loop Extension"** and related work as required by and in accordance with the Conditions of Contract, Drawings, Specifications, and elaborations below. The Work shall include all labor, materials, equipment, and related items necessary to complete all of the work defined in the following specification sections, except for those noted exclusions or clarifications listed below.

The following "Specific Items to be Included" are related to those required by the above referenced documents and are to be provided under, and hereby form a part of, the Scope of Work of this Bid Package (Contract). Should any conflict exist between this written Scope of Work and any scope items implied by the above referenced documents, this Scope of Work shall govern.

1. **General Excavation Work:** Provide proper grading and maintenance of grades around the buildings so that the site will be drained at all times. Perform all excavating, grading and backfill work.
   a. Strip all topsoil (black dirt) for reuse.
   b. Include all proof-rolling. All sidewalks, concrete paving, slab-on-grade and roads, must be proof-rolled.
   c. Provide all site subgrade preparation in accordance with the drawings and specifications.
   d. Perform dewatering as required for the scope of this Trade Contractors work. Perform all Site Demolition Work in accordance with the contract documents and within OSHA requirements (which ever in stricter).
   e. Assume requirements for weather conditions in the base bid based upon the project schedule.
   f. Perform daily removal of debris and spoils from the project site. Provide protection of existing areas to remain during demolition and debris removal, and restore any existing finishes or items damaged during demolition. Exterior spaces affected are to be maintained daily in a broom swept condition inclusive of all travel routes to and from the site/areas of work.

2. **Site Demolition Work:** Perform complete all site demolition work, including but not limited to the removal and disposal of existing asphalt pavement, granular base / sub-base, concrete pavement, concrete walkways, curbs, tree and stump removal, etc. as required to complete the scope of this project. Demolition is to include removal and disposal. Include all saw cutting where items to be removed transition to existing finish surfaces.

3. **Site Utilities:** Furnish and install, all Water Main Work as indicated in the Contract Documents including, but not limited to, the following:

a. Trade Contractor shall provide a complete underground system including, piping, etc., as required. Provide utilities beginning 5' outside of building foundation. Temporarily cap pipe for future connections by Building Plumbing Contractor.
b. Trade Contractor shall provide excavation and fill for all new underground utilities, which include stone beds, and stone back fill, compaction, and grade restoration. Include all spoil removal on a daily basis. Disposal of spoils shall be offsite at an approved dumpsite.
c. Trade Contractor shall connect new water main to existing structures as shown on Contract Documents. Cutting and capping of existing water main, and switchover to new services must be coordinated with JJC Construction Manager as not to impact school operations.
d. Trade Contractor to provide and install all thrust blocking and stone beds as required.
e. All backfill shall be brought up to elevation as required on the Contract Documents. Trade Contractor understands that all existing parking lots and asphalt drives will be in use, and provisions must be made to backfill with stone and asphalt patch in a timely manner.
f. Where trenching is made in existing asphalt surfaces, this Trade Contractor is to provide asphalt patching in a timely manner.
g. Provide hand excavation, hand back filling and hand compaction as required.
h. Provide pumping and dewatering of all rain and ground water seepage as required to maintain Trade Contractor's progress and provide safe working conditions. Exploratory excavation for existing utilities and notification to utility companies is included. JULIE must be notified 72 hours before work starts.
i. This Trade Contractor shall provide cleaning, flushing and chlorinating of utility systems including coordination and scheduling with governing authorities.

4. **Paving & Site Concrete Work:** The scope of work includes, but is not limited to, the following items: Aggregate base course (CA-6 stone or per details), spread, proof roll and compact. Note it is this bidder's responsibility to review and coordinate with the full set of documents including but not limited to Civil Drawings for full scope of site concrete and paving work as it relates to this water main work.
   a. All required reinforcing steel
   b. Provide concrete control, expansion joints and sealant/joint filler as indicated on the Contract Documents
   c. Concrete slab on grade reinforcing WWF (or other slab on grade reinforcing as may be specified), as indicated on the Contract Documents.
   d. All concrete isolation and construction joints.
   e. Furnish and install all required vapor barrier, vapor retarders as shown, as specified. Comply with all manufacturers' recommendations regarding proper installation and necessary protection during installation.
   f. Comply with all 'Specifications, Special Provisions & General Notes' as listed on the drawings.
   g. Provide and install all necessary asphalt binder and surface work as shown.

   h. Include geotextile fabric if indicated in the Contract Documents.
   i. Backfill at all curbs, roads, parking areas, and pathways with suitable engineered fill to allow binder course install.
   j. This Trade Contractor shall proof-roll subgrade surface paving areas and curbs prior to paving as required by Owners testing agency. Prior to the placement of bituminous surface and binder course, this Trade Contractor shall verify that sub-base has been installed as per specifications. Ensure that compression and water content test are

approved by Owner's testing agencies. Provide watering to achieve required moisture contents for compaction as necessary.

k. Multiple mobilizations may be required to complete this scope of work.

l. Saw cutting is required to match existing surfaces, note that saw cutting, removal, and replacement of existing pavement beyond the limits of what may be denoted on the drawings in order to construct the items in this bid package is included and will not be an additional cost. Repairs necessitated by base settlement and improper installation of base and subsurface are the responsibility of this Trade Contractor.

m. Contractor shall maintain the site at the end of each day's work in such condition to drain adequately, preventing rainwater accumulation. Scope of work includes water removal during the duration of the contract to ensure the above results.

5. **Erosion Control:** Soil erosion means including, but not limited to, silt fence, silt settlement basins, straw bales, etc. shall be furnished, installed, and maintained by this Trade Contractor. Silt fence shall be recessed into the existing grade a minimum of 6 inches. Silt fence shall be maintained (weekly) by this Trade in accordance with all state, IEPA regulations and requirements; any required patching and or replacement shall be furnished and installed by this Trade Contractor. The silt fence will be left in place, until permanent ground cover is established, removal and is included in the Contract. Furnish and install silt screening in all manholes and catch basins; provide straw bales as required to prevent silts from entering manholes, catch basins, inlets, etc. Provide all soil erosion control measures as shown, as required by local jurisdiction. Obtain all necessary IL-EPA, SWPPP, NPDES, etc. required permits. Include all cost for a weekly inspection and to maintain these measures for the duration of the project. Comply with all specifications, general notes, and details. The silt fence and inlet protection for the existing sewers will need to be installed immediately upon mobilization. The inlet protection for the new utility work will follow the new site utility installation. A gap between these two activities should be anticipated. Include all silt fence and protection measures shown on the Contract Documents, including silt fence shown on the site logistics plan. It is mandatory that all required inspections and maintenance be completed by this Trade Contractor. Failure to maintain, repair, place and install storm water protection measures which results in action by the IEPA or other governing authority will be the responsibility of this Trade Contractor including all remediation, penalties, and signing of all required documents.

6. **General Provisions**

a. Apply for and secure approval for all required regulatory building permits, however, the Owner will pay the building permit fees directly. The Trade Contractor is to identify to the JJC Construction Manager the amount of the permit fee, and the regulatory agencies contact information for fee payment. The Owner will be responsible for the general building permit. In addition, this Trade Contractor shall obtain and pay directly for all other required fees and licensures. All required regulatory inspections shall be the responsibility of this Trade Contractor to schedule and complete, but will be scheduled through the JJC Construction Manager only; provide the JJC Construction Manager with copies of all permit related paper work.

b. Investigate and mark all underground utilities and building utilities including, but not limited to, having the site marked by J-U-L-I-E. J-U-L-I-E will mark public utilities only. This site has private utilities as well, which J-U-L-I-E will not mark. Proceed with work in such fashion so as not to disrupt or damage existing utilities to remain. This Trade Contractor shall perform its work in the least disturbing fashion given that

the location is on an operating campus. Noise and vibrations shall be kept to a minimum. Provide dust mitigation means to prevent the creation and travel of airborne dust particles. The travel of dust, dirt and debris into occupied spaces is not acceptable. Clean up will be performed by this Trade on a daily basis. All roads traveled by the operations of this Trade shall be cleaned of dust, dirt, debris and mud (mechanically broom swept) continuously and at a minimum on a daily basis. Joliet Junior College employs its own site utility location employees. Consult with the JJC Construction Manager for this service.

c. Flagman and barricades for safety protection of Excavation, Utilities & Site Demolition Work is the sole responsibility of this Trade Contractor. Safety fencing around excavations is the responsibility of this Trade Contractor.

d. Notify the JJC Construction Manager 24 hours in advance of any work that will require special inspection services (i.e.: construction testing), (excavating, proof rolling, back fill, etc.).

e. All layout is the responsibility of this Trade Contractor to provide for the work of this bid package. All survey work must be performed by an Illinois Licensed Surveyor.

f. Furnish and install all required bedding and back fill material as shown and as specified. Comply with all compaction requirements as specified.

g. Comply with all specification requirements listed on the applicable civil drawings.

h. All material to be stockpiled on site must be reviewed and approved by the JJC Construction Manager prior to placement. Failure to comply with this may result in added rework to move materials to an alternate location as directed by the JJC Construction Manager.

i. Provide all required backfill and placement/compaction of subgrade stone for any utility trench areas that fall under new or existing roadway or parking lot areas.

j. Provide all necessary equipment or other means to place water as needed to obtain required compaction at all areas of the site. Comply with all 'Specifications, Special Provisions & General Notes' as listed on the drawings.

k. Provide all layout and required survey for all excavation work performed as part of this contract. Baseline control will be provided by others prior to start of work.

l. Trade Contractor is responsible for disposal of all waste generated as part of this contract scope of work. Provide your own dumpsters and daily clean-up of all debris as required.

m. Provide all necessary flushing and testing for the water main turnover. Include cost for multiple events as may be required by the AHJ or to coordinate final connections by the plumbing contractor. Include cost for any temporary piping that may be necessary to manage water flow away from the construction site or public roadways during testing or flushing.

GENERAL REQUIREMENTS

1. Provide a temporary toilet with weekly service for the duration of this project.
2. This trade contractor shall protect all adjacent areas of work. Remove protection after completion of work of this bid package and repair all damaged areas as necessary and required. See Section 02920 for lawn restoration.
3. Due to the ongoing school activities this Trade Contractor shall make arrangements with the JJC Construction Manager for any storage provisions prior to mobilization. Onsite storage must be coordinated with JJC Construction Manager. All areas disturbed by the action of the Trade Contractor shall be returned to their original condition at no additional expense to the owner.
4. Should the Plans or Specifications disagree in themselves or with each other, the Trade Contractor shall provide the better quality or greater quantity of work and/or materials unless otherwise directed by written addendum to the contract.

5. Each Trade Contractor shall field verify all existing conditions as required prior to commencing of work and shall make whatever modifications necessary to facilitate the installation of new work. Trade Contractors shall immediately notify the JJC Construction Manager in writing of his findings, especially upon finding unsatisfactory conditions that may affect his work and the quality of the work of others.
6. This Trade Contractor shall be responsible to maintain an accurate record of deviation and changes in the work and reasons thereof. The JJC Construction Manager will review the status of these documents on a monthly basis. Failure on the part of the Trade Contractor to maintain the As-Built Documents will be cause to reject the Trade Contractor's monthly payment request in part or in total until the condition is corrected and the record documents are updated to reflect site conditions.
7. Securely cover and tie down all materials nightly or when high winds are forecast to prevent damage and wind-blown debris.
8. All abatement of hazardous materials (if and where applicable) will be conducted by the owner. The Trade Contractor must notify the JJC Construction Manager immediately about any suspect material.
9. The Owner has employed a testing agency for this project. This Trade Contractor shall conform to all testing requirements as identified within the Contract Documents. The Trade Contractor shall provide 48 hour notice to the JJC Construction Manager prior to date testing agency needs to be on site to perform tests.
10. In addition to the requirements for safety defined in the Conditions of Contract and the Safety Plan, the Trade Contractor shall submit within two weeks of Notice to Proceed a detailed safety plan defining its intentions and procedures to be used on the project to comply with all requirements of OSHA and Project Safety Program, including work rules, fall protection, hoisting procedures, protection of other trades and finished materials, etc.
11. This Trade Contractor must include all costs necessary to address the requirements of the Safety Plan.
12. This Trade Contractor is required to fill out a JJC Construction Manager daily report and turn in to JJC Construction Superintendent by 9:00AM the following work day.
13. This Trade Contractor shall coordinate with the JJC Construction Manager the delivery, storage, and handling for all materials consistent with the Site Logistics Plan. This requirement shall include all mats which may be required for equipment movement on-site under wet conditions, foul weather or poor soil conditions.

The above listed items are not intended to be an all-inclusive listing of the specified Contract Scope of Work, but are merely to highlight the major items of work.

SPECIFIC ITEMS TO BE EXCLUDED

The following specific item(s) of work contained in the above referenced documents are EXCLUDED from the work of this Bid Package (Contract):
None

A. UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. ALL Unit Prices submitted shall be complete in-place prices and include all costs for overhead, profit, bond costs, labor, materials, equipment, engineering, shop drawings and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract. Provide the information requested in the unit prices section of the bid form.

B. ALTERNATE PRICES

An Alternate Price shall include all costs associated with the changes, omissions, additions or other adjustments to the Work of this Bid Package (Contract), which are described in the Alternate, or are reasonably inferable there from. Claims for extras resulting from changes caused by the acceptance or rejection of any Alternate will not be allowed. Alternate prices shall also include all costs of overhead, profit and bond costs associated with the work of the Alternate, whether additive or deductive.

The Drawings, Specifications and other Contract Documents shall be considered appropriately modified by either the acceptance or rejection of the various Alternates. The Owner and the JJC Construction Manager expressly reserve the right to accept or reject any, or all, Alternate Prices, and in any sequence. If any combination of alternates is accepted, the work identified must be completed within the time periods provided.

Alternates:
1. Provide and install (1) additional fire hydrant. Location along the new water main to be determined.

C. COST ALLOWANCES

The Bidder includes the following Cost Allowances in the total Lump Sum Amount of the Base Bid for this Bid Package. See General Conditions for definition of Allowances.

The Trade Contractor must include the cost of the allowances in the Base Bid. The Base Bid cost of this package should include the appropriate mark-up on the allowances. All work completed under the allowance will be paid at cost since the mark-up is incorporated in the base bid. Trade Contractors are not entitled to any unspent balance.

Cost Allowances:

1 General Allowance: **$15,000.00**

D. COST AND QUANTITY BREAKDOWN

In order to properly evaluate the Proposal, provide the requested information in the cost breakdown section of the bid form. The Scope of Work to be awarded will not be influenced by the cost and quantity information requested here. Do NOT include the cost of any alternates in base bid or in the following information. Cost and quantity breakdown shall include all related work to the subject category.

E. MILESTONE SCHEDULE DATES

	Start	Finish
Bid Release - Bid Period	4/16/2015	5/12/2015
Bids Due	5/12/2015	5/12/2015
Board Approval, Contracting, Insurance, Bonds, etc.	6/9/2015	6/9/2015
Mobilize	7/6/2015	7/6/2015
Install Watermain	7/6/2015	7/21/2015
Substantial Completion	7/21/2015	7/21/2015
Closeout	7/21/2015	8/26/2015
Final Completion	8/12/2015	8/26/2015
The dates reflected in this milestone schedule reference dates that require approval of shop drawings and submittals in advance.		

F. SPECIFICATIONS

Specific Specification Sections		
Number	**Title**	**Date**
	Sub-Surface Exploratory Geo-Technical Report: ECS Report	Jan 29, 2015
02231	Tree Protection and Trimming	March 27, 2015
02300	Earthwork	March 27, 2015
02510	Water Distribution	March 23, 2015
02741	Hot Mix Asphalt Paving	March 23, 2015
02751	Cement Concrete Pavement	March 23, 2015
02920	Lawns and Grasses	March 23, 2015

SECTION 02231

TREE PROTECTION AND TRIMMING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, Division 2 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the protection and trimming of existing trees that interfere with, or are affected by, execution of the Work, whether temporary or permanent construction.

B. Related Sections include the following:
   1. Division 2 Section "Earthwork" for building and utility trench excavation, backfilling, compacting and grading requirements, and soil materials.

1.3 DEFINITIONS

A. Tree Protection Zone: Area surrounding individual trees or groups of trees to remain during construction, and defined by the drip line of individual trees or the perimeter drip line of groups of trees, unless otherwise indicated.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Tree Pruning Schedule: Written schedule from arborist detailing scope and extent of pruning of trees to remain that interfere with or are affected by construction.

C. Qualification Data: For tree service firm and arborist.

D. Certification: From arborist, certifying that trees indicated to remain have been protected during construction according to recognized standards and that trees were promptly and properly treated and repaired when damaged.

E. Maintenance Recommendations: From arborist, for care and protection of trees affected by construction during and after completing the Work.

1.5 QUALITY ASSURANCE

A. Revise or delete first paragraph below if not required or available at Project location.

B. Tree Service Firm Qualifications: An experienced tree service firm that has successfully completed tree protection and trimming work similar to that required for this Project and that will assign an experienced, qualified arborist to Project site during execution of tree protection and trimming.

C. Arborist Qualifications: An arborist certified by ISA or licensed in the jurisdiction where Project is located.

D. Tree Pruning Standard: Comply with ANSI A300 (Part 1), "Tree, Shrub, and Other Woody Plant Maintenance--Standard Practices (Pruning)."

E. Preinstallation Conference: Conduct conference at Project site to comply with contract requirements.

1. Before tree protection and trimming operations begin, meet with representatives of authorities having jurisdiction, Owner, Architect, consultants, and other concerned entities to review tree protection and trimming procedures and responsibilities.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Topsoil: Natural or cultivated surface-soil layer containing organic matter and sand, silt, and clay particles; friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of weeds, roots, and toxic and other nonsoil materials.

1. Obtain topsoil only from well-drained sites where topsoil is 4 inches deep or more; do not obtain from bogs or marshes.

B. Filter Fabric: Manufacturer's standard, nonwoven, pervious, geotextile fabric of polypropylene, nylon, or polyester fibers.

C. Chain-Link Fence: Metallic-coated steel chain-link fence fabric of 0.120-inch- diameter wire; a minimum of 48 inches high; with 1.9-inch- diameter line posts; 2-3/8-inch- diameter terminal and corner posts; 1-5/8-inch- diameter top rail; and 0.177-inch- diameter bottom tension wire; with tie wires, hog ring ties, and other accessories for a complete fence system.

D. Organic Mulch: Wood and bark chips, free of deleterious materials.

PART 3 - EXECUTION

3.1 PREPARATION

A. Temporary Fencing: Install temporary fencing around tree protection zones to protect remaining trees and vegetation from construction damage. Maintain temporary fence and remove when construction is complete.

1. Install chain-link fence according to ASTM F 567 and manufacturer's written instructions.

B. Protect tree root systems from damage caused by runoff or spillage of noxious materials while mixing, placing, or storing construction materials. Protect root systems from ponding, eroding, or excessive wetting caused by dewatering operations.

C. Mulch areas inside tree protection zones and other areas indicated.

1. Apply 2-inch average thickness of organic mulch. Do not place mulch within 6 inches of tree trunks.

D. Do not store construction materials, debris, or excavated material inside tree protection zones. Do not permit vehicles or foot traffic within tree protection zones; prevent soil compaction over root systems.

E. Maintain tree protection zones free of weeds and trash.

F. Do not allow fires within tree protection zones.

3.2 EXCAVATION

A. Install shoring or other protective support systems to minimize sloping or benching of excavations.

B. Do not excavate within tree protection zones, unless otherwise indicated.

C. Where excavation for new construction is required within tree protection zones, hand clear and excavate to minimize damage to root systems. Use narrow-tine spading forks and comb soil to expose roots.

1. Redirect roots in backfill areas where possible. If encountering large, main lateral roots, expose roots beyond excavation limits as required to bend and redirect them without breaking. If encountered immediately adjacent to location of new construction and redirection is not practical, cut roots approximately 3 inches back from new construction.
2. Do not allow exposed roots to dry out before placing permanent backfill. Provide temporary earth cover or pack with peat moss and wrap with burlap. Water and maintain in a moist condition. Temporarily support and protect roots from damage until they are permanently relocated and covered with soil.

D. Where utility trenches are required within tree protection zones, tunnel under or around roots by drilling, auger boring, pipe jacking, or digging by hand.

1. Root Pruning: Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities. Cut roots with sharp pruning instruments; do not break or chop.

3.3 REGRADING

A. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade beyond tree protection zones. Maintain existing grades within tree protection zones.

B. Grade Lowering: Where new finish grade is indicated below existing grade around trees, slope grade away from trees as recommended by arborist, unless otherwise indicated.

1. Root Pruning: Prune tree roots exposed during grade lowering. Do not cut main lateral roots or taproots; cut only smaller roots. Cut roots with sharp pruning instruments; do not break or chop.

C. Minor Fill: Where existing grade is 6 inches or less below elevation of finish grade, fill with topsoil. Place topsoil in a single uncompacted layer and hand grade to required finish elevations.

D. Moderate Fill: Where existing grade is more than 6 inches but less than 12 inches below elevation of finish grade, place drainage fill, filter fabric, and topsoil on existing grade as follows:

1. Carefully place drainage fill against tree trunk approximately 2 inches above elevation of finish grade and extend not less than 18 inches from tree trunk on all sides. For balance of area within drip-line perimeter, place drainage fill up to 6 inches below elevation of grade.
2. Place filter fabric with edges overlapping 6 inches minimum.
3. Place fill layer of topsoil to finish grade. Do not compact drainage fill or topsoil. Hand grade to required finish elevations.

3.4 TREE PRUNING

A. Prune trees to remain that are affected by temporary and permanent construction.

B. Prune trees to remain to compensate for root loss caused by damaging or cutting root system. Provide subsequent maintenance during Contract period as recommended by arborist.

C. Pruning Standards: Prune trees according to ANSI A300 (Part 1).

1. Type of Pruning: Thinning.

D. Cut branches with sharp pruning instruments; do not break or chop.

E. Chip removed tree branches and spread over areas identified by Construction Manager.

3.5 TREE REPAIR AND REPLACEMENT

A. Promptly repair trees damaged by construction operations within 24 hours. Treat damaged trunks, limbs, and roots according to arborist's written instructions.

B. Aerate surface soil, compacted during construction, 10 feet beyond drip line and no closer than 36 inches to tree trunk. Drill 2-inch- diameter holes a minimum of 12 inches deep at 24 inches o.c. Backfill holes with an equal mix of augered soil and sand.

3.6 DISPOSAL OF WASTE MATERIALS

A. Burning is not permitted.

B. Disposal: Remove excess excavated material and displaced trees from Owner's property.

END OF SECTION 02231

SECTION 02300

EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Visit the site and examine all conditions that may affect the scope of work.

B. Take necessary precautions to prevent blocking of sewers, filling of ditches and washing of earth onto existing pavement during heavy rains. After heavy rains promptly cleanup any debris and sedimentations that may have occurred, or might be damaging to sewers, ditches, and pavements.

C. Comply with all local ordinances relative to erosion control. The contractor is responsible to follow any permit required under the National Pollution Discharge Elimination System (NPDES) from the Illinois Environmental Protection Agency, Division of Water Pollution Control.

D. Topographic and property surveys giving lot size, ground elevations, obstructions on site, locations and depths of sewers, conduits, pipes, existing structures, curbs, pavements, and tracts have been obtained from reliable sources. The accuracy of this data is not guaranteed, and is furnished solely as an accommodation to the Contractor. No additional compensation will be granted due to the Contractor's lack of knowledge of site conditions. Prior to bid submission, conduct any additional surveys and soil test you may deem necessary to verify the accuracy of the information provided. Additional surveys and tests made by the Contractor shall be made at no cost to the Owner.

1.2 WORK INCLUDES

A. Base Bid:

1. General Contractor provide:

   a. Excavation for utility trench (watermain).
   b. Preparing and grading subgrades for walks and pavements.
   c. Cut and fill as necessary to provide finish grading at new paved and unpaved areas shown on the drawings.
   d. Backfilling and compaction.
   e. Subbase course for walks and pavements.
   f. Spreading of topsoil on all unpaved and disturbed areas.

1.3 RELATED WORK

A. Specified Elsewhere:
1. Section 02741 - Bituminous Concrete Paving
2. Section 02751 - Portland Cement Concrete Paving

1.4 REFERENCES

A. ASTM D698 - Standard Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb. Rammer and 12" Drop.

B. ASTM D1556 - Standard Test Method for Density of Soil in Place by the Sand-Cone Method.

C. ASTM D2167 - Standard Test Method for Density and Unit Weight of Soil in Place by the Rubber Balloon Method.

D. ASTM D2487 - Standard Test Method for Classification of Soils for Engineering Purposes.

E. ASTM D2922 - Standard Test Methods for Moisture Content of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

F. State of Illinois Dept of Transportation (IDOT) - Standard Specification for Road and Bridge Construction, latest edition.

G. FS Q-P-166E - Peat, Moss; Peat, Humus; and Peat, Reedsedge; 1961.

1.5 DEFINITIONS

A. Excavation: Consists of the removal of material encountered to subgrade elevations and the reuse or disposal of materials removed.

B. Subgrade: The uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.

C. Subbase course: The layer placed between the subgrade and base course in a paving system or the layer placed between the subgrade and surface of a pavement or walk.

D. Base course: The layer placed between the subbase and surface pavement in a paving system.

E. Unauthorized excavation: Consists of removing materials beyond indicated subgrade elevations or dimensions without direction by the Construction Manager. Unauthorized excavation, as well as remedial work directed by the Construction Manager, shall be at the Contractor's expense.

F. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below ground surface.

G. Utilities: Include on-site underground pipes, conduits, ducts, and cables, as well as underground services within building lines.

1.6 SUBMITTALS

A. Test Reports: Submit test reports for all fill materials to be installed below the soil materials and the area of intended use. A separate submittal of test reports is required for each new source of material.

B. Filter fabric: Provide product data and 12" x 12" sample.

C. Test Report on Fill Material: Prior to filling operations, submit an engineering report of the material to be used for fill, which includes a Standard Proctor Compaction Test (ASTM D698) and an engineer's recommendation for proper method of compaction for the fill material to be followed by the contractor during the filling operation.

D. Product Certification: Submit certificates of inspection as may be required by governing authorities to accompany shipments. For standard products submit manufacturer's certified analysis. For other materials submit analysis by a recognized laboratory, made in accordance with methods established by the Association of Official Agricultural Chemists wherever applicable.

E. Topsoil Analysis Report: Submit soil analysis report for proposed new topsoil.

1. Before delivery of topsoil, furnish to the Construction Manager a written statement giving location of properties from which topsoil is to be obtained, names and addresses of Owners, depth to be stripped, and crops grown during past two years.

2. Before delivery of topsoil, furnish to the Construction Manager a soil analysis made by an acceptable soil testing laboratory, stating percentages of silt, clay, sand, and organic matter; soil pH; mineral content; and plant nutrient content of topsoil. In soil analysis report, indicate suitability of topsoil for indicated use. If not suitable, state recommended quantities for nitrogen, phosphorus, and potash; and any limestone, aluminum sulfate, or other soil amendments to be added to make topsoil suitable.

1.7 QUALITY ASSURANCE

A. Perform excavation work in compliance with applicable requirements of Federal and State codes and standards.

B. IDOT Standard Specifications.

C. Contractor shall employ a qualified independent geotechnical engineering testing agency to classify proposed on-site and borrow soils to verify that soils comply with specified requirements and to perform the following.

1. Laboratory preparation of standard proctor for fill materials.
2. Verify existing bearing capacities.
3. Test for compaction of installed fill material.

1.8 JOB CONDITIONS

A. Existing Utilities

1. Locate existing underground utilities in the area of work. When utilities are to remain in place, provide adequate means of protection during earthwork operations.
2. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult the Construction Manager and the Owner in writing for resolution.

B. Bring to the attention of the Construction Manager in writing, any unnoted structural conditions or existing conditions.

C. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, except when permitted in writing by Construction Manager, and then only after acceptable temporary utility services have been provided.

D. Site soils are moisture sensitive and subject to significant deterioration if prematurely exposed or overworked with construction equipment.

E. Certain soils or weather conditions may preclude or require the limitation of the use of certain types of heavy earthmoving equipment.

F. Correction of soil deterioration caused by contractor means/methods and/or scheduling will be considered incidental to the work and will not be subject to contract cost or time adjustment by Change Order.

G. Protection of Persons or Property: Barricade open excavations with suitable fencing to prevent entry.

H. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining, washout and other hazards created by earthwork operations.

I. Dispose of excess and unsuitable excavated material off-site on the adjacent property as designated on the plans.

J. Protect downstream properties from materials deposited by storm water run-off.

PART 2 - PRODUCTS

2.1 BACKFILL AND FILL MATERIALS AT BUILDING SITE

A. Sand: Fine aggregate materials meeting the requirements of IDOT Grade FA-6 of Section 703 of the Standard Specifications.

B. Borrow Material: Silty clay, a native material from the project site that is free of grass, roots, and vegetation. It shall not contain topsoil or muck.

C. Pavement Base Material: Crushed stone Coarse Aggregate Gradation IDOT CA.

D. Structural Fill: Subbase or base soil material with 70% maximum silt tested according to ASTM D-422 and free of all organic material or rocks.

E. Mass backfill material: Gravel or uniformly graded crushed stone.

F. Drainage fill: Washed, evenly graded mixture of crushed stone, or crushed or uncrushed gravel, ASTM D448, coarse aggregate grading size 57, with 100% passing a 1-1/2" sieve and not more than 5% passing a No. 8 sieve.

G. Filter fabric: Manufacturer's standard nonwoven pervious geotextile fabric of polypropylene, nylon or polyester fibers, or a combination. Tensile strength: 100 lb. Apparent opening size: #100 US Standard Sieve. Permeability: 150 gpm per sq. ft.

H. Flowable Fill: Water, Portland cement and fine aggregate mixed according to IDOT special provisions for controlled low-strength material, 28 day compressive strength is 100 min, 500 maximum verified by laboratory tests by Contractor.

2.2 TOPSOIL

A. Topsoil at Site: Verify suitability and quantity of topsoil stockpiled at site. If sufficient quantities of suitable topsoil are not available at site, provide additional topsoil as required to complete landscape work.

B. Acceptable topsoil: Includes selectively excavated material that is representative of soils in the vicinity that produce heavy growths of crop, grass or other vegetation and is reasonably free of underlying subsoil, clay lumps, objectionable weeds, litter, brush, matted roots, toxic substances, or any material that might be harmful to plant growth or be a hindrance to grading, plant or maintenance operation. Topsoil shall not contain stones, stumps, and other objects larger than 2" in any dimension for lawn areas. Topsoil shall be acceptable to Construction Manager prior to beginning finish grading work.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine the areas and conditions under which excavating, filling and grading are to be performed and notify the Construction Manager in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been resolved.

B. Protect structures, utilities, sidewalks, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

C. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

D. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding project site and surrounding area.

E. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.

3.2 EXCAVATION

A. The areas indicated for grading shall be cut to the elevations and contours shown. Useable topsoil shall be stripped and stockpiled for reuse. The final grade in unpaved areas shall have a minimum of 6" of topsoil. All areas, once stripped either for fill or for subgrade, shall be proof-rolled with loaded trucks to detect localized weak subgrades.

B. Classified excavation: Excavation is classified and includes excavation to required subgrade elevations. Excavation will be classified as earth excavation or rock excavation as follows:

1. Earth excavation includes excavation of pavements and other obstructions visible on surface; underground structures, utilities, and other items indicated to be demolished and removed; together with soil and other materials encountered that are not classified as rock or unauthorized excavation.
2. Rock excavation includes removal and disposal of rock material and obstructions encountered that cannot be removed by heavy-duty rock excavating equipment without systematic drilling, blasting, or ripping.
    a. Rock material includes boulders 1/2 cubic yard or more in volume and rock in beds, ledges, unstratified masses, and conglomerate deposits.
    b. Rock excavation, when encountered, will be paid by unit prices included in the Contract Documents or by Change Order. Do not excavate rock until it has been classified and authorized by Construction Manager.

C. Stability of excavations: Comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations.

D. Excavation for walks and pavements: Excavate surfaces under walks and pavements to indicated cross sections, elevations, and grades.

E. Excavation for utility trenches:

1. Excavate trenches to indicated slopes, lines, depths, and invert elevations.
2. Excavate trenches to uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12" higher than top of pipe or conduit, unless otherwise indicated.
3. Trench bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove stones and sharp objects to avoid point loading.

F. Approval of subgrade: Notify Construction Manager when excavations have reached required subgrade. When Construction Manager determines that unforeseen unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by the Construction Manager.

G. Unauthorized excavation: Fill unauthorized excavation under foundations or wall footings by extending indicated bottom elevation of concrete foundation or footing to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position when acceptable to the Construction Manager. Fill unauthorized excavations under other construction as directed by the Construction Manager.

H. Unsuitable Soil Materials Removal: When dry compacted suitable bearing soil for footings is not encountered at depth indicated on drawings, immediately notify Construction Manager; do not proceed until an acceptable solution has been determined.

I. Cold Weather Protection: Protect excavation bottoms against freezing when atmospheric temperature is below 35° F.

3.3 STORAGE OF SOIL MATERIALS

A. Stockpile excavated materials acceptable for backfill and fill soil materials, including acceptable borrow materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.4 BACKFILL

A. Place acceptable soil material in layers to specified subgrade elevations, for each area classification listed below.

1. Under grassed areas, use satisfactory excavated or fill material from the site and final 6" layer of topsoil.
2. Under walks use trench backfill or fill material.
3. Under paved areas use fill material.

B. Backfill excavations promptly, but not before completing the following:

1. Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, and perimeter insulation.
2. Surveying locations of underground utilities for record documents.
3. Testing, inspecting, and approval of underground utilities.
4. Concrete formwork removal.
5. Removal of trash and debris from excavation.
6. Removal of temporary shoring and bracing, and sheeting.
7. Installing permanent or temporary horizontal bracing on vertical supported walls.

C. Placement and Compaction:

1. Place backfill and fill material in layers not exceeding 8" in loose depth for material compacted by heavy compaction equipment, and not exceeding 4" in loose depth for material compacted by hand-operated tampers.
2. Place backfill and fill materials evenly adjacent to structures, to specified elevations; prevent wedging action of backfill against structures by carrying material uniformly around structure to approximately same elevation in each lift.

D. Moisture Control:

1. Before compaction, moisten or aerate each layer to provide optimum moisture content; compact each layer to specified percentage of maximum dry density or relative dry density for each area classification.
2. Do not place backfill material on muddy, frozen, frosted, or iced surfaces.

E. Lime Modification:

1. Lime modification of some subgrade material in the building and paving areas may be allowed. All work shall be done in accordance with the IDOT Standard Specifications, Section 658 with the exception that the mixture composition will be as follows: Lime will be proportioned at a mixture rate of 5% of line to soil (over-dry basis). Also the basis for payment shall be as detailed below in item 2.
2. Limits of lime modification will be determined at the time of construction, and may vary with field conditions. The change to the project cost shall be by change orders.

F. Utility trench backfill:

1. Place and compact bedding course on rock and other unyielding bearing surfaces and to fill unauthorized excavations. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
2. Concrete backfill trenches that carry below or pass under footings and that are excavated within 18" of footings. Place concrete to level of bottom of footings.
3. Place and compact initial backfill of satisfactory soil material or subbase material, free of particles larger than 1", to a height of 12" over the utility pipe or conduit. Carefully compact material under pipe haunches and bring backfill evenly up on both sides and along the full length of utility piping or conduit to avoid damage or displacement of utility system.
4. Coordinate backfilling with utilities testing. Fill voids with approved backfill materials as shoring and bracing, and sheeting is removed. Place and compact final backfill material of satisfactory soil material to final subgrade.

3.5 FILL

A. Preparation: Remove vegetation, topsoil, debris, wet, and unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placing fills.

1. Scarify or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing surface.
2. When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface to depth required, pulverize, moisture-condition or aerate soil and recompact to required density.

B. Place fill material in layers to required elevations for each location listed below.

1. Under grass, use satisfactory excavated or borrow soil material with 6" of topsoil at the surface.
2. Under walks and pavements, use excavated structural fill.
3. Under building slabs, use excavated structural fill.
4. For backfilling use borrow material.
5. Under footings and foundations, use structural fill.

C. Flowable fill: In tight locations below foundations use flowable fill as shown on the drawings.

3.6 MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill layer before compaction to within 2% of optimum moisture content. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice. Remove and replace, or scarify and air-dry satisfactory soil material that is too wet to compact to specified density.

3.7 COMPACTION

A. Place backfill and fill materials in layers not more than 8" in loose depth for material compacted by heavy compaction equipment, and not more than 4" in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill materials evenly on all sides of structures to required elevations. Place backfill and fill uniformly along the full length of each structure. Carry material uniformly on both sides of the wall to approximately the same elevation in each lift.

C. Control soil compaction during construction, providing minimum percentage of dry density specified for each area classification. Dry density is determined by a Standard Proctor Test, ASTM D698.

D. Prior to any filling or after cutting to proper subgrade elevations, the entire area outside the building area shall be disced to a depth of 8" and recompacted using a sheepsfoot roller or other appropriate equipment.

1. Lawn or unpaved areas: Compact top 8" of subgrade and each 12" layer of backfill or fill material at average 90% maximum dry density.
2. Paved areas: Compact top 8" of subgrade and each 8" layer of backfill or fill material at average 95% maximum dry density.
3. Walkways: Compact top 6" of subgrade and each layer of backfill or fill material at average 95% maximum dry density.
4. Building structure areas: Compact top 8" of subgrade and each 8" layer of fill material at average 98% maximum dry density.
5. Building slabs: Compact top 8" of subgrade and each 8" layer of backfill or fill material at average 98% maximum dry density.

3.8 GRADING

A. Subsoil Preparation:

1. Eliminate uneven and depressed areas. Remove any debris, roots, branches, stones, and gravel in excess of 1/2” in size. Remove subsoil contaminated with petroleum products.
2. Scarify subgrade to a depth of 12" where topsoil is scheduled. Scarify all areas where equipment has compacted subsoil.

B. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated. Provide a smooth transition between existing adjacent grades and new grades. Cut out soft spots, fill low spots, and trim high spots to conform to required surface tolerances.

C. Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding. Finish surfaces free from irregular surface changes, within not more than 0.10' above or below the required finish elevations. Topsoil to be in minimum depth of 6". Topsoil finish grade shall be in accordance with type of surface treatment.

D. Grading Surface of Fill: Grade smooth and even, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1".

E. Topsoil:

1. Provide acceptable topsoil level to grade and place in areas where seeding or sodding is scheduled.
2. Install topsoil during favorable weather conditions. Topsoil and installation area must be relatively dry.
3. Place topsoil over all backfill trenches, excavations and disturbed areas that are not scheduled for paving.
4. Place topsoil to a minimum depth of 6".

F. Site grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Lawn or unpaved areas: + .10'.
2. Walks: + .10'.
3. Pavements: + 1/2".
4. Grading inside building lines: Finish subgrade to a tolerance of 1/2" when tested with a 10' straightedge.

G. Finish Grading:

1. Mechanically cultivate and fine grade topsoil eliminating rough, uneven, or depressed areas. Maintain levels, profiles and contours of subgrade.

    a. Finished grade shall provide positive drainage away from buildings at all times and shall prevent pooling or puddling of water at any/all locations.
    b. Finished grade tolerance shall be + 1".
    c. Finished grade to be level, firm and sufficient to prevent areas from settling when irrigation is applied.
    d. Cultivate inaccessible areas by hand. Rake until surface is smooth.

2. Remove stones, roots, grass, weeds, debris and foreign materials while grading. Do not bury foreign materials.

3.9 SUBBASE AND BASE COURSES AND AGGREGATE PAVEMENT

A. Proof roll building site and parking lots prior to fill operations with a loaded dump truck. The Owner’s soils engineer will examine for soft areas that will need to be removed. The cost of correcting unstable soil conditions shall be adjusted by change order.

B. Under pavements and walks, place subbase course material on prepared subgrades. Place base course material over subbases to pavements.

C. Compact subbase and base courses at optimum moisture content to required grades, lines, cross sections and thickness to not less than 100% of standard dry density. Shape subbase and base to required crown elevations and cross-slope grades. When thickness of compacted subbase or base course is 6" or less, place materials in a single layer. When thickness of compacted subbase or base course exceeds 6", place materials in equal layers, with no layer more than 6" thick or less than 3" thick when compacted.

D. All aggregate pavement shall be treated with liquid calcium chloride as soon as it is installed and compacted.

3.10 DRAINAGE FILL

A. Under slabs-on-grade, place drainage fill course on prepared subgrade. Compact drainage fill to required cross sections and thickness. When compacted thickness of drainage fill is 6" or less, place materials in a single layer. When compacted thickness of drainage fill exceeds 6" thick place materials in equal layers, with no layer more than 6" thick nor less than 3" thick when compacted.

3.11 FIELD QUALITY CONTROL

A. Testing agency services: Allow testing agency to inspect and test each subgrade and each fill or backfill layer. Do not proceed until test results for previously completed work verify compliance with requirements.

B. Paved and building slab areas: At subgrade and at each compacted fill and backfill layer, perform field in-place density test per Construction Manager, but in no case fewer than three tests.

C. Trench backfill: In each compacted initial and final backfill layer, perform at least one field in-place density test for each 150' or less of trench, but no fewer than two tests.

D. When testing agency reports that subgrades, fills, or backfills are below specified density, scarify and moisten or aerate, or remove and replace soil to the depth required, recompact and retest until required density is obtained.

3.12 PROTECTION

A. Protecting grade areas: Protect newly graded areas from traffic, freezing and erosion. Keep free of trash and debris.

B. Repair and re-establish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or lose compaction due to subsequent construction operations or weather conditions.

C. Settling: Where settling occurs during the project correction period, remove finished surfacing, backfill with additional approved material, compact, and reconstruct surfacing. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.13 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off the Owner’s property.

END OF SECTION 02300

SECTION 02510

WATER DISTRIBUTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes water-distribution piping and related components outside the building for combined water service and fire-service mains.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Detail precast concrete vault assemblies and indicate dimensions, method of field assembly, and components.

C. Field quality-control test reports.

D. Operation and maintenance data.

1.3 QUALITY ASSURANCE

A. Reference Standards

1. Standard Specifications for Water and Sewer Main Construction in Illinois, Sixth Edition, latest edition.

B. Regulatory Requirements:

1. Comply with requirements of utility company supplying water. Include tapping of water mains and backflow prevention.
2. Comply with standards of authorities having jurisdiction for potable-water-service piping, including materials, installation, testing, and disinfection.
3. Comply with standards of authorities having jurisdiction for fire-suppression water-service piping, including materials, hose threads, installation, and testing.

C. Piping materials shall bear label, stamp, or other markings of specified testing agency.

1.4 PROJECT CONDITIONS

A. Interruption of Existing Water-Distribution Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary water-distribution service according to requirements indicated:

1. Notify Owner no fewer than two days in advance of proposed interruption of service.
2. Do not proceed with interruption of water-distribution service without Owner's written permission.

1.5 COORDINATION

A. Coordinate connection to water main with Owner.

B. Work shall commence at the northerly extents of the project limits and shall be coordinated with other on-site contractors.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers and products must be approved by Engineer.

2.2 PIPE AND FITTINGS

A. Push-on-Joint, Ductile-Iron Pipe: AWWA C151, with push-on-joint bell and plain spigot end unless grooved or flanged ends are indicated.

1. Push-on-Joint, Ductile-Iron Fittings: AWWA C110, ductile- or gray-iron standard pattern or AWWA C153, ductile-iron compact pattern.
2. Gaskets: AWWA C111, rubber.

B. Boltless ball and socket joint, ductile iron pipe.

2.3 GATE VALVES

A. AWWA, Cast-Iron Gate Valves:

1. Nonrising-Stem, Resilient-Seated Gate Valves:

a. Description: Gray- or ductile-iron body and bonnet; with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, and stem nut.

1) Standard: AWWA C509.
2) Minimum Pressure Rating: 200 psig (1380 kPa).
3) End Connections: Mechanical joint.
4) Interior Coating: Complying with AWWA C550.

2.4 GATE VALVE ACCESSORIES AND SPECIALTIES

A. Tapping-Sleeve Assemblies:

1. Description: Sleeve and valve compatible with drilling machine.

a. Standard: MSS SP-60.
b. Tapping Sleeve: Cast- or ductile-iron or stainless-steel, two-piece bolted sleeve with flanged outlet for new branch connection. Include sleeve matching size and type of pipe material being tapped and with recessed flange for branch valve.
c. Valve: AWWA, cast-iron, nonrising-stem, resilient-seated gate valve with one raised face flange mating tapping-sleeve flange.

2.5 CONCRETE VAULTS

A. Description: Precast, reinforced-concrete vault, designed for A-16 load designation according to ASTM C 857 and made according to ASTM C 858.

1. Ladder: ASTM A 36/A 36M, steel or polyethylene-encased steel steps.
2. Manhole: ASTM A 48/A 48M Class No. 35A minimum tensile strength, gray-iron traffic frame and cover.

a. Dimension: 24-inch (610-mm) minimum diameter, unless otherwise indicated.

3. Manhole: ASTM A 536, Grade 60-40-18, ductile-iron traffic frame and cover.

a. Dimension: 48 INCH minimum diameter, unless otherwise indicated.

2.6 FIRE HYDRANTS

A. Fire hydrants shall conform to the Standards of the City of Joliet or as otherwise noted on the plans.

PART 3 - EXECUTION

3.1 EARTHWORK

A. Refer to Earthwork for excavating, trenching, and backfilling.

3.2 PIPING APPLICATIONS

A. General: Use pipe, fittings, and joining methods for piping systems according to the following applications.

B. Underground Combined Water-Service and Fire-Service-Main Piping, 12 inch shall be the following:

1. Ductile-iron, push-on-joint pipe; or ball joints.

3.3 VALVE APPLICATIONS

A. General Application: Use mechanical-joint-end valves for NPS 3 (DN 80) and larger underground installation. Use threaded- or flanged-end valves for installation in vaults. Use UL/FMG, nonrising-stem gate valves for installation with indicator posts.

B. Drawings indicate valve types to be used. Where specific valve types are not indicated, the following requirements apply:

1. Underground Valves, NPS 3 (DN 80) and Larger: AWWA, cast-iron, nonrising-stem, resilient-seated gate valves with valve box.
2. Use the following for valves in vaults and aboveground:
   a. Gate Valves, NPS 3 (DN 80) and Larger: AWWA, cast iron, OS&Y non-rising stem, resilient seated.

3.4 PIPING INSTALLATION

A. Make connections larger than NPS 2 (DN 50) with tapping machine according to the following:

1. Install tapping sleeve and tapping valve according to MSS SP-60.
2. Install tapping sleeve on pipe to be tapped. Position flanged outlet for gate valve.
3. Use tapping machine compatible with valve and tapping sleeve; cut hole in main. Remove tapping machine and connect water-service piping.
4. Install gate valve onto tapping sleeve. Comply with MSS SP-60. Install valve with stem pointing up and with valve box.

B. Comply with NFPA 24 for fire-service-main piping materials and installation.

C. Install ductile-iron, water-service piping according to AWWA C600 and AWWA M41.

D. Bury piping with depth of cover over top at least 5.5 feet.

E. Install underground piping with restrained joints at horizontal and vertical changes in direction. Use restrained-joint piping, thrust blocks, anchors, tie-rods and clamps, and other supports.

3.5 JOINT CONSTRUCTION

A. Make pipe joints according to the following:

1. Ductile-Iron Piping, Gasketed Joints for Water-Service Piping: AWWA C600 and AWWA M41.

3.6 ANCHORAGE INSTALLATION

A. Install anchorages for tees, plugs and caps, bends, crosses, valves, and hydrant branches. Include anchorages for the following piping systems:

1. Gasketed-Joint, Ductile-Iron, Water-Service Piping: According to AWWA C600.
2. Fire-Service-Main Piping: According to NFPA 24.

B. Apply full coat of asphalt or other acceptable corrosion-resistant material to surfaces of installed ferrous anchorage devices.

3.7 VALVE INSTALLATION

A. AWWA Gate Valves: Comply with AWWA C600 and AWWA M44. Install each underground valve with stem pointing up and with valve box.

3.8 CONCRETE VAULT INSTALLATION

A. Install precast concrete vaults according to ASTM C 891.

3.9 FIRE HYDRANT INSTALLATION

A. General: Install each fire hydrant with separate gate valve in supply pipe, anchor with restrained joints or thrust blocks, and support in upright position.

B. AWWA Fire Hydrants: Comply with AWWA M17.

3.10 FIELD QUALITY CONTROL

A. Piping Tests: Conduct piping tests before joints are covered and after concrete thrust blocks have hardened sufficiently. Fill pipeline 24 hours before testing and apply test pressure to stabilize system. Use only potable water.

B. Prepare reports of testing activities.

3.11 CLEANING

A. Clean and disinfect water-distribution piping as follows:

END OF SECTION 02510

SECTION 02741

HOT-MIX ASPHALT PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes hot-mix asphalt paving patch.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.

B. Job-Mix Designs: Certification, by authorities having jurisdiction, of approval of each job mix proposed for the Work.

C. Material certificates.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer shall be registered with and approved by authorities having jurisdiction or the DOT of the state in which Project is located.

B. Retain first paragraph below if asphalt paving work is located on public property and must comply with requirements of state or local DOT. Also retain if referencing these requirements regardless of property ownership.

C. Regulatory Requirements: Comply with Illinois Department of Transportation's "Standard Specifications for Road and Bridge Construction" Adopted January latest edition (IDOT Std. Specs.) for asphalt paving work.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.

B. Store pavement-marking materials in a clean, dry, protected location and within temperature range required by manufacturer. Protect stored materials from direct sunlight.

1.5 PROJECT CONDITIONS

A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp or if the following conditions are not met:

1. Tack Coat: Minimum surface temperature of 60 deg F.
2. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
3. Asphalt Surface Course: Minimum surface temperature of 60 deg F at time of placement.

B. Pavement-Marking Paint: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 40 deg F (4deg C) for oil-based materials, 50 deg F (10 deg C) for water-based materials, and not exceeding 95 deg F (35 deg C).

PART 2 - PRODUCTS

2.1 AGGREGATES

A. Coarse Aggregate:

1. Per IDOT Std. Specs. Section 1004.03

B. Fine Aggregate:

1. Per IDOT Std. Specs. Section 1003.03

C. Mineral Filler:

1. Per IDOT Sts. Specs. Section 1011.

2.2 ASPHALT MATERIALS

A. Asphalt Binder: AASHTO MP 1, [PG 64-22]

B. Tack Coat: Per IDOT Std. Specs. Section 1032 Grade MC-30.

2.3 MIXES

A. Hot-Mix Asphalt: Dense, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction and complying with the following requirements:

1. Provide mixes with a history of satisfactory performance in geographical area where project is located.
2. Base Course: Super Pave IL-19, N50 RAP <15% Per IDOT Std. Spes. Section 1030.
3. Surface Course: Super Pave Mix C N 50 Rap <25% Per IDOT Std. Specs. Section 1030.

2.4 AUXILIARY MATERIALS

A. Pavement-Marking Paint: Alkyd-resin type, ready-mixed, complying with FS TT-P-115, Type I, or AASHTO M-248, Type N.

PART 3 - EXECUTION

3.1 PATCHING

A. Hot-Mix Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches (300 mm) into adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Recompact existing unbound-aggregate base course to form new subgrade.

B. Retain first paragraph below for coating vertical surfaces abutting hot-mix asphalt patches.

C. Tack Coat: Apply uniformly to vertical surfaces abutting or projecting into new, hot-mix asphalt paving at a rate of 15 gal./sq. yd.

D. Patching: Fill excavated pavements with hot-mix asphalt base mix and, while still hot, compact flush with adjacent surface.

3.2 SURFACE PREPARATION

A. Proof-roll subbase using heavy, pneumatic-tired rollers to locate areas that are unstable or that require further compaction.

B. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

1. Sweep loose granular particles from surface of unbound-aggregate base course. Do not dislodge or disturb aggregate embedded in compacted surface of base course.

3.3 HOT-MIX ASPHALT PLACING

A. Spread and compact leveling binder on existing pavement to eliminate depressional areas.

B. Apply tack coat on existing pavement at a rate of 0.15 gal/sy.

C. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

1. Spread mix at minimum temperature of 250 deg F.
2. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

D. Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.

E. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.4 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or vibratory-plate compactors in areas inaccessible to rollers.

1. Complete compaction before mix temperature cools to 185 deg F.

B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent nor greater than 96 percent.

D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

E. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

F. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.5 INSTALLATION TOLERANCES

A. Thickness: Compact each course to produce the thickness indicated within the following tolerances:

1. Base Course: Plus or minus 1/2 inch.
2. Surface Course: Plus 1/4 inch, no minus.

B. Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot (3-m) straightedge applied transversely or longitudinally to paved areas:

1. Base Course: 1/4 inch .
2. Surface Course: 1/8 inch.

3.6 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and to prepare test reports.

B. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

C. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.7 DISPOSAL

A. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.

3.8 PAVEMENT MARKING

A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Joliet Junior College.

B. Allow paving to cure for 30 days before starting pavement marking.

C. Sweep and clean surface to eliminate loose material and dust.

D. Apply paint with mechanical equipment to produce pavement markings of dimensions indicated with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).

END OF SECTION 02741

SECTION 02751

CEMENT CONCRETE PAVEMENT

PART 1 - GENERAL

1.1 SUMMARY

A. This section includes cement concrete pavement for the following applications:

1. Curbs and gutters
2. Walkways

1.2 SUBMITTALS

A. Product Data: For each manufactured material and product indicated.

B. Design Mixes: For each concrete mix indicated.

C. Material certificates.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.

B. Comply with Illinois Department of Transportation's "Standard Specifications For Road And Bridge Construction" latest edition (IDOT STD. SPECS.).

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

A. Plain-Steel Welded Wire Fabric: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

2.2 CONCRETE MATERIALS

A. Portland Cement: Per IDOT Std. Specs. Section 1001

1. Fly Ash: AASHTO M 295 Class C.
2. Ground Granulated Blast-Furnace Alag: AASTO M 302.

B. AGGREGATE: Per IDOT Std. Specs. Section 1003; 1004.

C. Water: Per IDOT Std. Specs. Section 1002.

D. Admixtures: Per IDOT Std. Specs. Section 1021.

E. Curing Materials: Per IDOT Std. Specs. Section 1022.

F. Related Materials:

1. Expansion and isolation – Joint filler strips: Per IDOT Std. Specs. Section 1051.

2.3 CONCRETE MIXES AND MIXING

A. Concrete Mixes: Prepare design mixes, proportioned according to IDOT Std. Specs Section 1020 Class SI.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Surface Preparation: Proof-roll prepared subbase, and remove loose material from surface.

B. Forms: Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations.

C. Reinforcement: Accurately position and support reinforcement, and secure against displacement. Set wire ties with ends directed into concrete.

1. Install welded wire fabric in lengths as long as practicable; lap at least one full mesh, and lace splices with wire.

D. Joints: Locate and install construction, isolation, contraction, and expansion joints as indicated.

E. Concrete Placement: Comply with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete. Place concrete in a continuous operation within planned joints or sections.

1. Moisten subbase to provide a uniform dampened condition at time concrete is placed.

2. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping according to recommendations in ACI 309R.

3. Screed and initial-float concrete surfaces with darby or bull float before excess moisture or bleed water appears on the surface.

4. Protect concrete from cold or hot weather during mixing, placing, and curing.

3.2 FINISHES AND CURING

A. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surfaces to true planes with gaps below 10-foot long, unleveled straightedge not to exceed 1/4 inch. Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.

1. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface, perpendicular to line of traffic, to provide a uniform, fine-line texture.

B. Curing: Begin curing after finishing concrete, but not before free water has disappeared from concrete surface. Cure concrete by one or a combination of the following methods:

1. Moisture cure concrete by water, continuous fog spray, continuously wet absorptive cover, or by moisture-retaining-cover curing. Keep surfaces continuously moist for not less than seven days.

2. Retain subparagraph above for moisture curing or below for curing-compound curing. Retain both if Contractor's option.

3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

3.3 REPAIRS AND PROTECTION

A. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.

B. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement.

C. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 02751

SECTION 02920

LAWNS AND GRASSES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Seeding
2. Lawn renovation
3. Erosion-control material(s)
4. Topsoil

B. Related Sections:
1. Division 2 Section "Earthwork" for excavation, filling and backfilling, and rough grading.

1.3 DEFINITIONS

A. Finish Grade: Elevation of finished surface of planting soil.

B. Manufactured Soil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.

C. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.

D. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill immediately beneath planting soil.

E. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture stating the botanical and common name and percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

1. Certification of each seed mixture for turfgrass and sod, identifying source, including name and telephone number of supplier.

C. Qualification Data: For qualified landscape Installer.

D. Product Certificates: For soil amendments and fertilizers, from manufacturer.

E. Material Test Reports: For existing surface soil and imported topsoil.

F. Planting Schedule: Indicating anticipated planting dates for each type of planting.

G. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of lawns during a calendar year. Submit before expiration of required initial maintenance periods.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape installer whose work has resulted in successful lawn establishment.

1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when planting is in progress.
2. Maintenance Proximity: Not more than two hours' normal travel time from Installer's place of business to Project site.

B. Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

C. Topsoil Analysis: Furnish soil analysis by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; deleterious material; pH; and mineral and plant-nutrient content of topsoil.

1. Report suitability of topsoil for lawn growth. State-recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce satisfactory topsoil.

D. Preinstallation Conference: Conduct conference at Project site.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Seed: Deliver seed in original sealed, labeled, and undamaged containers.

B. Sod: Harvest, deliver, store, and handle sod according to requirements in TPI's "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" in its "Guideline Specifications to Turfgrass Sodding." Deliver sod in time for planting within 24 hours of harvesting. Protect sod from breakage and drying.

1.7 PROJECT CONDITIONS

A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of Substantial Completion.

1. Spring Planting: Mid April through the end of the year.
2. Fall Planting: Mid August through the end of September.

B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.8 MAINTENANCE SERVICE

A. Initial Lawn Maintenance Service: Provide full maintenance including mowing, water, fertilizers and weeding by skilled employees of landscape Installer. Maintain as required in Part 3. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:

1. Seeded Lawns: 60 days from date of Substantial Completion.

a. When initial maintenance period has not elapsed before end of planting season, or if lawn is not fully established, continue maintenance during next planting season.

PART 2 - PRODUCTS

2.1 SEED

A. Grass Seed: Fresh, clean, dry, new-crop seed complying with AOSA's "Journal of Seed Technology; Rules for Testing Seeds" for purity and germination tolerances.

B. Seed Species: State-certified seed of grass species, as follows:

C. Seed Species: Seed of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:

1. Full Sun: Kentucky bluegrass (Poa pratensis), a minimum of three cultivars.
2. Sun and Partial Shade: Proportioned by weight as follows:
    a. 50 percent Kentucky bluegrass (Poa pratensis).
    b. 30 percent chewings red fescue (Festuca rubra variety).
    c. 10 percent perennial ryegrass (Lolium perenne).
    d. 10 percent redtop (Agrostis alba).
3. Shade: Proportioned by weight as follows:
    a. 50 percent chewings red fescue (Festuca rubra variety).
    b. 35 percent rough bluegrass (Poa trivialis).
    c. 15 percent redtop (Agrostis alba).

2.2 TOPSOIL

A. Topsoil: ASTM D 5268, pH range of 5.5 to 7, a minimum of 4 percent organic material content; free of stones 1 inch or larger in any dimension and other extraneous materials harmful to plant growth. All to be pulverized. 195% of shall pass ¼ sieve.

1. Do not reuse existing topsoil. Topsoil which has been stripped from on-site shall not be utilized.
2. Topsoil Source: Import topsoil or manufactured topsoil from off-site sources. Obtain topsoil displaced from naturally well-drained construction or mining sites where topsoil occurs at least 4 inches deep; do not obtain from recent agricultural land, bogs or marshes.
    a. Qualities - Fertile, friable, loamy, any surface soil, free of stones, stumps, root, trash, debris and other deleterious matter.
    b. PH range 6.5 to 8.4. Topsoil not meeting this range will be amended.
    c. Organic content 3-10% degradation (per above).

2.3 INORGANIC SOIL AMENDMENTS

A. Lime: ASTM C 602, agricultural limestone containing a minimum of 80 percent calcium carbonate equivalent and as follows:

1. Class: T, with a minimum of 99 percent passing through No. 8 sieve and a minimum of 75 percent passing through No. 60 sieve.
2. Class: O, with a minimum of 95 percent passing through No. 8 sieve and a minimum of 55 percent passing through No. 60 sieve.
3. Provide lime in form of dolomitic limestone.

B. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum of 99 percent passing through No. 6 sieve and a maximum of 10 percent passing through No. 40 sieve.

C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.

D. Aluminum Sulfate: Commercial grade, unadulterated.

E. Perlite: Horticultural perlite, soil amendment grade.

F. Agricultural Gypsum: Finely ground, containing a minimum of 90 percent calcium sulfate.

G. Sand: Clean, washed, natural or manufactured, free of toxic materials.

H. Diatomaceous Earth: Calcined, diatomaceous earth, 90 percent silica, with approximately 140 percent water absorption capacity by weight.

I. Zeolites: Mineral clinoptilolite with at least 60 percent water absorption by weight.

2.4 ORGANIC SOIL AMENDMENTS

A. Compost: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through ½-inch sieve; soluble salt content of 5 to 10 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

1. Organic Matter Content: 50 to 60 percent of dry weight.

B. Peat: Sphagnum peat moss, partially decomposed, finely divided or granular texture, with a pH range of 3.4 to 4.8.

C. Peat: Finely divided or granular texture, with a pH range of 6 to 7.5, containing partially decomposed moss peat, native peat, or reed-sedge peat and having a water-absorbing capacity of 1100 to 2000 percent.

D. Wood Derivatives: Decomposed, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture, free of chips, stones, sticks, soil, or toxic materials.

1. In lieu of decomposed wood derivatives, mix partially decomposed wood derivatives with ammonium nitrate at a minimum rate of 0.15 lb/cu.ft. of loose sawdust or ground bark, or with ammonium sulfate at a minimum rate of 0.25 lb/cu. ft of loose sawdust or ground bark.

E. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.

2.5 PLANTING ACCESSORIES

A. Selective Herbicides: EPA registered and approved, of type recommended by manufacturer for application.

2.6 FERTILIZER

A. Bonemeal: Commercial, raw or steamed, finely ground; a minimum of 4 percent nitrogen and 20 percent phosphoric acid.

B. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.

C. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:

1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight, or in amounts recommended in soil reports form a qualified soil-testing agency.

D. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:

1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight or in amounts recommended in soil reports from a qualified soil-testing agency.

2.7 MULCHES

A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.

B. Peat Mulch: Sphagnum peat moss, partially decomposed, finely divided or granular texture, with a pH range of 3.4 to 4.8.

C. Peat Mulch: Finely divided or granular texture, with a pH range of 6 to 7.5, containing partially decomposed moss peat, native peat, or reed-sedge peat and having a water-absorbing capacity of 1100 to 2000 percent.

D. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

1. Organic Matter Content: 50 to 60 percent of dry weight.

E. Fiber Mulch: Biodegradable, dyed-wood, cellulose-fiber mulch; nontoxic; free of plant-growth or germination inhibitors; with a maximum moisture content of 15 percent and a pH range of 4.5 to 6.5.

F. Nonasphaltic Tackifier: Colloidal tackifier recommended by fiber-mulch manufacturer for slurry application; nontoxic and free of plant-growth or germination inhibitors.

G. Asphalt Emulsion: ASTM D 977, Grade SS-1; nontoxic and free of plant-growth or germination inhibitors.

2.8 EROSION-CONTROL MATERIALS

A. Erosion-Control Blankets: Excelsior Green Blanket preferred. Include manufacturer's recommended steel wire staples, 6 inches long.

B. Erosion-Control Fiber Mesh: Biodegradable burlap or spun-coir mesh, a minimum of 0.92 lb/sq. yd., with 50 to 65 percent open area. Include manufacturer's recommended steel wire staples, 6 inches long.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas to receive lawns and grass for compliance with requirements and other conditions affecting performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities, trees, shrubs, and plantings from damage caused by planting operations.

1. Protect adjacent and adjoining areas from hydroseeding and hydromulching overspray.
2. Protect grade stakes set by others until directed to remove them.

B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 LAWN PREPARATION

A. Limit lawn subgrade preparation to areas to be planted.

B. Newly Graded Subgrades: Loosen subgrade to a minimum depth of 4 inches. Remove stones larger than 1½ inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.

1. Apply recommended fertilizer directly to subgrade before loosening.
2. Thoroughly blend planting soil mix off-site before spreading or spread topsoil, apply soil amendments and fertilizer on surface, and thoroughly blend planting soil mix.
    a. Delay mixing fertilizer with planting soil if planting will not proceed within a few days.
    b. Mix lime if necessary, with dry soil before mixing fertilizer.
3. Spread planting soil mix to a minimum depth of 6 inches but not less than required to meet finish grades after light rolling and natural settlement. Do not spread if planting soil or subgrade is frozen, muddy, or excessively wet.
    a. Spread approximately 1/2 the thickness of planting soil mix over loosened subgrade. Mix thoroughly into top 4 inches of subgrade. Spread remainder of planting soil mix.
    b. Reduce elevation of planting soil to allow for soil thickness of sod, if sodding.

C. Finish Grading: Grade planting areas to a smooth, uniform surface plane with loose, uniformly fine texture. Grade to within plus or minus 1/2 inch of finish elevation. Roll and rake, remove ridges, and fill depressions to meet finish grades. Limit finish grading to areas that can be planted in the immediate future.

D. Moisten prepared lawn areas before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

E. Before planting, restore areas if eroded or otherwise disturbed after finish grading.

3.4 PREPARATION FOR EROSION-CONTROL MATERIALS

A. Prepare area as specified in "Lawn Preparation" Article.

B. For erosion-control blanket or mesh, install from top of slope, working downward, and as recommended by material manufacturer for site conditions. Fasten as recommended by material manufacturer.

C. Moisten prepared area before planting if surface is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

3.5 SEEDING

A. Sow seed with spreader or seeding machine. Do not broadcast or drop seed when wind velocity exceeds 5 mph. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.

1. Do not use wet seed or seed that is moldy or otherwise damaged.
2. Do not seed against existing trees. Limit extent of seed to outside edge of planting saucer.

B. Sow seed at a total rate of 4-5 lb/1,000 sq. ft.

C. Rake seed lightly into top 1/8 inch of soil, roll lightly, and water with fine spray.

D. Protect all seeded areas with excelsior – green blanket installed and anchored according to manufacturer's written instructions.

E. Protect seeded areas from hot, dry weather or drying winds by applying mulch within 24 hours after completing seeding operations. Soak areas, scatter mulch uniformly to a depth of 3/16 inch, and roll surface smooth.

3.6 LAWN MAINTENANCE

A. Maintain and establish lawn by watering, fertilizing, weeding, mowing, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth lawn. Provide materials and installation the same as those used in the original installation.

1. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch and anchor as required to prevent displacement.

B. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.

1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
2. Water lawn with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.

C. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 1/3 of grass height. Remove no more than 1/3 of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:

1. Mow grass to a height of 1-1/2 to 2 inches.

D. Lawn Postfertilization: Apply fertilizer after initial mowing and when grass is dry.

1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1,000 sq. ft. to lawn area.

3.7 SATISFACTORY LAWNS

A. Lawn installations shall meet the following criteria as determined by Construction Manager, Civil Engineer and Owner:

1. Satisfactory Seeded Lawn: At end of maintenance period, a healthy, uniform, close stand of grass has been established, free of weeds and surface irregularities, with coverage exceeding 90 percent over any 10 sq. ft. and bare spots not exceeding 5 by 5 inches.

B. Use specified materials to reestablish lawns that do not comply with requirements and continue maintenance until lawns are satisfactory.

3.8 CLEANUP AND PROTECTION

A. Promptly remove soil and debris, created by lawn work, from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.

B. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after lawn is established.

C. Remove nondegradable erosion-control measures after grass establishment period.

END OF SECTION 02920

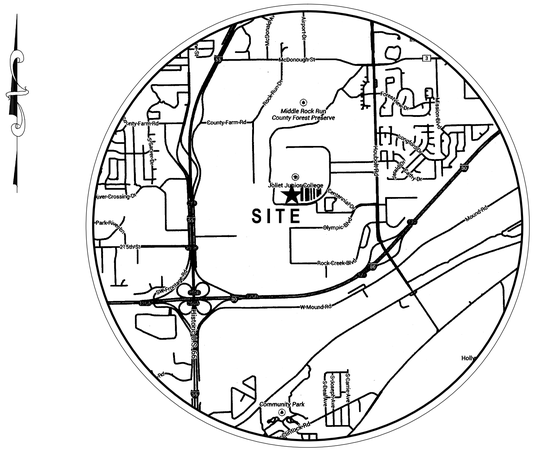
G. CONTRACT DRAWINGS

Drawing No.	Sheet Title	Issue Date
CIVIL DRAWINGS		
Sheet 1	Cover Sheet	March 12, 2015
Sheet 2	PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (1 OF 4	March 12, 2015
Sheet 3	PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (2 OF 4)	March 12, 2015
Sheet 4	PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (3 OF 4)	March 12, 2015
Sheet 5	PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (4 OF 4)	March 12, 2015
Sheet 6	GENERAL NOTES AND CONSTRUCTION DETAILS	March 12, 2015

Improvement Plans
for
MAIN CAMPUS WATERMAIN EXTENSION
JOLIET JUNIOR COLLEGE
City of Joliet
Will County, Illinois

LEGEND

XXX.XX	EXISTING ELEVATION
XXX	EXISTING CONTOUR
T/F	TOP OF FOUNDATION
F.F.	FINISHED FLOOR
CMP	CORRUGATED METAL PIPE
FES	FLARED END SECTION
T/WALL	TOP OF WALL
FL	FLOW LINE
RCP	REINFORCED CONCRETE PIPE
CPP	CORRUGATED PLASTIC PIPE
PVC	POLYVINYL CHLORIDE PIPE
	EXISTING UTILITY POLE
	EXISTING GUY ANCHOR
UGE	EXISTING UNDERGROUND ELECTRIC LINES
OHE	EXISTING OVERHEAD ELECTRIC LINES
	EXISTING STREET LIGHT
	EXISTING VALVE & VAULT
	EXISTING FIRE HYDRANT
	EXISTING STORM SEWER INLET
	EXISTING STORM SEWER MANHOLE
	EXISTING STORM SEWER LINES
ST	EXISTING "SUSPECTED" STORM SEWER LINES
	EXISTING CABLE TV HANDHOLE
	EXISTING CABLE TV PEDESTAL
CATV	EXISTING UNDERGROUND CABLE TV LINES
	EXISTING TELEPHONE PEDESTAL
	EXISTING TELEPHONE CONTROL MANHOLE
UGT	EXISTING UNDERGROUND TELEPHONE LINES
	EXISTING SIGN
G	EXISTING UNDERGROUND GAS LINES
	EXISTING SIGNAL CONTROL BOX
	EXISTING SIGNAL PEDESTAL
	EXISTING EVERGREEN TREE W/ DIAMETER
	EXISTING TREE W/ DIAMETER
	EXISTING BUSH W/ DIAMETER
	EXISTING TRAFFIC SIGNAL
	EXISTING TRAFFIC SIGNAL HANDHOLE
GM	EXISTING GAS METER
	EXISTING SANITARY SEWER MANHOLE
SAN	EXISTING "SUSPECTED" SANITARY SEWER LINES
	EXISTING GUARDRAIL
	EXISTING ELECTRIC BOX
	EXISTING ELECTRIC HANDHOLE
	EXISTING ELECTRIC OUTLET
	EXISTING ELECTRIC TRANSFORMER
	EXISTING GAS VALVE BOX
	EXISTING LANDSCAPE LIGHT
	EXISTING BUFFALO BOX
	EXISTING HAND WATER PUMP
	EXISTING ELECTRIC METER
W	EXISTING "SUSPECTED" UNDERGROUND WATER LINES
WV	EXISTING IRRIGATION CONTROL VALVE
	EXISTING CLEAN OUT
	EXISTING TELEPHONE HANDHOLE
	EXISTING LIGHT HANDHOLE
XX	EXISTING SOIL BORING LOCATION
X X X X X X X X X X X X X	EXISTING WATERMAIN TO BE REMOVED PER THIS PLAN
12"W	PROPOSED WATERMAIN WITH SIZE PER THIS PLAN
	PROPOSED FIRE HYDRANT PER THIS PLAN
H	PROPOSED WATER VALVE AS NOTED PER THIS PLAN
	PROPOSED CONSTRUCTION FENCE PER THIS PLAN
	PROPOSED EROSION CONTROL SILT FENCE PER THIS PLAN
	PROPOSED PROTECTION OF EXISTING TREE
	PROPOSED INLET FILTER BASKET



SITE LOCATION MAP
NOT TO SCALE

INDEX OF ENGINEERING SHEETS

Call Before You Dig
JULIE ILLINOIS ONE-CALL SYSTEM
CONTACT J.U.L.I.E. at 811 or 800-892-0123
48 Hours (2 Working Days) BEFORE YOU DIG.
Include the following:
County, City/Township, Section & ¼ Section No.

NOTE: DUE TO THE UNCERTAINTY OF SEASONAL GROUND WATER TABLES AND THE GEOPHYSICAL CONDITIONS AFFECTING GROUND WATER MOVEMENT, RUETTIGER, TONELLI & ASSOCIATES TAKES NO RESPONSIBILITY FOR THE MANAGEMENT OF GROUND WATER ASSOCIATED WITH SUB-GRADE CONSTRUCTION. BASEMENTS OR OTHER LIKE FACILITIES CONSTRUCTED BELOW THE FINISHED SURFACE GRADE OF THE PROPERTY ARE AT THE RISK OF THE BUILDER/OWNER.

LAND SURVEYOR / ENGINEER:

RUETTIGER, TONELLI & ASSOCIATES, INC.
129 CAPISTA DRIVE
SHOREWOOD, ILLINOIS 60404
Ph. (815) 744-6600

OWNER / DEVELOPER:

JOLIET JUNIOR COLLEGE
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431
CONTACT: PHIL THIELE
Ph. (815) 280-2889

SITE BENCHMARK 1:
HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS EXIT ROAD ONTO HOUBOLT ROAD.

ELEVATION: 607.75 (NAVD 88)

SITE BENCHMARK 2:
CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.

ELEVATION = 564.18 (NAVD 88)

FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

I, JOSEPH P. HAMMER, A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF ILLINOIS, HEREBY CERTIFY THAT THESE IMPROVEMENT PLANS HAVE BEEN PREPARED UNDER MY SUPERVISION BY RUETTIGER, TONELLI & ASSOCIATES, INC., ILLINOIS PROFESSIONAL DESIGN FIRM No. 184-001251.

DATED THIS_____DAY OF_____, ____.

JOSEPH P. HAMMER IL P.E. No. 062-053186 (EXPIRES 11-30-2015)

TO ENSURE AUTHENTICITY OF THIS DRAWING, IT MUST BEAR THE EMBOSSED SEAL OF THE DESIGN FIRM OR PROFESSIONAL LICENSEE WHO PREPARED THIS DRAWING.

REVISIONS

No.	DATE	DESCRIPTION	BY
0	3-16-2015	ISSUED FOR REVIEW	R.P.

No.	DATE	DESCRIPTION	BY

DOCUMENTATION:
PROJECT No.: 20150152.00
DATE: 3-12-2015
FIELD BOOK: JJC2, P. 50
DRAWN BY: R.P.
CHECKED BY: J.H.

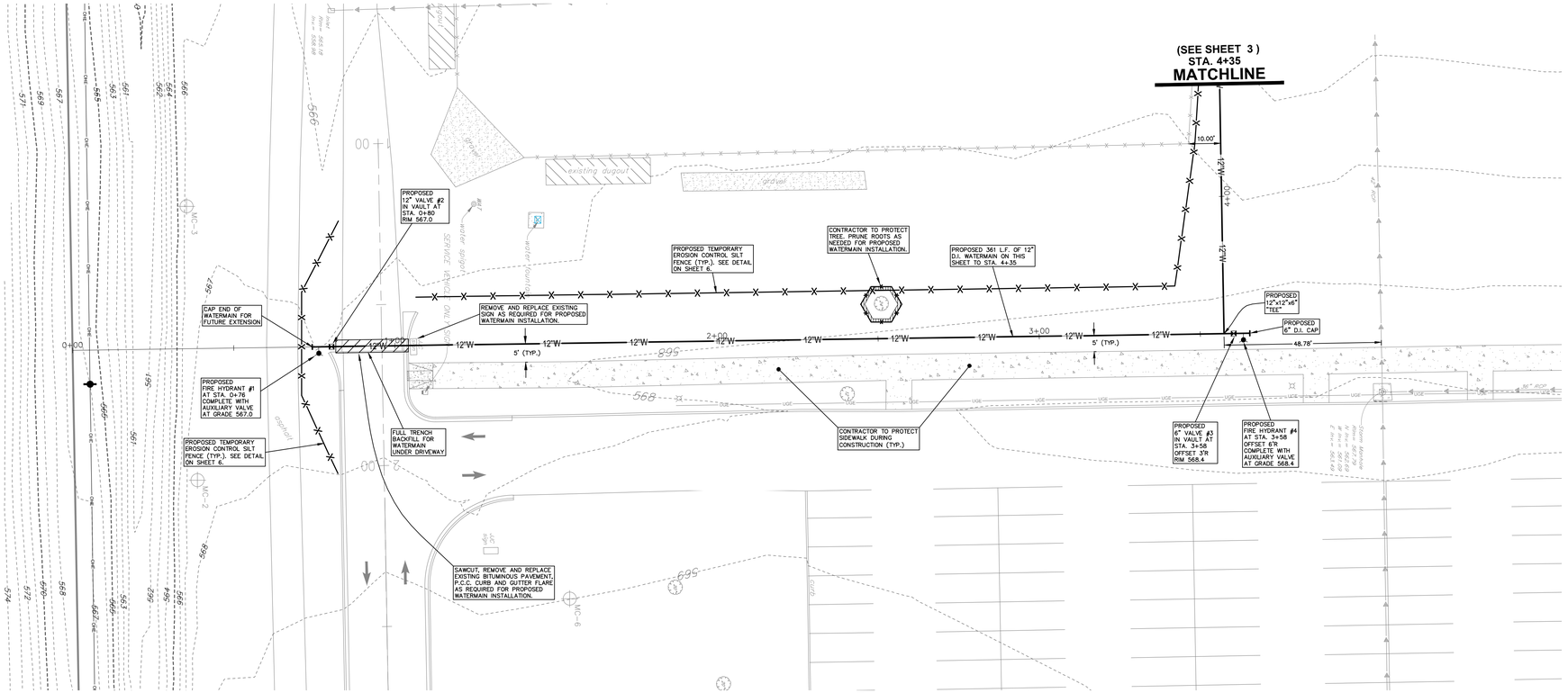
Ruettiger, Tonelli & Associates, Inc.
Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404
PH. (815) 744-6600 FAX (815) 744-0101
website: www.ruettigertonelli.com

PROJECT TITLE:
JOLIET JUNIOR COLLEGE
MAIN CAMPUS WATERMAIN EXTENSION
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

DRAWING TITLE:
COVER SHEET

DRAWING No.
315-0152-C1
SCALE:
AS NOTED
ENGINEERING DEPARTMENT
SHEET 1 OF 6

N:\Tech\2015\0152\Engineering\Plans Sets\C1 - Watermain Extension\Sht 01 - Cover Sheet.dwg, Layout1, 3/16/2015 11:36:47 AM, Rpeoples



PLAN OF PROPOSED WATERMAIN EXTENSION

SCALE: 1" = 20'

GRAPHIC SCALE
20 0 20
(IN FEET)
1 inch = 20 ft.

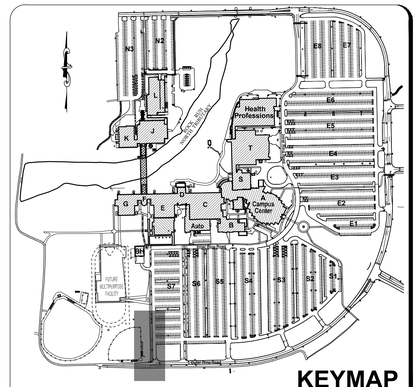
1.) EXISTING CONDITIONS SHOWN HEREON ARE FROM SURVEYS BY R.T. & A. (2008–2015) DURING VARIOUS PHASES OF CAMPUS CONSTRUCTION AND FROM PREVIOUSLY PROPOSED IMPROVEMENT PLANS BY R.T. & A. (2008–2011).1SFIELD VERIFY EXACT LOCATIONS PRIOR TO ANY CONSTRUCTION. EXISTING UNDERGROUND UTILITIES WERE LOCATED BY USING PHYSICAL EVIDENCE, UTILITY COMPANY MAPS AND JJC LOCATIONS/MAPS AND THEREFORE THEIR LOCATIONS ARE APPROXIMATE AND SUSPECTED AND MAY NOT BE COMPLETELY ACCURATE. FOR MORE ACCURATE LOCATION, FIELD EXCAVATE.

2.) SEE SHEET 1 FOR MASTER LEGEND.

3.) CONTRACTOR TO RESTORE ALL DISTURBED AREAS WITH 6" OF TOPSOIL, SEEDING AND EROSION CONTROL BLANKET.

4.) CONTRACTOR WILL BE SUBJECT TO THE REQUIREMENTS OF THE STORMWATER POLLUTION PREVENTION PLAN ACTIVE ON CAMPUS.

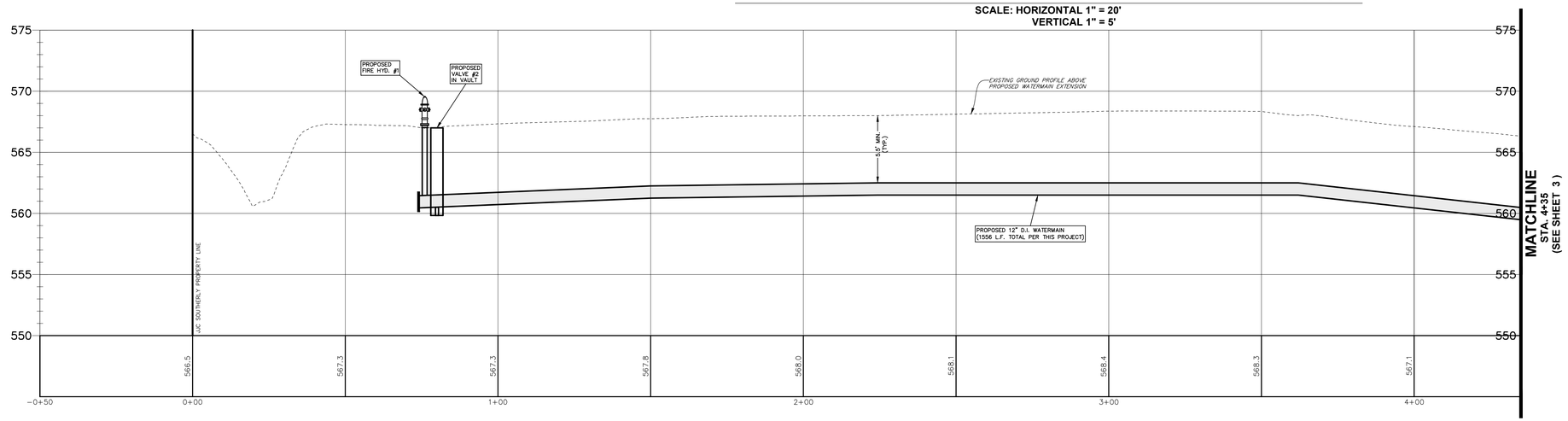
5.) CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.



KEYMAP
SCALE: 1" = 500'

PROFILE OF PROPOSED WATERMAIN EXTENSION

SCALE: HORIZONTAL 1" = 20'
VERTICAL 1" = 5'



SITE BENCHMARK 1:

HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS EXIT ROAD ONTO HOUBOLT ROAD.

ELEVATION: 607.75 (NAVD 88)

SITE BENCHMARK 2:

CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.

ELEVATION = 564.18 (NAVD 88)

FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

LEGEND
XXX.X EXISTING GROUND ELEVATION
XXX.X AT PROPOSED UTILITY
UTILITY CENTERLINE STATION

REVISIONS							
No.	DATE	DESCRIPTION	BY	No.	DATE	DESCRIPTION	BY
0	3-16-2015	ISSUED FOR REVIEW	R.P.				

DOCUMENTATION:
PROJECT No.: 20150152.00
DATE: 3-12-2015
FIELD BOOK: JJC2, P. 50
DRAWN BY: R.P.
CHECKED BY: J.H.

Ruettiger, Tonelli & Associates, Inc.
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website: www.ruettigertonelli.com

PROJECT TITLE:
JOLIET JUNIOR COLLEGE
MAIN CAMPUS WATERMAIN EXTENSION
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

DRAWING TITLE:
PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (1 OF 4)

DRAWING No. 315-0152-C1
SCALE: AS NOTED
ENGINEERING DEPARTMENT
SHEET 2 OF 6

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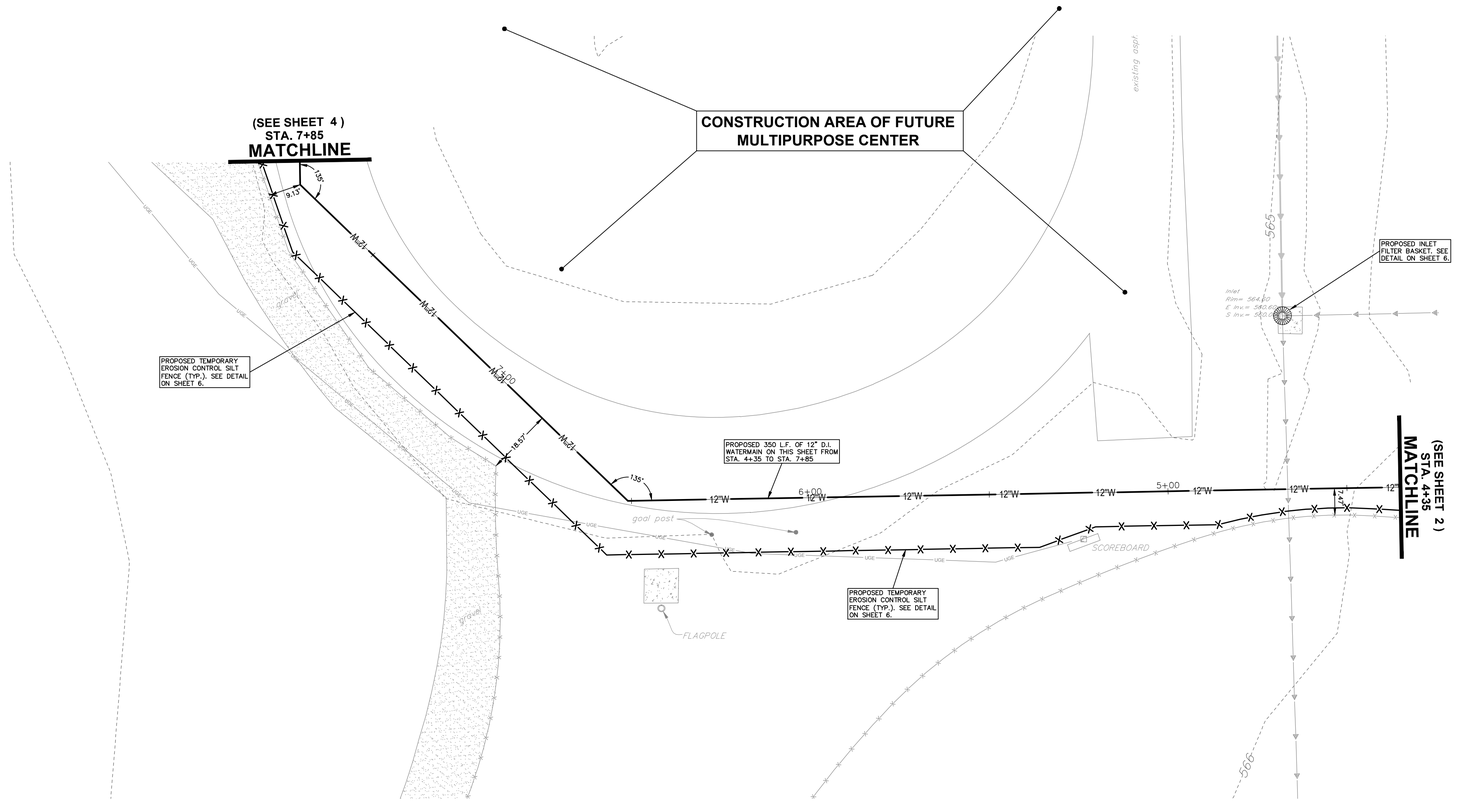


GRAPHIC SCALE

20 0 20

(IN FEET)

1 inch = 20 ft.

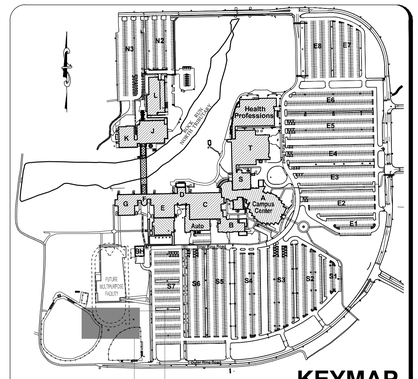
1.) EXISTING CONDITIONS SHOWN HEREON ARE FROM SURVEYS BY R.T. & A. (2008–2015) DURING VARIOUS PHASES OF CAMPUS CONSTRUCTION AND FROM PREVIOUSLY PROPOSED IMPROVEMENT PLANS BY R.T. & A. (2008–2011).FIELD VERIFY EXACT LOCATIONS PRIOR TO ANY CONSTRUCTION. EXISTING UNDERGROUND UTILITIES WERE LOCATED BY USING PHYSICAL EVIDENCE, UTILITY COMPANY MAPS AND JJC LOCATIONS/MAPS AND THEREFORE THEIR LOCATIONS ARE APPROXIMATE AND SUSPECTED AND MAY NOT BE COMPLETELY ACCURATE. FOR MORE ACCURATE LOCATION, FIELD EXCAVATE.

2.) SEE SHEET 1 FOR MASTER LEGEND.

3.) CONTRACTOR TO RESTORE ALL DISTURBED AREAS WITH 6" OF TOPSOIL, SEEDING AND EROSION CONTROL BLANKET.

4.) CONTRACTOR WILL BE SUBJECT TO THE REQUIREMENTS OF THE STORMWATER POLLUTION PREVENTION PLAN ACTIVE ON CAMPUS.

5.) CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.



KEYMAP

SCALE: 1" = 500'

PLAN OF PROPOSED WATERMAIN EXTENSION

SCALE: 1" = 20'

PROFILE OF PROPOSED WATERMAIN EXTENSION

SCALE: HORIZONTAL 1" = 20'
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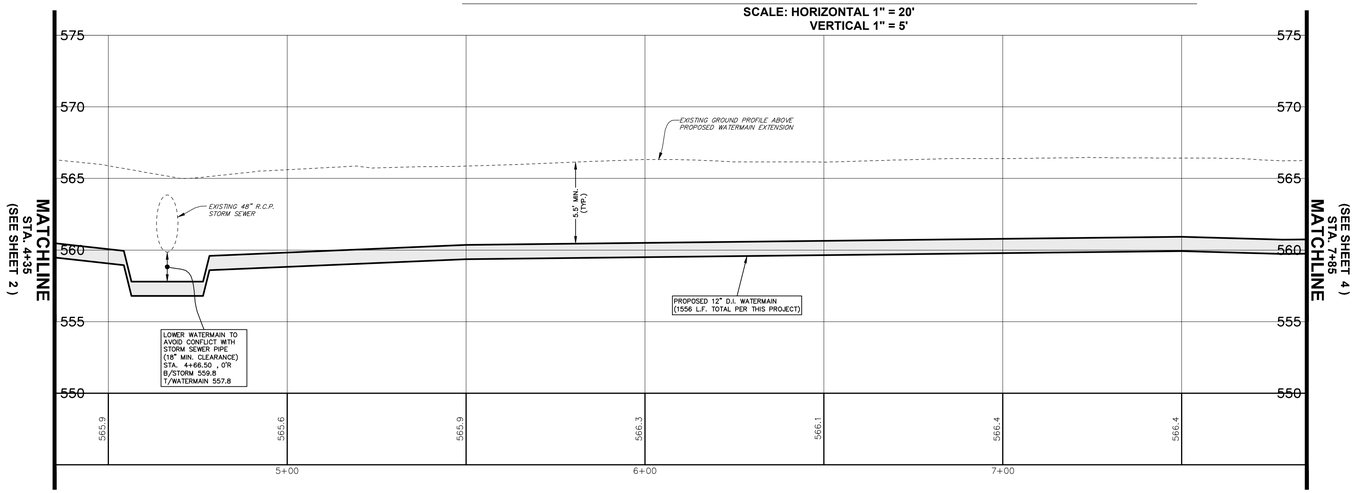

SITE BENCHMARK 1:

HEAD BOLT ON FIRE HYDRANT THAT ARROW POINTS TO, LOCATED APPROXIMATELY 740' SOUTH OF MAIN CAMPUS EXIT ROAD ONTO HOUBOLT ROAD.

ELEVATION: 607.75 (NAVD 88)

SITE BENCHMARK 2:

CUT CROSS TOP OF CONCRETE PAD BY ELECTRIC PANELS LOCATED TO THE EAST OF THE BASEBALL FIELD PRESS BOX.

ELEVATION = 564.18 (NAVD 88)

FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

LEGEND
EXISTING GROUND ELEVATION
XXX.X AT PROPOSED UTILITY
UTILITY CENTERLINE STATION

REVISIONS

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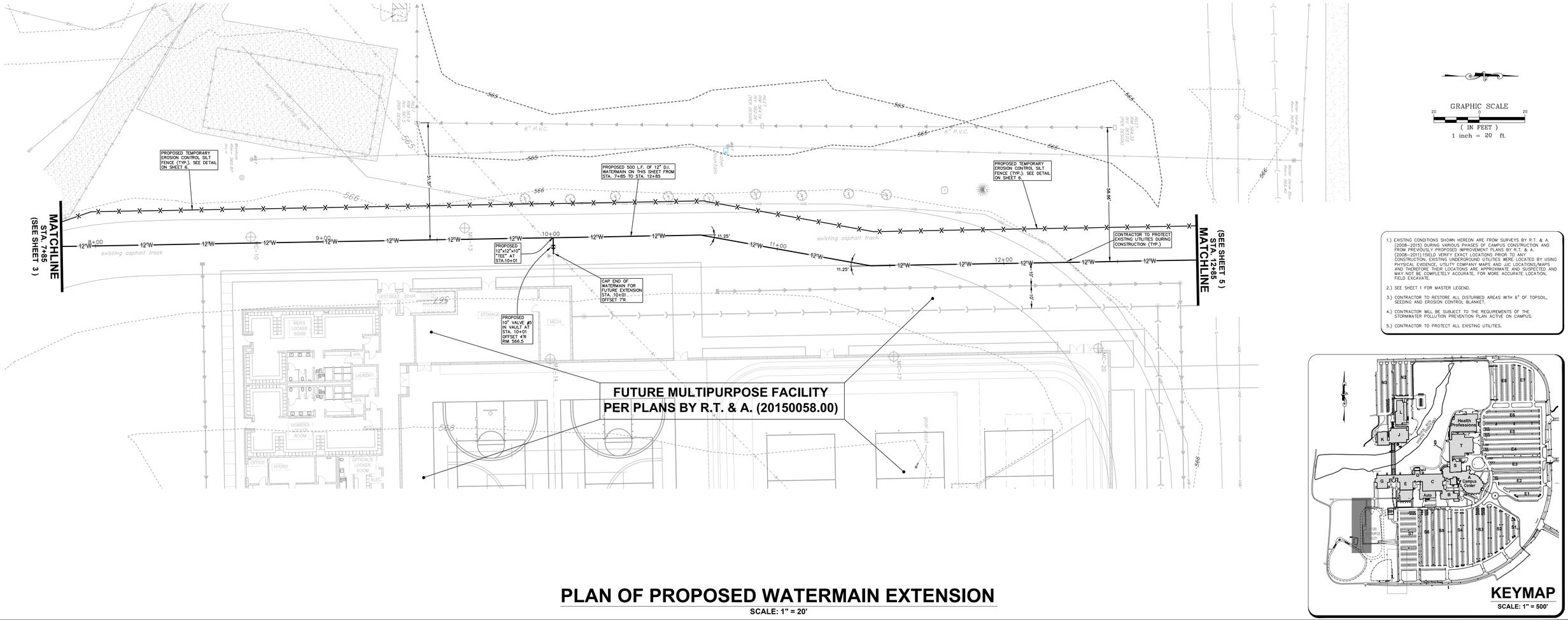
JOLIET, ILLINOIS 60431

DRAWING TITLE:
PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (2 OF 4)

DRAWING No. 315-0152-C1
SCALE: AS NOTED
ENGINEERING DEPARTMENT
SHEET 3 OF 6

N:\Tech\2015\152\Engineering\Plans Sent\C1 - Watermain Extension\SH 03 - Plan and Profile of Watermain Extension 02.dwg, Layout1, 3/6/2015 11:39:25 AM, Rpeoples



PLAN OF PROPOSED WATERMAIN EXTENSION

SCALE: 1" = 20'

GRAPHIC SCALE

20 0 20

(IN FEET)

1 inch = 20 ft.

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2.) SEE SHEET 1 FOR MASTER LEGEND.

3.) CONTRACTOR TO RESTORE ALL DISTURBED AREAS WITH 6" OF TOPSOIL, SEEDING AND EROSION CONTROL BLANKET.

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5.) CONTRACTOR TO PROTECT ALL EXISTING UTILITIES.

SCALE: 1" = 500'

PROFILE OF PROPOSED WATERMAIN EXTENSION

SCALE: HORIZONTAL 1" = 20'
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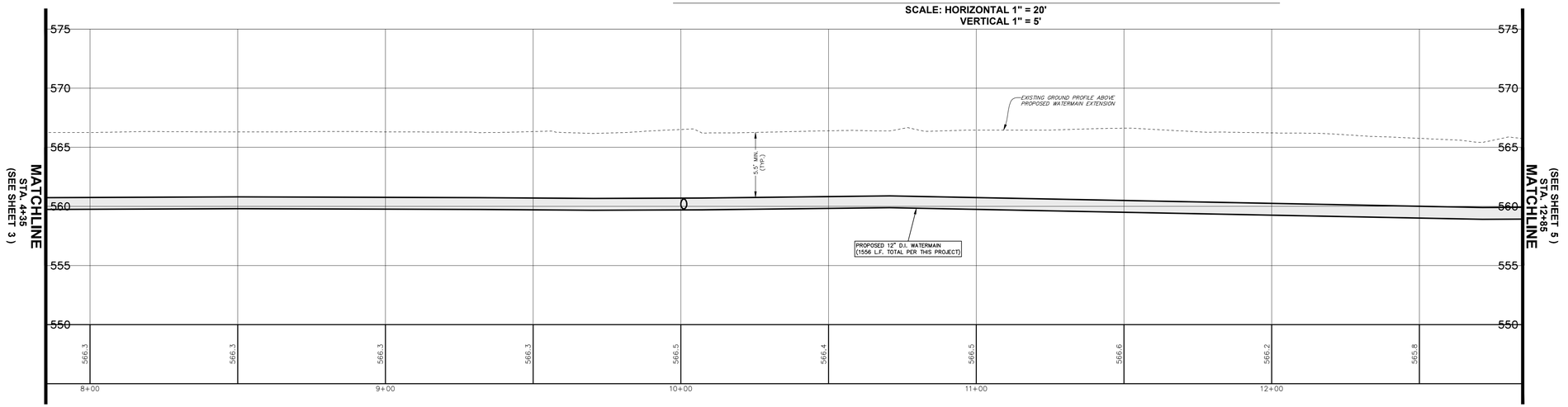

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FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

LEGEND
EXISTING GROUND ELEVATION
XXX.X AT PROPOSED UTILITY
UTILITY CENTERLINE STATION

REVISIONS

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JOLIET, ILLINOIS 60431

DRAWING TITLE:
PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (3 OF 4)

DRAWING No. 315-0152-C1
SCALE: AS NOTED
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SHEET 4 OF 6

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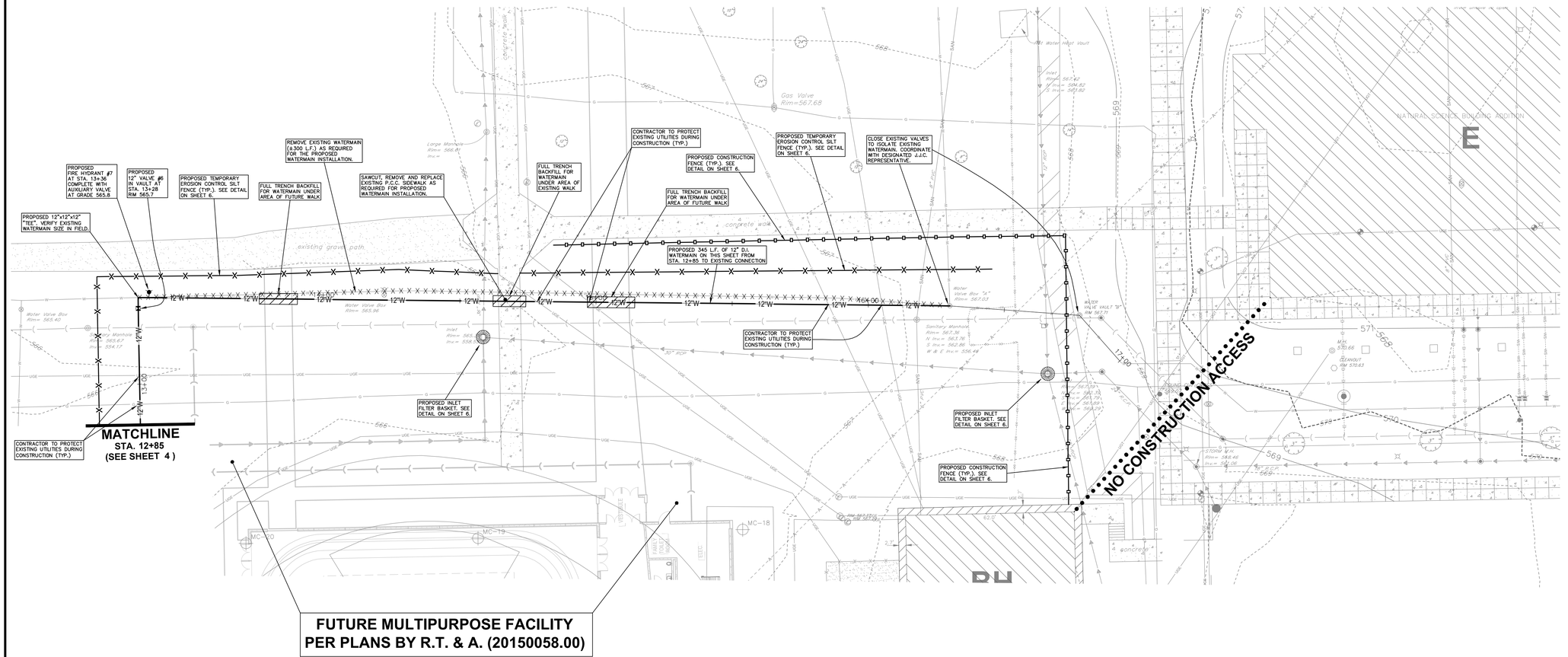

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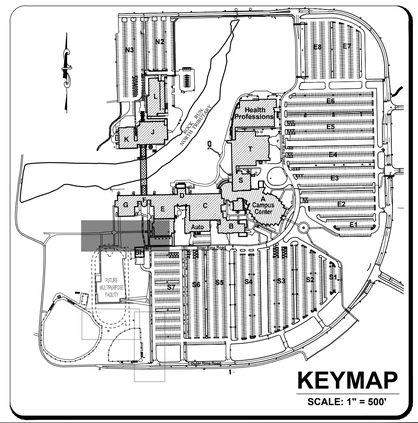

SCALE: 1" = 500'

PLAN OF PROPOSED WATERMAIN EXTENSION

SCALE: 1" = 20'

PROFILE OF PROPOSED WATERMAIN EXTENSION

SCALE: HORIZONTAL 1" = 20'
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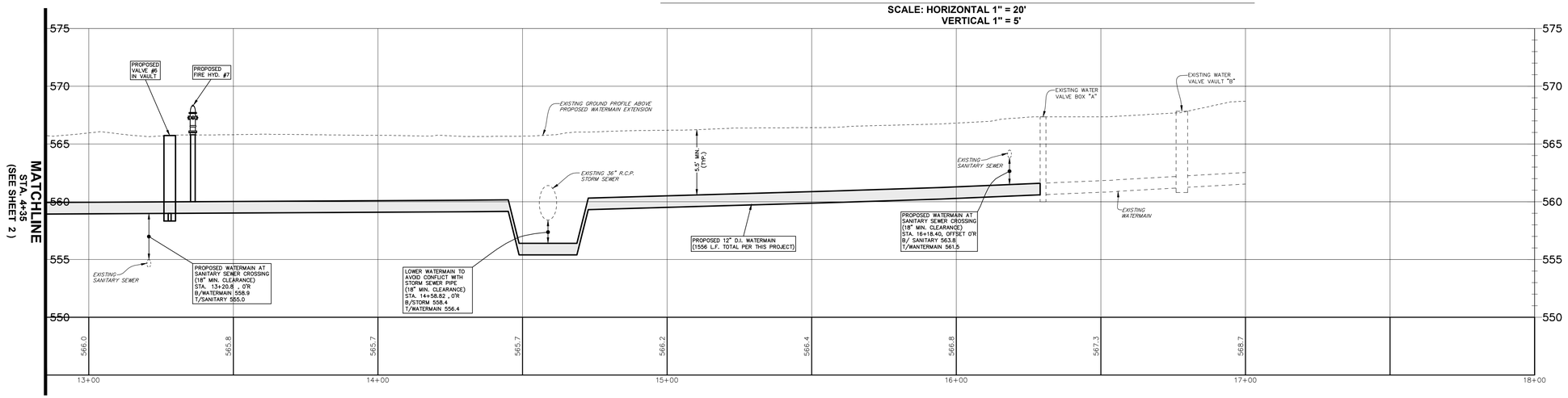

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FIELD VERIFY BENCHMARK WITH BENCHMARK LIST.

LEGEND
EXISTING GROUND ELEVATION
XXX.X AT PROPOSED VERTICY
UTILITY CENTERLINE STATION

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PLAN AND PROFILE OF PROPOSED WATERMAIN EXTENSION (4 OF 4)

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SCALE: AS NOTED
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SHEET 5 OF 6

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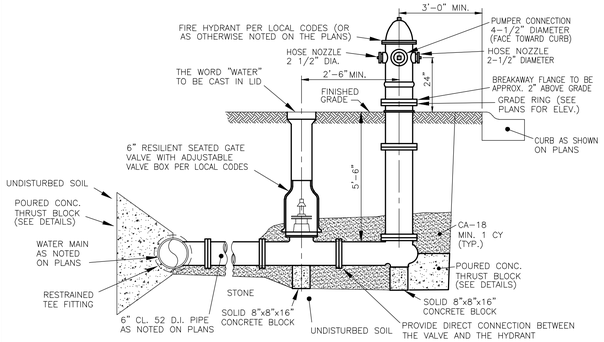
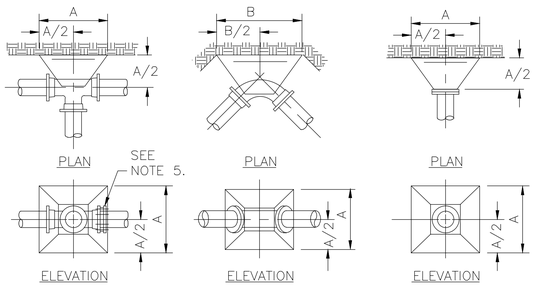


HYDRANT INSTALLATION NOTES:

1. HYDRANT DRAIN HOLE SHALL BE FREE OF CONCRETE
2. HYDRANT SHALL BE RED IN COLOR
3. PROVIDE VALVE BOX STABILIZER
4. NPT CONNECTIONS FOR NOZZLES

FIRE HYDRANT INSTALLATION

NOT TO SCALE



TEE OR TAP

BEND

PLUG END

TABLE OF "A" DIMENSIONS (IN FEET)						
TEST PRESSURE (P.S.I.)	PIPE SIZE (NOMINAL DIAMETER IN INCHES)					
	4	6	8	10	12	16
115	1'-3"	1'-7"	2'-1"	2'-7"	3'-1"	4'-4"
100	1'-2"	1'-6"	2'-0"	2'-5"	3'-0"	4'-0"
130	1'-3"	1'-8"	2'-3"	2'-9"	3'-4"	4'-7"
150	1'-4"	1'-11"	2'-6"	3'-2"	3'-9"	4'-11"

VERTICAL BEND

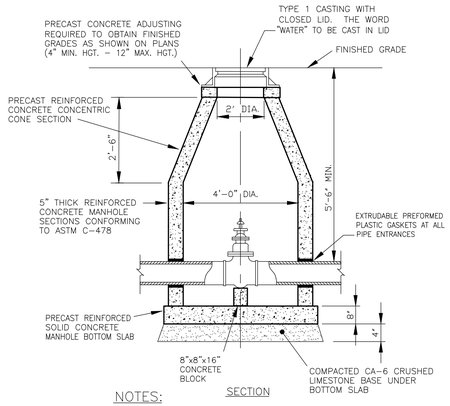
TABLE OF "B" DIMENSIONS (IN FEET)							
TEST PRESSURE (P.S.I.)	BEND (DEGREES)	PIPE SIZE (NOMINAL DIAMETER IN INCHES)					
		4	6	8	10	12	16
100	90	1'-4"	1'-9"	2'-4"	3'-0"	3'-5"	5'-10"
	45	1'-0"	1'-4"	1'-9"	2'-2"	2'-7"	4'-4"
	22-1/2	0'-9"	1'-0"	1'-3"	1'-6"	1'-10"	3'-1"
	11-1/4	0'-6"	0'-8"	1'-0"	1'-1"	1'-4"	2'-2"
115	90	1'-5"	1'-11"	2'-6"	3'-1"	3'-8"	6'-3"
	45	1'-1"	1'-5"	1'-10"	2'-4"	2'-9"	4'-8"
	22-1/2	0'-9"	1'-0"	1'-4"	1'-8"	2'-0"	3'-4"
	11-1/4	0'-7"	0'-9"	1'-0"	1'-2"	1'-5"	2'-4"
130	90	1'-6"	2'-0"	2'-8"	3'-4"	3'-11"	6'-8"
	45	1'-2"	1'-6"	2'-0"	2'-5"	2'-11"	4'-11"
	22-1/2	0'-10"	1'-1"	1'-5"	1'-9"	2'-1"	3'-6"
	11-1/4	0'-8"	0'-9"	1'-0"	1'-3"	1'-6"	2'-6"
150	90	2'-0"	2'-10"	3'-9"	4'-7"	5'-5"	9'-2"
	45	1'-6"	2'-1"	2'-9"	3'-4"	4'-0"	6'-7"
	22-1/2	1'-3"	1'-6"	2'-0"	2'-5"	2'-10"	3'-9"
	11-1/4	0'-9"	1'-1"	1'-5"	1'-9"	2'-0"	2'-8"

NOTES

1. THRUST BLOCKS SHALL BE CONSTRUCTED OF CLASS "SI" P.C. CONCRETE.
2. REINFORCING STEEL SHALL BE BASED ON TEST PRESSURES:
   - 100 PSI = #4 @ 12" EACH WAY
   - 115 PSI = #4 @ 12" EACH WAY
   - 130 PSI = #5 @ 12" EACH WAY
   - 150 PSI = #5 @ 12" EACH WAY
3. THRUST BLOCK SIZE FOR TEE DETERMINED BY SMALLEST DIAMETER OF TEE AND TEST PRESSURE OF PIPE.
4. ALL THRUST BLOCK SIZES SHOWN ARE BASED ON A MINIMUM SOIL BEARING PRESSURE OF 1500 PSI (STANDARD PROCTOR).
5. MECHANICALLY RESTRAINED JOINTS SHALL BE USED WHEREVER THERE IS A SHORTAGE OF SPACE DUE TO OTHER UTILITIES OR STRUCTURES, AND WHERE BEARING SOILS HAVE BEEN DISTURBED OR DO NOT MEET THE MINIMUM SOIL BEARING REQUIREMENT.

THRUST BLOCK INSTALLATION

NOT TO SCALE



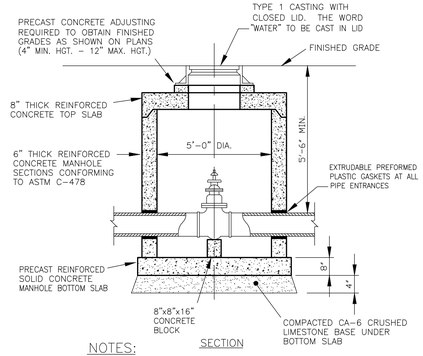
SECTION

NOTES:

1. MANHOLE SECTIONS, ADJUSTING RINGS AND CASTING SHALL BE SET IN BUTYL ROPE (RAMNECK, EZ STICK, OR EQUAL). ALL LIFT HOLES AND INTERIOR JOINTS SHALL BE SEALED WITH NON-SHRINK GROUT.
2. VALVE MUST ALIGN WITH CENTER OF VAULT OPENING.

WATER VALVE VAULT FOR 4", 6" AND 8" DIA. PIPES

NOT TO SCALE



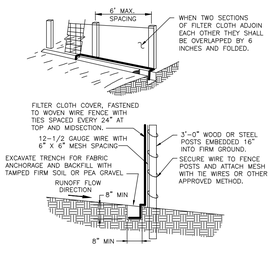
SECTION

NOTES:

1. MANHOLE SECTIONS, ADJUSTING RINGS AND CASTING SHALL BE SET IN BUTYL ROPE (RAMNECK, EZ STICK, OR EQUAL). ALL LIFT HOLES AND INTERIOR JOINTS SHALL BE SEALED WITH NON-SHRINK GROUT.
2. VALVE MUST ALIGN WITH CENTER OF VAULT OPENING.

WATER VALVE VAULT FOR 10" AND 12" DIA. PIPES

NOT TO SCALE

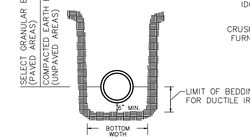


NOTES FOR SILT FENCE

1. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL SHALL BE REMOVED WHEN BULGES DEVELOP IN THE SILT FENCE.
2. FILTER CLOTH SHALL BE FILTER X, MIRAFI 100X, STABILINKA T140N, OR EQUAL.
3. PREFABRICATED UNIT SHALL BE GEOFAB, ENVIROFENCE, OR EQUAL.

SILT FENCE INSTALLATION

NOT TO SCALE



NOTES:
A. PAVED AREA SHALL BE DEFINED AS ANY AREA WHERE THE LIMITS OF THE TRENCH FALL WITHIN 2' OF DRIVEWAYS, SIDEWALK, CURB & GUTTER, ROADWAY PAVEMENT, ETC.
B. MINIMUM BOTTOM WIDTH = O.D. + 2'
C. MAXIMUM BOTTOM WIDTH = O.D. + 3'

MATERIALS

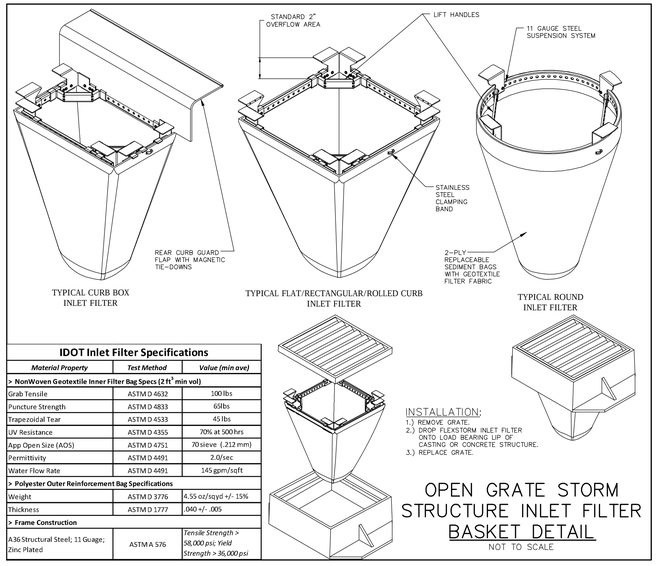
BEDDING, HAUNCHING, INITIAL BACKFILL
IDOT GRADATION CA-7 OR CA-11

SELECT GRANULAR BACKFILL
IDOT GRADATION CA-6, CA-7 OR CA-11

NO RECYCLED MATERIAL SUCH AS CRUSHED CONCRETE, ASPHALT MILLINGS, BLAST FURNACE SLAG, ETC. PERMITTED FOR USE AS BEDDING, HAUNCHING, BACKFILL

TRENCH DETAIL FOR PVC & DUCTILE IRON PIPES

NOT TO SCALE



IDOT Inlet Filter Specifications

Material Property	*Test Method*	*Value (min ave)*
> NonWoven Geotextile Inner Filter Bag Specs (2 ft³ min vol)		
Grab Tensile	ASTM D 4632	100 lbs
Puncture Strength	ASTM D 4833	65 lbs
Trapezoidal Tear	ASTM D 4533	45 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs
App Open Size (AOS)	ASTM D 4751	70 sieve (.212 mm)
Permittivity	ASTM D 4491	2.0/sec
Water Flow Rate	ASTM D 4491	145 gpm/sqft
> Polyester Outer Reinforcement Bag Specifications		
Weight	ASTM D 3776	4.55 oz/sqyd +/- 15%
Thickness	ASTM D 1777	040 +/- .005
> Frame Construction		
A36 Structural Steel; 11 Guage; Zinc Plated	ASTM A 576	*Tensile Strength > 58,000 psi; Yield Strength > 36,000 psi*

INSTALLATION:
1.) REMOVE GRATE.
2.) DROP FLEXSTORM INLET FILTER ONTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE.
3.) REPLACE GRATE.

OPEN GRATE STORM STRUCTURE INLET FILTER BASKET DETAIL

NOT TO SCALE

EROSION CONTROL NOTES

1. EROSION CONTROL TO BE APPLIED PER THE ILLINOIS PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL MANUAL, LATEST EDITION.
2. THE TEMPORARY EROSION CONTROL SYSTEMS INSTALLED BY THE CONTRACTOR SHALL BE PROPERLY MAINTAINED AS DIRECTED BY THE VILLAGE TO CONTROL SILTATION AT ALL TIMES DURING THE LIFE OF THE CONTRACT.
3. ALL STORM SEWER STRUCTURES WITH OPEN GRATES SHALL BE PROTECTED BY INSTALLING FILTER BASKETS FOR THE DURATION OF THE CONSTRUCTION, UNTIL FINAL PERMANENT STABILIZATION IS ACHIEVED.
4. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN (7) SEVEN CALENDAR DAYS FOLLOWING THE END OF ACTIVE DISTURBANCE, RE-DISTURBANCE, CONSISTENT WITH THE FOLLOWING CRITERIA, APPROPRIATE TEMPORARY OR PERMANENT STABILIZATION MEASURES SHALL INCLUDE SEEDING, MULCHING, SODDING AND / OR NON-VEGETATIVE MEASURES.
5. ALL EROSION CONTROL ITEMS REMAIN IN PLACE AND BE MAINTAINED UNTIL DEEMED UNNECESSARY BY THE OWNER / DEVELOPER AND THE VILLAGE AT WHICH TIME THE EROSION CONTROL ITEMS SHALL BE COMPLETELY REMOVED FROM THE SITE BY THE INSTALLER.
6. ALL DISTURBED AREAS NOT SPECIFICALLY IDENTIFIED FOR LANDSCAPING IMPROVEMENTS OR IMPERVIOUS SURFACE TREATMENTS SUCH AS PAVEMENTS, DRIVES, PATIOS, STOOPS, SIDEWALKS OR WALKWAYS SHALL BE FINISHED WITH A MINIMUM OF 6" OF TOPSOIL AND RESTORED IN ACCORDANCE WITH THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2002 AS FOLLOWS:
   - CLASS 2 SEED PER SECTION 250.
   - FERTILIZED NUTRIENTS IN THE RATIO OF 1:1:1 OF NITROGEN, PHOSPHOROUS AND POTASSIUM EACH, ALL AT THE RATE OF 60 LBS/ACRE IN ACCORDANCE WITH SECTION 250.
   - EROSION CONTROL BLANKET: EXCELSOR GREEN BLANKET (I.D.O.T. SEC. 251.04)
   - CONTRACTOR SHALL MAINTAIN RESTORED AREA AS NEEDED UNTIL GERMINATION IS COMPLETED AND THE OWNER, OR LOCAL AGENCY HAVING JURISDICTION, HAS ACCEPTED THE WORK.
7. FOR EACH PHASE OF WORK, THE CONTRACTOR RESPONSIBLE FOR THAT WORK IS TO PROVIDE QUALIFIED PERSONNEL WHO SHALL INSPECT:
   - DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABLIZED WITH IMPERVIOUS MATERIALS OR VEGETATIVE GROUND COVER.
   - STRUCTURAL CONTROL MEASURES (I.E. SILT FENCE, GRATE FABRIC, ETC.)
   - OFF SITE ROADS AND ON SITE PAVEMENTS WHICH THE CONTRACTOR'S VEHICLES AND OR EQUIPMENT OPERATE.

   SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT HAS 0.5 INCHES OR MORE OF PRECIPITATION.

   ALL INSPECTIONS SHALL BE IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN INSPECTION REQUIREMENTS.
8. ANY STOCKPILE OF TOPSOIL MAINTAINED ON SITE SHALL BE STABILIZED WITH A VEGETATION ACCORDING TO NOTE 4 ABOVE. STOCKPILE SHALL BE SURROUNDED WITH SILT FENCE.

SITE CONSTRUCTION GENERAL NOTES

1. ALL NEW CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" LATEST EDITION; AND "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" – ILLINOIS DEPARTMENT OF TRANSPORTATION, LATEST EDITION.
2. THE OWNER AND/OR CONTRACTOR ARE REQUIRED TO FOLLOW THE ACTIVE GENERAL PERMIT ILR-10 OR NATIONAL POLLUTANT ELIMINATION SYSTEM (NPDES) PERMIT. CONTRACTOR IS REQUIRED TO MAINTAIN THE STORMWATER POLLUTION PREVENTION PLAN.
3. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE CONSTRUCTION MANAGER.
4. UNLESS NOTED OTHERWISE, ANY UNDERGROUND SEWER OR DRAIN TILE SHALL REMAIN IN OPERATION, AND IF DAMAGED SHALL BE REPAIRED TO EXISTING OR BETTER CONDITION. THE OWNER OF THE TILE AND THE CONSTRUCTION MANAGER SHALL BE NOTIFIED BEFORE TRENCH IS BACKFILLED.
5. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THE OWNER, CONSTRUCTION MANAGER AND ENGINEER IF THERE IS ANY DISCREPANCY BETWEEN THE PLANS AND EXISTING CONDITIONS PRIOR TO PROCEEDING WITH ANY STAGE OF CONSTRUCTION OF PROPOSED IMPROVEMENTS.
6. GRANULAR BACKFILL TO BE CRUSHED LIMESTONE CA-6.
7. EROSION CONTROL TO BE APPLIED PER THE ILLINOIS PROCEDURES FOR URBAN SOIL EROSION AND SEDIMENTATION CONTROL MANUAL, LATEST EDITION. EROSION CONTROL NOTED SHALL BE CONSIDERED AS MINIMUM. ADDITIONAL MEASURES MAY BE REQUIRED AS CONSTRUCTION PROCEEDS.
8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLETELY REMOVE AND PROPERLY DISPOSE OF EXISTING STRUCTURES, DEBRIS, WASTES AND VEGETATION FROM THE SITE AS NOTED ON THE PLAN OR AS MAY BE REQUIRED TO PROPERLY COMPLETE HIS WORK. ALL DEBRIS AND SURPLUS MATERIALS REMOVED FROM THE SITE SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR. NO ON-SITE BURNING OR BURIAL SHALL BE ALLOWED.

   THE CONTRACTOR SHALL MAINTAIN THE SITE IN A CLEAN AND ORDERLY MANNER AT ALL TIMES. DEBRIS AND SURPLUS MATERIAL CLEAN UP AND REMOVAL SHALL PROCEED AS THE WORK PROCEEDS.

   ANY EXISTING WATER AND SANITARY SERVICES ENCOUNTERED FROM PREVIOUSLY DEMOLISHED BUILDINGS SHALL BE ABANDONED AND CAPPED OFF.
9. TRAFFIC CONTROL

   ALL WORK CONDUCTED WITHIN ANY PUBLIC AREAS SHALL BE GOVERNED BY THE APPLICABLE ARTICLES OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS". WORK SHALL INCLUDE FURNISHING, INSTALLING, MAINTAINING, RELOCATING AND REMOVING ALL TRAFFIC CONTROL DEVICES USED FOR THE PURPOSE OF REGULATING, WARNING OR DIRECTING TRAFFIC DURING THE CONSTRUCTION OF ANY IMPROVEMENTS, LOADING AND UNLOADING OF MATERIALS, MOBILIZATION OF EQUIPMENT, CLEANING OF PAVEMENTS, OR WHENEVER THE SAFETY OF WORKERS OR TRAFFIC MAY BE AN ISSUE.

   TRAFFIC CONTROL DEVICES INCLUDE: SIGNS AND THEIR SUPPORTS, SIGNALS, PAVEMENT MARKINGS, BARRICADES WITH SAND BAGS, CHANNELING DEVICES, WARNING LIGHTS, ARROW BOARDS, FLAGGERS, OR ANY OTHER DEVICE USED FOR THE PURPOSE OF REGULATING, WARNING OR GUIDING TRAFFIC THROUGH THE CONSTRUCTION ZONE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER LOCATION, INSTALLATION, AND ARRANGEMENT OF ALL TRAFFIC. ANY DROP OFF GREATER THAN TWO INCHES WITHIN EIGHT FEET OF THE PAVEMENT EDGE SHALL BE PROTECTED BY TYPE I OR II BARRICADES WITH IDOT APPROVED WARNING LIGHTS.

   TRAFFIC CONTROL DEVICES AND MEASURES SHALL BE SUBJECT TO APPROVAL AND INSPECTION BY CONSTRUCTION MANAGER.
10. FOR EACH PHASE OF WORK, THE CONTRACTOR RESPONSIBLE FOR THAT WORK IS TO PROVIDE QUALIFIED PERSONNEL WHO SHALL INSPECT:
    - DISTURBED AREAS OF THE CONSTRUCTION SITE WHICH HAVE NOT BEEN STABILIZED WITH IMPERVIOUS MATERIALS OR VEGETATIVE GROUND COVER.
    - STRUCTURAL CONTROL MEASURES (I.E. SILT FENCE, GRATE FABRIC, ETC.)
    - OFF SITE ROADS AND ON SITE PAVEMENTS WHICH THE CONTRACTOR'S VEHICLES AND OR EQUIPMENT OPERATE.

    SUCH INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT HAS 0.5 INCHES OR MORE OF PRECIPITATION.

    ALL INSPECTIONS SHALL BE IN CONFORMANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN INSPECTION REQUIREMENTS.

WATERMAIN NOTES:

SANITARY SEWER & WATER MAIN SEPARATION SHALL CONFORM TO SECTION 41-2.01 OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

WATER MAIN:

1. WATER MAIN SHALL BE CEMENT LINED DUCTILE IRON C-151, CLASS 52 WITH C-111 PUSH-ON JOINTS; DISINFECTION-CHLORINE, INITIAL CONC. 50 mg/l, FINAL 25 mg/l, RETENTION TIME 24 HOURS, MINIMUM SAMPLES TWO CONSECUTIVE DAYS @ 24 HOUR INTERVALS.
2. ALL FITTINGS SHALL BE CEMENT LINED DUCTILE IRON, MECHANICAL JOINT; RETAINER GLANDS ARE REQUIRED ON ALL BENDS, TEES, OR ELBOWS; ALL PLUGS SHALL BE CLOW F-1159 OR APPROVED EQUAL.
3. FIRE HYDRANT SHALL BE A CLOW F-2500 MUELLER "CENTURION" A-423 COMPLETE WITH AUXILIARY VALVE; VALVE OPENING OF 5 1/4 INCH AND EQUIPPED WITH TWO 2 1/2 INCH HOSE CONNECTIONS AND ONE 4 1/2" MALE PUMPER CONNECTION.
4. ALL VALVES SHALL BE RESILIENT SEATED CONFORMING TO AWWA C509 STANDARDS; MANUFACTURED BY MUELLER OR APPROVED EQUAL.
5. RETAINER GLANDS SHALL BE REQUIRED FOR HYDRANTS NOT DIRECTLY CONNECTED TO HYDRANT TEE AT WATERMAIN.

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JULIE ILLINOIS ONE-CALL SYSTEM
CONTACT J.U.L.I.E. at 811 or 800-892-0123
48 Hours (2 Working Days) BEFORE YOU DIG.
Include the following:
County, City/Township, Section & ¼ Section No.

REVISIONS

No.	DATE	DESCRIPTION	BY	No.	DATE	DESCRIPTION	BY
0	3-16-2015	ISSUED FOR REVIEW	R.P.				

DOCUMENTATION:
PROJECT No.: 20150152.00
DATE: 3-12-2015
FIELD BOOK: JJC2, P. 50
DRAWN BY: R.P.
CHECKED BY: J.H.

Ruettiger, Tonelli & Associates, Inc.
Surveyors • Engineers • Planners • Landscape Architects • G.I.S. Consultants
129 CAPISTA DRIVE - SHOREWOOD, ILLINOIS 60404
PH. (815) 744-6600 FAX (815) 744-0101
website: www.ruettigertonelli.com

PROJECT TITLE:
JOLIET JUNIOR COLLEGE
MAIN CAMPUS WATERMAIN EXTENSION
1215 HOUBOLT ROAD
JOLIET, ILLINOIS 60431

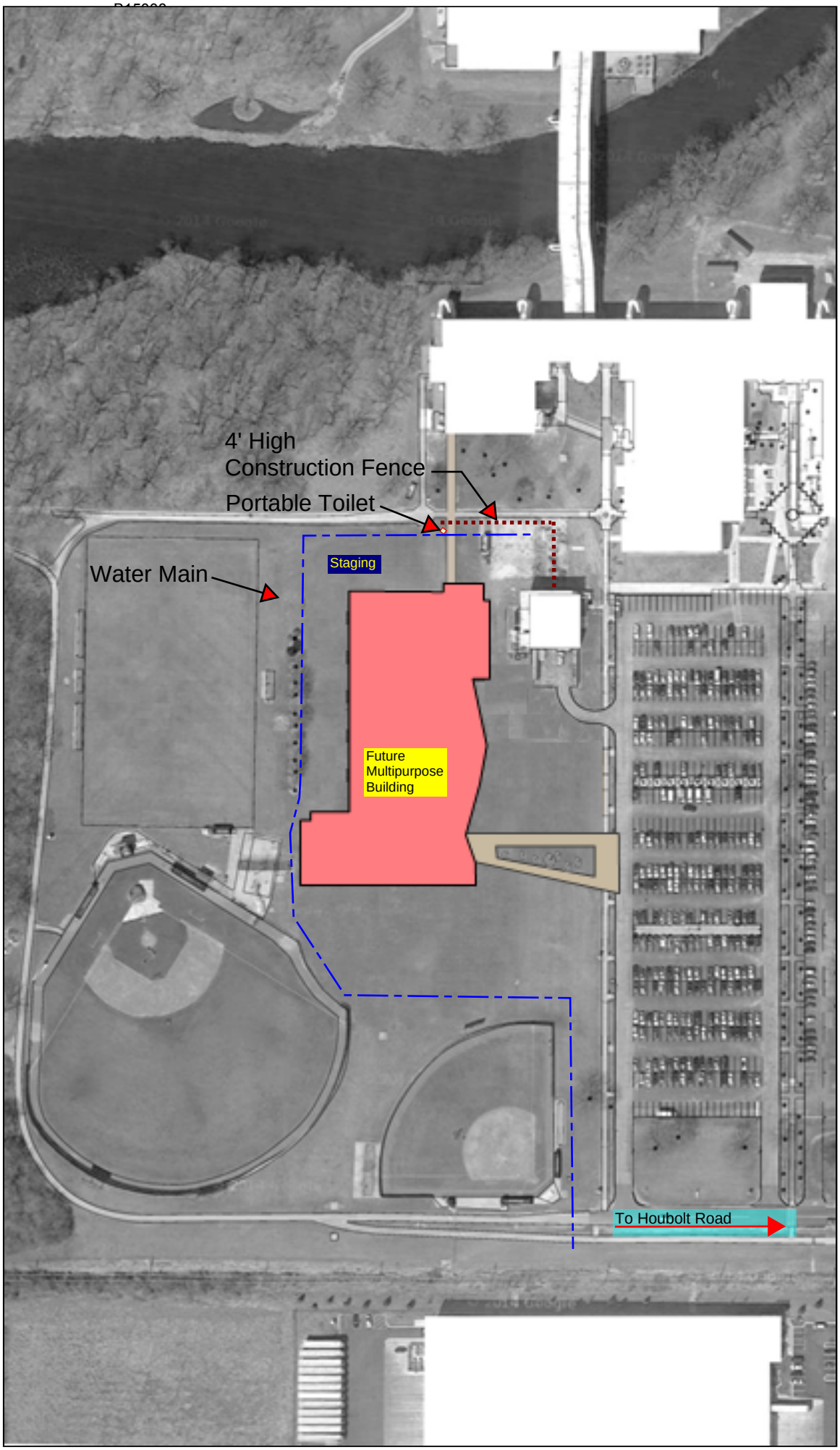
DRAWING TITLE:
GENERAL NOTES AND CONSTRUCTION DETAILS

DRAWING No.: 315-0152-C1
SCALE: AS NOTED
ENGINEERING DEPARTMENT
SHEET 6 OF 6

N:\Projects\20150152\Engineering\Plans Sets\C1 - Watermain Extension\Sht 06 - General Notes and Details 01.dwg, Layout1, 3/16/2015 11:37:28 AM, Rpeebles

Joliet Junior College
1215 Houbolt Road
Joliet IL. 60431

Water Main
Site Logistics Plan



JOLIET JUNIOR COLLEGE
1901

CONTRACT AGREEMENT

Purchase Order#: XXXXXX Account #: XXX-XXX-XXX.XXX

Date: XXXXXX

Project: XXXXX

Between:

Joliet Junior College		Contractor
1215 Houbolt Road	AND	Address
Joliet, Illinois 60431		Address

In the amount of $ _____ xxxxxxxxxxxxxxxxxxxxxxx and 00/100

ARTICLE 1

THE WORK

1.1 The Trade Contractor and JJC agree that the materials and equipment to be furnished and the work to be done by the Trade Contractor are as follows:

The Contract Sum includes, but is not limited to the following:

- 110% Performance and payment bond to Joliet Junior College, Illinois Community College District No. 525
- Insurance in accordance with Schedule "A" Insurance Requirements.

The Contract Sum excludes the following:

- All sales, consumer, use and other similar taxes on equipment and materials incorporated into the work for this project. Tax Exempt No E9992-4773-06 for Joliet Junior College, Illinois Community College District No. 525

1 .2 The Trade Contractor shall be held accountable for the following Project related responsibilities: furnish all labor and supervision; furnish, supply and install all equipment, material supplies, tools, scaffolding, hoisting, transportation, unloading and handling; do all things required to complete the work described above on the Project all in accordance with the drawings, documents and specifications prepared by the Architect/Engineer/Owner; and furnish all necessary information, shop drawings, details, samples, brochures,

etc. for Owner/Architect approval, as may be required.

ARTICLE 2

TIME OF COMMENCEMENT AND COMPLETION

2.1 Trade Contractor shall start the work upon notice to proceed and shall execute the work with diligence and so as to maintain such schedules and milestones as established by JJC's Construction Manager. The Trade Contractor agrees to complete portions and the whole of the work by the following anticipated dates:

2.2 The Trade Contractor is cautioned that schedules and milestones are subject to review and revision. It is the sole responsibility of the Trade Contractor to attend job meetings, keep itself informed of any revisions, and conform to any such revisions.

2.3 In the event that the Trade Contractor should fail to maintain JJC's progress schedule or the schedule as established above, the JJC Construction Manager reserves the right, after 48 hours formal notice, either by letter or confirmed email to the Trade Contractor, to procure the materials, equipment, and labor necessary to proceed with, or to complete the work, or any portion thereof from other sources and charge the cost thereof to the Trade Contractor.

ARTICLE3

THE CONTRACT SUM

3.1 JJC agrees to pay the Trade Contractor for the satisfactory performance of his work the total sum of:

Contract Amount: $.00

Contract amount is made up of the following:

- Base Bid .....$
- Alternate Bid No. .....$

  Total Contract Amount.....$

Allowances (if applicable):

Unit Prices (furnished and installed unless stated otherwise)

In current funds subject to additions and deductions for changes, as may be agreed upon, and to make payments on account thereof as follows:

3.2 On the established day of each month, the Trade Contractor shall deliver to the JJC Construction Manager (2) completed copies of the JJC Payment Application Package showing values of all materials delivered and work completed up to the established billing date for which payment is being requested. It is specifically understood and agreed that prior to submission of the first statement the Trade Contractor will deliver to the JJC Construction Manager, for review and approval, a detailed breakdown of this contract sum showing a schedule of values for the various parts of the work. Once accepted, this schedule of values will be used as a basis for checking the Trade Contractor's monthly statement.

3.3 The Trade Contractor shall, with the second and each succeeding monthly request for payment, submit a waiver of lien showing all payments made for labor and materials and on account for all work covered in the previous months request for payment. Affidavit and waiver of liens may be required to be submitted from Trade Contractors, suppliers, and/or Trade-Trade Contractors (all tier).

3.3.1 The Trade Contractor shall, with the second and each succeeding monthly request for payment, submit certified payroll for all labor and sub labor.

3.4 Ten percent (10%) of each payment shall be retained, unless specific provisions to the contrary are indicated in the contract documents.

3.5 No payment made under this Agreement, including the final payment, shall be conclusive evidence of the performance of the work, either wholly or in part, and no payment shall be construed as an acceptance of defective work or improper materials.

3.6 The Trade Contractor shall save and keep JJC's property free from all mechanics' and material liens and all other liens and claims, legal or equitable, arising out of the Trade Contractors work hereunder. In the event any such lien or claim is filed by anyone claiming by, through, or under the Trade Contractor, the Trade Contractor shall remove and discharge same, by bonding or otherwise, within five (5) days of the filing thereof.

ARTICLE 4

THE CONTRACT DOCUMENTS

4.1 The contract documents consist of this Agreement and any exhibits attached hereto; general conditions, supplementary, special and other conditions, the drawings, specifications, general instructions to bidders, supplements to bidder's documents, form of proposal, all addenda issued prior to and all modifications issued after execution of the Agreement. Any post bid review and/or pre-construction document shall be considered part of this Agreement.

4.2 The Trade Contractor agrees to perform the work under the general direction of the JJC Construction Manager.

4.3 If there is a provision for liquidated damages in the contract documents, the Trade Contractor shall be liable for any liquidated damages by reason of the failure of the Trade Contractor to prosecute the work diligently and properly.

4.4 No extra work shall be performed under this Agreement, except upon receipt of a written change

order from JJC. Should the Trade Contractor proceed with any work they consider extra to this contract without a fully executed JJC change order form, it is considered at their own risk and cost.

ARTICLE 5

INSURANCE AND INDEMNITY

5.1 The Trade Contractor agrees to at the time of execution of this Agreement furnish the Construction Manager with certificates of an insurance company (or other source). These certificates should certify that the Trade Contractor is protected on the work with worker's compensation and employer's liability, public liability and bodily injury, property damage insurance, and any other insurance as required by the contract documents and in accordance with the attachment to this Agreement entitled "Insurance Specifications". The Trade Contractor will not be permitted to start work at the site until these certificates are filed with the JJC Construction Manager. Compliance by the Trade Contractor with the foregoing requirements, as to carrying insurance and furnishing certificates, shall not relieve the Trade Contractor of its liabilities and obligations.

ARTICLE 6

PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

6.1 The Trade Contractor agrees to furnish and pay for a 110% Performance Bond and a 110% Labor and Material Payment Bond. The bonds are to be delivered within 10 days of receipt of a purchase order and execution of this agreement.

ARTICLE 7

WARRANTY

7.1 The Trade Contractor agrees to promptly make good, without cost to the JJC, any and all defects, due to faulty workmanship and/or materials, which may appear within the guarantee or warranty period so established in the contract documents. If no such period be stipulated in the contract documents, then such guarantee shall be for a period of one (1) year from date of completion and acceptance of the work by JJC. The Trade Contractor further agrees to provide any and all guarantees as required by the terms of the contract documents, as a condition precedent to final payment.

ARTICLE 8

CHANGES IN THE WORK

A. 8.1 The Trade Contractor may be ordered in writing by JJC, without invalidating this Agreement, to make changes in the work within the general scope of this Agreement. These changes may consist of additions, deletions, or other revisions, the contract sum and the contract time being adjusted accordingly. The Trade Contractor, prior to the commencement of such changed or revised work, shall submit promptly to the JJC Construction Manager written copies of any claim for adjustment

to the contract sum and contract time for such revised work in a manner consistent with the contract documents. Any extra work done by the Contractor will be considered performed at no extra cost to JJC unless a written JJC change order form has been fully executed and signed by the Director of Business and Auxiliary Services. A contractor shall not be entitled to any compensation for extra work/material based on verbal conversations or email exchanges (the contractor is considered proceeding with extra work at their own risk without a fully executed JJC change order form). It is the contractor's responsibility to obtain a fully executed change order form from JJC. A change order or a combination of multiple change orders may not exceed 10% of the original contract without JJC seeking approval from the Board of Trustees.

8.2 Where changes in the work involve both additions and deletions, percentages for overhead and profit shall be applied to the net increase only of such values for labor and materials.

8.3 The amount to be paid by the Owner for changes in the work, as outlined in paragraph 8.1 above, shall be made on the basis of one of the following methods:

(a) by mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation and agreed upon by the JJC Construction Manager and the Trade Contractor, or

(b) by unit prices stated in the contract documents, or

(c) if no such unit prices are set forth and if the parties cannot agree upon a lump sum, then the actual net cost in money to the Trade Contractor of materials and labor (including insurance and applicable taxes) required, plus rental of plant equipment (other than small tools and small equipment) plus compensation for overhead and for profit as noted in Article 12, field overhead will not be considered as part of actual net cost, or

(d) by the method provided in subparagraph 8.4.

8.4 If none of the above methods set forth in clauses 8.3 (a), 8.3 (b), 8.3 (c) is agreed upon, the Trade Contractor, provided he receives a written order signed by JJC shall promptly proceed with the work involved. The cost of such work shall be determined by the JJC Construction Manager on the basis of reasonable expenditures and savings of those performing the work attributable to the change, including, in the case of an increase in the contract sum, a reasonable allowance for overhead and profit as set forth in the bid documents. In such case, and also under clauses 8.3 (c) and 8.3 (d) above, the Trade Contractor shall keep and present, in such form as the JJC Construction Manager may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a change order. Unless otherwise provided in the contract documents, cost shall be limited to the following: cost of materials including sales tax and cost of delivery, cost of labor including social security, old age and unemployment insurance and fringe benefits required by Agreement or custom; workers or workmen's compensation insurance; bond premiums; rental value of equipment and machinery; and the additional costs of supervision and field office personnel directly attributable to the change. Pending final determination of cost, payments, on account shall be made as determined by the JJC. The amount of credit to be allowed by the Trade Contractor for any deletion or change which results in a net decrease in the contract sum will be the amount of the actual net cost as confirmed by JJC when both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any with respect to that

change.

8.5 For work performed by a Trade-Trade Contractor, the Trade Contractor will be allowed to add 5% only and said Trade-Trade Contractor mark-up shall not exceed the agreed upon percentages noted in Article 11 for overhead and profit.

ARTICLE 9

TRADE CONTRACTOR RESPONSIBILITIES

9.1 The Trade Contractor shall provide sufficient, safe, and proper facilities at all times for the inspection of the work by JJC. The Trade Contractor shall, within a 24-hour notice from the JJC Construction Manager, proceed to take down all portions of the work and remove from the grounds or buildings, all materials, whether worked or unworked, which the JJC Construction Manager shall condemn as unsound or improper, or as in any way failing to conform to the contract documents. The Trade Contractor shall make good at its own expense, all work damaged or destroyed thereby.

9.2 The Trade Contractor agrees, in the performance of this Agreement, to comply with all federal, state, municipal, and local laws, ordinances, codes and governing regulations, to pay all costs and expenses required thereby; to pay all fees, charges, assessments, and taxes, including sales and use taxes, and to pay all fringe and other benefits required by Agreement or law.

9.3 The Trade Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save JJC harmless from loss on account thereof, except that JJC shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Trade Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the JJC Construction Manager.

9.4 Should the Trade Contractor become insolvent, or at any time, refuse or neglect to supply a sufficiency of properly skilled workers, or equipment and materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the Agreements herein contained, JJC shall be at liberty, after 48 hours written notice to the Trade Contractor, to provide any such labor, equipment, and materials and deduct the cost thereof, from any money then due or thereafter to become due to the Trade Contractor, under this Agreement if such refusal, neglect, or failure is sufficient ground for such actions, JJC shall also be at liberty to terminate the employment of the Trade Contractor. Consequently, JJC may enter upon the premises to take possession, for the purpose of completing the work included under this Agreement, of all materials, tools, and appliances thereon, and to employ any other person or persons to finish the work and provide the materials therefore. In case of such discontinuance of the employment, the Trade Contractor shall not be entitled to receive any further payment under this Agreement until the said work shall be wholly finished. If such expense shall exceed such unpaid balance, the Trade Contractor shall pay the difference to JJC. The expense incurred by JJC, as herein provided, either for furnishing materials, or finishing the work, and any damage incurred through such default, shall be chargeable to the Trade Contractor. In the event that a Termination for Cause is not upheld by a properly empowered judicial or arbitral authority, then the Termination for Cause shall be deemed a Termination for Convenience and construed under Section 9.4.1. hereof.

9.4.1 Notwithstanding the above paragraph, JJC reserves the right to terminate this Agreement for its convenience upon written notice to the Trade Contractor. In such instance the Trade Contractor will be paid

its share of the contract amount proportionate to the percentage of its work completed and other reasonable cancellation costs incurred as a result of said termination. No payments shall be made for anticipated overhead and profit. Prior to making any payments under this clause, JJC shall have the right to audit the records of the Trade Contractor.

9.5 The Trade Contractor agrees to adhere to the federal occupational safety act, state and local safety regulations and JJC's safety and health program so as to avoid injury or damage to persons or property, and to be directly responsible for damage to persons and property resulting from failure to do so.

9.6 In the event the Trade Contractor after a 24-hour written notice from JJC fails to take corrective action to insure compliance with said safety regulations or removal of rubbish and debris resulting from his work, JJC shall undertake these obligations and charge the cost of same to the Trade Contractor's account without further notice to the Trade Contractor.

9.7 The Trade Contractor agrees to notify the JJC Construction Manager of all accidents which may occur to persons or property and shall provide a copy of all accident reports on appropriate forms. All reports shall be signed by the Trade Contractor or his authorized representative and submitted within five (5) days of occurrence.

9.8 The Trade Contractor shall procure its materials from such sources, and employ such labor subject to contract terms and conditions in order to ensure harmonious labor relations on the site and prevent strikes or labor disputes by its employees or other trade employees. The Trade Contractor, in the event of a labor dispute including strikes, shall take whatever action is required in order to prevent the disruption of work on the Project site.

9.9 The Trade Contractor will not assign this Agreement or any moneys due or to become due under this Agreement, or sublet the whole or any part of the work to be performed hereunder, without the written consent of the Owner. In the event of such consent, a Trade-Trade Contractor must comply with all the requirements of this Agreement.

9.1 0 The Trade Contractor agrees that all disputes concerning the jurisdiction of trades shall be adjusted in accordance with any plan for the settlement of jurisdictional disputes which may be in effect either nationally or in the locality in which the work is being done. The Trade Contractor shall be bound by, and shall abide by, all such adjustments and settlements of jurisdictional disputes, whether or not the Trade Contractor is signature bound by the Agreement establishing the impartial jurisdictional disputes board and/or its successors. The Trade Contractor agrees not to cause work stoppage, due to the jurisdictional assignment of work.

9.11 The Trade Contractor shall submit to the JJC Construction Manager upon request, copies of orders placed for the various materials required for the Project or authentic stock lists if such material is normally a stock item. Order copies need not reflect prices but should indicate type of material, quantity, vendor name, and address, etc. The Trade Contractor shall be required to submit to the JJC Construction Manager a monthly material status report, or more often if required by the JJC Construction Manager, as a prerequisite for the monthly progress payment. The Trade Contractor shall notify the JJC Construction Manager immediately upon learning of a change of status of any material, equipment, or supplies.

9.12 The Trade Contractor shall continuously and adequately protect all his work and will immediately replace all damaged and defective work.

9.13 The Trade Contractor agrees to maintain an adequate force of experienced workers and the necessary materials, supplies, and equipment to meet the requirements of the JJC Construction Manager and other trades in order to maintain construction progress schedules, as established by the JJC Construction Manager. In the event that his force is, in the judgment of the JJC Construction Manager, inadequate to meet the established schedules during the regular working hours, the Trade Contractor agrees to work sufficient overtime hours or increase his work force to meet such schedules at no extra cost to JJC. If for reasons not already stated, the JJC Construction Manager requires and directs the Trade Contractor to work overtime, including Saturdays, Sundays or Holidays, the Trade Contractor will be reimbursed the net premium rate only. The net premium rate is understood to mean the actual premium labor cost, including applicable taxes and wage additives required by trade Agreement or by law, but without additives for overhead, labor efficiency, or profit.

9.14 The Trade Contractor agrees to employ competent administrative, supervisory, and field personnel to accomplish the work, including layout, engineering, and preparation and checking of shop drawings. If required, the Trade Contractor shall substantiate this employment of competent personnel to JJC's Construction Manager's satisfaction before initiating any work.

9.15 The Trade Contractor shall insure that all construction tools, equipment, temporary facilities, and other items used in accomplishing the work, whether purchased, rented, or otherwise provided by the Trade Contractor or provided by others, are in a safe, sound, and good condition, must be capable of performing the functions for which they are intended and must be maintained in conformance with applicable laws and regulations.

9.16 If the Trade Contractor is delayed at any time in the progress of the work by any act or neglect of JJC, the Architect/Engineer, or by any employee of either, or by any separate contractor employed by JJC, or by changes ordered in the work, or by labor disputes, fire, unusual delay in transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties or any causes beyond the Trade Contractor's control, or by delay authorized by JJC, or by any other cause which the JJC Construction Manager determines may justify the delay, then the contract time shall be extended by amendment for such reasonable time as the JJC Construction Manager may determine. In the event that a conflict exists between this section (9.16) and a like clause contained in a document having higher precedence, such like clause shall have preference to the extent of the conflict.

9.17 Right-To-Know- each Trade Contractor is required to implement the provisions of the right-to-know law, if any, as enacted by the state in which the work is being performed. Before using on site any material listed in the right-to-know substance list, each Trade Contractor will furnish the Construction Manager a copy of the material safety data sheet for that substance.

9.18 In the event the Trade Contractor employs independent contractors, as well as payroll labor, to discharge its obligations hereunder, the Trade Contractor acknowledges and understands that it does so at its own risk and that federal, state and/or local agencies may dispute the independent contractor status and assess penalties, fines, and costs should there be a determination to reclassify such workers. In that event, the Trade Contractor agrees that it will defend, indemnify and hold JJC harmless from any fines, costs, damages, penalties, attorneys fees, and causes of action, including without limitation, personal injury or property damage, arising out of or relating in any way to such a determination.

9.19 The Trade Contractor will have competent supervision on site at all times when work is proceeding. No subcontractor should be working on site without representation/supervision by this Trade Contractor. The JJC Construction Manager reserves the right to hire proper supervision of subcontractors, and fully back charge

this Trade Contractor for such services.

ARTICLE 10

EQUAL OPPORTUNITY

10.1 During the performance of this Agreement, the Trade Contractor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Trade Contractor will take affirmative action to insure that applicants are employed without regard to their race, color, religion, sex, or national origin. The Trade Contractor will comply with all provisions of Executive Order No. 11246, Section 503 of the Rehabilitation Act of 1973, as Amended, the Vietnam Era Veterans' Readjustment Assistance Act of 1974, as Amended, (38 U.S.C. 4212) and their implementing regulations at 41 CFR Chapter 60.

ARTICLE 11

ALTERATIONS

11.1 The overhead and profit allowable under Article 8.3. A, 8.3 B, 8.3 C is:

- For the Trade Contractor, for any Work performed by the Trade Contractor's own forces- 12 percent of the cost
- For the Trade Contractor, for Work performed by his Subcontractor - 5 percent of the amount due the Subcontractor

11.2 All proposals, except those less than $200 shall be accompanied by a complete itemization of costs including, labor, materials and subcontractors. Labor and material shall be itemized in the manner prescribed in Article 11.1. Where major cost items are subcontracts, they shall be itemized also. In no case will a change involving over $200 be approved without such itemization.

ARTICLE 12

COMPLETE AGREEMENT

12.1 This Agreement, together with all documents, specifications, drawings, incorporated herein by reference, constitutes the entire Agreement between JJC and Trade Contractor. There are no terms, conditions, or provisions, either oral or written, between the parties hereto, other than those contained herein. This Agreement supersedes any and all written representations, inducements, or understandings of any kind or nature between the parties hereto, relating to the particular Project involved herein.

12.2 The said parties for themselves, their heirs, successors, executors, administrators and assigns, do hereby agree to the full performance of the covenants herein contained.

12.3 Governing Law; Venue - The validity, construction and interpretation of this Agreement shall be governed by the laws of the State of Illinois. The parties hereto irrevocably agree that all actions or proceedings in any way, manner or respect arising out of or from or related to his Agreement shall be litigated only in the Circuit Court, Twelfth Judicial Circuit, Will County, Illinois. Each party hereby consents and submits to personal jurisdiction in the State of Illinois and waives any rights such party may have to transfer the venue of any such action or proceeding.

In witness whereof they have hereunder set their hands the day and date first above written.
In the presence of

Trade Contractor

_____
Witness

Accepted by: _____ (Signature)

Name: _____ (Print name)

Title: _____

Date: _____

Joliet Junior College
Owner

_____
Witness

By: _____ (Signature)
Joliet Junior College

Name: _____ (Print name)

Title: _____

Date: _____

Date:
Time:
Project Title / Location:
Project Number:

FOR
(Contractor's name)

1. **Introductions:** All project members are to introduce themselves including their name, organization, title, and role on the project.

   A. Joliet Junior College Personnel:
      1. Construction Manager:
         a. Phone:
         b. Cell:
         c. Fax:
         d. Email:

      2. Alternate Contact:
         a. Phone:
         b. Cell:
         c. Fax:
         d. Email:

   B. Contractor Personnel
      1. Project Manager:
         a. Phone:
         b. Cell:
         c. Fax:
         d. Email

      2. Construction Superintendent:
         a. Phone:
         b. Cell:
         c. Fax:
         d. Email:

2. Communications:

   A. Communications related to the project between Joliet Junior College and the Contractor shall be conducted through the Joliet Junior College Construction Manager (CM) only, unless directed otherwise.

B. In the event of an emergency the Contractor is to contact Campus Police at 815-280-2234, or may pick-up any campus phone and dial 2911.

C. RFI's: Requests for Information (RFI's): All Requests for Information shall be in written form to JJC's CM with a copy to the A/E when required. All responses will come from JJC or the A/E in writing addressed to the Contractor's Project Manager

D. Weekly Construction Reports: Contractor is to provide a weekly construction report to JJC CM. This report is to be inclusive of daily activities, potential delays, stoppage, problems, accidents, near misses, significant decisions, meetings, requests by JJC, etc.

E. Correspondence: All correspondence shall be directed to the Construction Manager

Joliet Junior College
Facilities Services Department
ATTN:_____
1215 Houbolt Road
Joliet, IL 60431

Include Project Title, Project Number, Purchase Order Number on ALL correspondence.

3. Construction Schedule:

A. Schedule of Values: Contractor is to provide a schedule of values (AIA document recommended) broken down into each division of the work as a minimum. The schedule of values will include as a minimum a listing of the work elements or branch values, the cost of each work element, and the percentage of total project "award" cost that the work element represents. The schedule of values will become the basis for "work elements" a.k.a. "branch values" of the Construction Schedule. These same "work elements" shall be used as the basis for the "branch values" of the Construction Progress Report as listed in item #2D above.

B. Construction Schedule: Contractor is to submit within one week of pre-construction meeting, a fully developed gantt chart type construction schedule.
   1. Provide a task for each construction activity or "work element".
   2. No progress payment will be processed until the construction schedule is submitted and approved.
   3. Provide a revised, updated schedule with each progress payment request.

Performance:

A. Commencement, Prosecution & Completion of Work
   1. Purchase order/notice to proceed received:_____
   2. Contract Amount:_____
   3. Total Amount of Alternates Accepted:_____
   4. Proposed start/mobilization date :_____
   5. Preconstruction Submittals Received: Check one Y_____ N_____
   6. Bonding & Insurance Requirements Received: Check one Y_____ N_____
   7. Completion date: _____
   8. Delays and time extensions: The Contractor is responsible for the completion of project work within the time designated above and in the construction schedule. Justified change orders may qualify a delay and require a time extension which must be discussed and approved by the JJC CM. Failure to complete the project on time will result in a negative evaluation of Contractor performance on the JJC project close-out documents.
   9. All shop drawings will be submitted to the JJC CM or A/E when required. Material samples shall be submitted for approval when required.
   10. The JJC CM and/or the A/E will provide a list of punch list items. The final punch list shall be completed within 2 weeks upon substantial completion. 10% of the contract amount will be withheld until all punch list items are completed.
   11. Construction status meetings between the Contractor and JJC CM shall be held on a weekly basis in the JJC CM's office. At the JJC CM's discretion, this weekly meeting may be held via conference telephone call as the project dictates.
   12. As-built drawings shall be maintained and kept on-site daily. Final as-built drawings are required to be turned over to the JJC CM at project completion. When AutoCAD drawings are available from the A/E, the Contractor will revise the drawings to reflect as-built conditions. Final payment will not be processed until all as-built drawings are received.

B. Coordination of Work:
   1. The Contractor is responsible for coordination of all elements of the work and every aspect of the coordination of his subcontractors work.

   2. The Contractor is required to have a competent construction supervisor in charge of the work at all times. Construction supervisor may be a working foreman.

3. When the shut down of utilities is required, the Contractor shall coordinate with the JJC CM to schedule the shut down process. Allow a minimum of 5 days notice to allow for a shut down. Unless otherwise stated during the bidding process, a utility shut down will be required between the hours of 10:00 p.m. to 6:00 a.m.

4. The contractor is to consider any loud construction noise that may be disruptive to classes, faculty, students and staff (including but not limited to loud demolition, hammer drilling, concrete cutting/drilling, rock breaking, shooting of metal stud track into floors and ceilings, etc.). Such work shall be performed during the maintenance hours of 10:00 p.m. to 6:00 a.m.

5. The contractor will be responsible for providing and maintaining portable toilet facilities when the scope of work is an outdoor project. Location of the portable toilet(s) shall be coordinated with JJC.

6. Any project requiring excavation with remaining spoils shall be hauled off site as part of the contractors base scope of work. Leaving/spreading spoils on site shall not be permitted.

C. Contractor Evaluation:
At the completion of the project, the JJC CM will complete a contractor evaluation. This evaluation is kept on file and is taken into consideration when considering the Contractor for future projects.

13. Mobilization: Prior to the Contractor mobilizing on site, the following requirements must be met and reviewed.

A. Pre-mobilization requirements:
1. Safety plan submitted and approved.
2. Schedule of Values and Construction Schedule submitted and approved.
3. Review Contractor's plan for mobilizing on site, including phasing, timing elements, crane operations, dumpster locations, gang box locations, deliveries, parking, storage of material, etc.
4. The Contractor's safety plan shall be submitted to the JJC CM addressing issues of excavation, crane lifts, hot work and other construction hazards.
5. Contractor check-in with Facility Services. The Contractor's employees are required to obtain vehicle tags and I.D. badges. Any ticketing by Campus Police as a result of no vehicle tag will be the responsibility of the Contractor.

14. Housekeeping and Clean-up: The Contractor is primarily responsible for housekeeping in its respective work areas, and for work performed by its employees and subcontractors. This means the Contractor's work area is required to be maintained in an orderly, safe and productive condition at all times.

A. Accumulation of combustibles, flammable liquids, chemical products, tools not in use, trash and/or refuse is not acceptable and will not be allowed.

B. Parking, staging and storage of materials and equipment shall be confined to designated areas only.

C. When a Contractor's work material may be dislodged by wind and could create a hazard when left in an open area, it shall be secured by the Contractor.

D. The Contractor will police its work area(s) at the end of the shift and leave the area in a condition that is acceptable to the JJC CM.

E. In the event that housekeeping in a Contractor's work area is found to be in an unacceptable condition by the JJC CM, the CM will give notice once verbally to the Contractor's on-site supervisor or foreman. If the deficiency is not corrected in a timely manner (and no later than the end of the day's work shift), the JJC Facility Services Department may make provisions for clean-up (which may or may not be done by outside services), and fully back charged to the Contractor. The Contractor will be liable for all costs associated with clean-up at a minimum rate of $100/man hour plus materials.

F. The Contractor shall provide and install safety fencing or barricades around areas requiring protecting (including but not limited to trees, plantings, etc.). This includes installing cyclone fencing for outdoor projects to prevent anyone from entering the construction zone.

G. The Contractor will be responsible for daily cleaning of mud off roadways where required, or caused by this Contractor.

H. The Contractor will provide tree protection and install silt fencing when working in areas that such protection or erosion control is required.

I. The Contractor will provide berms around storm drains to prevent mud run-off from entering the lake.

15. Conduct and Behavior:

The Contractor's employees must take into consideration the environment around them when holding conversations with fellow employees as well as JJC staff as to not interrupt classes that may be in session, or students in concourses that may be studying. Profanity/foul language, derogatory remarks or harassment of students will not be tolerated and will be an immediate means for the employee dismissal from the project.

16. Progress Payments/Invoicing and Change Orders:

A. A "pencil" copy of progress invoicing shall be submitted to the JJC CM & the A/E by the 1st of every month for review and approval. Final invoicing shall be in by the second week of the month for processing and board approval. No invoice will be processed without lien waiver(s) and certified payroll.

B. Any extra work done by the Contractor will be considered performed at no extra cost to JJC unless a written JJC change order form has been fully executed and signed by the Director of Business and Auxiliary Services. A contractor shall not be entitled to any compensation for extra work/material based on verbal conversations or email exchanges (the contractor is considered proceeding with extra work at their own risk without a fully executed JJC change order form). It is the contractor's responsibility to obtain a fully executed change order form from JJC. A change order, or a combination of multiple change orders may not exceed 10% of the original contract without JJC seeking approval from the Board of Trustees.

17. Miscellaneous:

A. Soliciting or canvassing and posting or distributing printed material (except as permitted by law) is prohibited.

B. Smoking is restricted to designated signed areas outside. The use of any tobacco products (including chewing) indoors is prohibited, and must be done in the designated outdoor smoking areas during break time.

C. Drinking, using, possessing or being under the influence of alcohol or controlled substances are prohibited, and a cause for immediate dismissal.

D. No radios, CD Players or MP3 players shall be used during normal working hours.

E. The Contractor shall perform his/her work in accordance to no less than the minimum requirements as established by the Occupational Safety and Health Association. Personal Protection equipment shall be provided by the Contractor and worn at all times.

F. The Contractor will be responsible for securing materials and tools and shall be solely responsible for any such theft or damage.

By signing below, the Contractor certifies that he, his employees, subcontractors, or assigns will abide to this Preconstruction Conference Checklist during the course of the project.

Contractor: _____
Print name:_____
Sign name:_____
Title: _____
Date signed: _____

JJC CM: _____
Sign name: _____
Date signed: _____

August 2008

Safety Requirements for Contractors and Subcontractors

Environmental Health and Safety

Facility Service Department

(815) 280-2384

Environmental Health and Safety

Safety Requirements for Contractors And Subcontractors

Environmental Health and Safety

Facility Services Department

1215 Houbolt Rd.

Joliet, IL 60431

Phone: (815) 280-2384 Fax (815) 280-6673

http: // www.jjc.edu/ehs

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Introduction

EHS Information

The mission of Environmental Health and Safety (EHS) is to:

- Work toward providing a safe and healthful living, learning, and working environment for every member of the greater college community by assuring safe work practices through educating, training, and assisting individuals and departments;
- Help individuals and departments achieve compliance with all health and safety state and federal regulations and college policies as economically as possible and
- Act as liaison with external regulatory agencies, and to monitor college compliance with mandatory health and safety standards whenever necessary.

Purpose

Joliet Junior College developed *Safety Requirements for Contractors and Subcontractors* to assure the safety of college employees and the public who may be in proximity to renovation, demolition, installation, or maintenance operations performed by Contractors or Subcontractors. Every Contractor is expected to take steps as necessary to protect the safety and health of college employees, students, and visitors during the performance of their work. Each Contractor that coordinates the work of Subcontractors shall assure that they abide by the requirements outlined herein.

Application

Each department that coordinates or uses the services of a Contractor to perform maintenance, repair, installation, renovation or construction-related operations is expected to designate one or more persons to coordinate this program within his or her department. These coordinators are expected to assure that the Contractor is:

- Informed of the presence of hazards in or near the work area.
- Informed about JJC's requirements related to lead, confined space entry, lockout/tagout, hot work, and excavation operations.
- Aware of the colleges' expectations regarding safety compliance and the control of worksite hazards.

A representative from EHS will serve as the coordinator for the purposes of this program on capital renovation and construction projects.

Scope

This program applies to all JJC properties, and to all work performed by Contractors and Subcontractors in or on property owned, leased or occupied by JJC or employees of JJC.

General Requirements

Contractual Obligations

A copy of this document shall be made available upon request to prospective bidders/offerors at the pre-bid/pre-proposal conference for the work. This document shall be either included with, or referenced in, the contract documents.

Contractors performing building, facilities or equipment-related construction, repair, installation, renovation or maintenance activities shall attend a safety orientation as follows:

- On capital projects, this orientation will be conducted during the pre-construction conference or as determined by the Project Manager.
- For non-capital construction/renovation work, the Project Coordinator shall arrange the safety orientation with EHS and the Contractor prior to the start of work by contacting EHS at (815) 280-2384. Contractors retained on a term contract need only attend one safety orientation held prior to the award of the first project under that contract.

The Contractor shall provide the Project Manager/Coordinator with emergency contact phone number(s), usable 24 hours a day, for the Contractor's representative. These phone numbers shall be copied to EHS and the JJC Police Department prior to the work.

The Contractor bears sole responsibility for the safety of his or her employees. The Contractor is expected to take all steps necessary to establish, administer, and enforce safety rules that meet the regulatory requirements of the Illinois Department of Labor (IDOL) and the Occupational Safety and Health Administration (OSHA). These regulations include, but are not limited to:

- Title 29 of the Code of Federal Regulations (CFR) Parts 1910, Occupational Safety and Health Administration (OSHA) Standards for General Industry,
- Title 29 of the Code of Federal Regulations (CFR) Parts 1926, Occupational Safety and Health Administration (OSHA) Standards for the Construction Industry.

The Contractor bears sole responsibility for communication of safety-related information and requirements to his or her Subcontractors. Contractors shall assure that their Subcontractors comply with the requirements outlined herein.

Submittals

Submittals, where required from the Contractor by this document, shall be made in writing, directly to the Project Manager/Coordinator and copied to EHS. Submittals shall be made sufficiently in advance to avoid delay of the project. Where review, approval, or coordination of submittals is required, submittals shall be made at least ten (10) working days prior to the start of the project unless prior arrangements have been made. Post-job submittals, where required

as outlined in this document, shall be made no later than fifteen (15) working days after completion of the project or as specified herein.

Control of Fugitive Emissions

The Contractor shall take all reasonable precautions necessary to control fugitive emissions from the job site. Fugitive emissions include, but are not limited to: nuisance dust, chemical odors/vapors/gases, hazardous materials (such as lead dust or asbestos), and noise.

Where the product(s) or material(s) to be used by the Contractor has a permissible exposure limit (PEL) established by OSHA or IDOL and where college employees or the public may be exposed to the product or material, the Contractor shall take all reasonable steps to maintain exposures below the PEL where an exposure condition during use exceeding the PEL could reasonably be anticipated. In such instances, the Contractor shall monitor, or shall contract to have monitored, work area exposure conditions. Monitoring shall occur, at a minimum, during the start of work and whenever there is a change in procedure, process, or chemical or material used. If it is deemed not practicable to maintain exposures below the PEL, the Contractor shall restrict access to all areas where exposures exceed the PEL to authorize personnel only.

Accidental Spills and Releases

In the event of an accidental release or spill of chemicals or other hazardous materials the Contractor shall:

- Immediately take action as appropriate to contain the spill if this action can be taken without jeopardizing the health or safety of employees,
- Notify the fire department, campus police, or other entities as needed or required,
- Contact EHS, and
- Contact the Project Manager/Coordinator.

EHS emergency response personnel may be reached after normal business hours by contacting the Campus Police Department at (815) 280-2234 or 2811 from a house phone.

The following phone numbers may be used in the event of an emergency during normal working hours:

	Outside	On-Campus
Joliet Fire Department and Ambulance		911
JJC Campus Police	(815) 280-2911	Extension 2911
North Campus-Romeoville Fire/Ambulance	911	911
Morris Fire/Ambulance	911	911
Environmental, Health and Safety	(815) 280-2384	Extension 2384
East Joliet Fire/Ambulance	(815) 723-1504	911
Facility Services	(815) 280-2332	Extension 2332

All college costs associated with responding to or remediation of a chemical or hazardous material spill or release may be assessed by the Contractor.

General Work Requirements

The Contractor shall abide by the requirements of any sign posted in a building that requires the use of specific personal protective equipment, that restricts access to qualified or authorized persons only, or that establishes other requirements for entry.

The Contractor shall not conduct work or operations that obstruct exits or the means of egress from an occupied building without the prior approval of EHS and the Project Manager/Coordinator. Equipment and materials are not to be stored in exits or exit stairwells at any time, and may not be stored in the means of egress without prior approval. Fire rated doors shall not be chocked or blocked open except temporarily and event of a building fire alarm or similar emergency.

Compressed gases shall be stored, used and transported in accordance of the NFPA, OSHA and DOT. New compressed gas installations shall comply with these agency requirements.

All tents, stages and temporary structures shall comply with the requirements of the NFPA.

Contractors shall not use College equipment or vehicles nor shall the Contractor allow college employees to use the Contractors' equipment or vehicles without the approval of Risk Management and EHS. If an employee of a Contractor needs to use specialized equipment owned by JJC, such as powered industrial trucks, the Contractor must provide suitable documentation that the employee has been trained and certified (if required) to use such equipment.

Project Safety Plan Guideline

FOR

Safety Plan
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DEFINITIONS

Contract: A written agreement between the Owner and Trade Contractor, between Trade Contractor and a Subcontractor, between the Owner and Other Contractor(s), or between Other Contractor(s) and its (their) Subcontractor(s).

Employer: Any contractor, supplier, or vendor performing work under Contract at the project site.

Project: The premises owned by the Owner as described in the contract between the Owner and Trade Contractor and/or areas and ways contiguous thereto, including any work sites set up by the **Owner** for use by a contractor exclusively for the storage of material or equipment, or for on-site fabrication of materials to be used on the job site, including temporary locations.

Owner: An entity that has a contract between themselves and Trade Contractors or, between themselves and the Contractor.

Contractor: Any company performing work under Contract at the project site.

PROJECT INTRODUCTION

Included in the project is site work.

ADMINISTRATION

MANAGEMENT POLICY STATEMENT

The ***Safety Plan*** embodies the policies and procedures for prevention of injury, property damage, fire damage and occupational illness. **No single feature of our work is of greater importance.** There is never an acceptable reason for compromising safety. This document, the contractor selection process, and site field activities are all designed to support and reinforce this goal.

It is a policy to provide a safe place to work at all times and to conduct all operations in a manner as to provide protection for all individuals who might come into contact with these operations. The Owner's employees, Contractor and Subcontractor employees, and all others employed on this site, as well as anyone who comes on the site for any reason during construction, are expected to conduct their work in a safe manner and are required to comply with established safety programs. By contract, every Contractor on this site is obligated to perform all work in a safe manner. By contract, every Contractor on this site is obligated to conform to the requirements of the Federal Occupational Safety and Health Act of 1970 (OSHA) and all additions and revisions thereto, OSHA Global Harmonization law, IDOL, as well as other applicable Federal, State and Local requirements and the Project Safety Plan.

All supervisory employees must accept their responsibility for the prevention of accidents and for conducting all operations under their direction in a safe and efficient manner. The results of our safety efforts will affect our overall success in constructing the Project. **Our goal is accident-free work** with the traditional defect-free quality. We know this is the most efficient method and that all individuals working on this Project will subscribe to the Project Safety Plan.

With the cooperation, dedication and assistance of everyone, this will be a successful and safe project.

MANAGEMENT STATEMENT - STATEMENT OF FINAL AUTHORITY

All persons who come into the work area, for any reason during construction, will be required to comply with the established safety regulations that govern the project.

Contractors are committed by contract to observe and comply with all applicable safety regulations and procedures. Each Contractor will participate in the Project Safety Program, hereafter referred to as the "Program".

If the Safety Coordinator finds Contractor areas of work or individuals being, or acting in noncompliance with the Occupational Safety and Health Act of 1970 (OSHA), as amended, or any other applicable regulations, the Safety Coordinator shall have the authority to order immediate correction and cessation of the non-compliant occurrence. **Non-compliance with Project Safety Regulations will be grounds for Contractor dismissal and/or employee(s) being forbidden entry onto the project**. All costs of correction shall be borne by the Contractor deemed responsible. Nothing contained herein, however, shall serve to relieve the Contractor of his liabilities and/or obligations under the "Occupational Safety and Health Act of 1970" and all additions and revisions thereto, OSHA Global Harmonization law, IDOL, as well as all other applicable Federal, State and Local requirements.

RESPONSIBILITIES- General Trades Safety Coordinator

- Audit activities of the Trade Contractor's safety program so that it conforms to the Safety Program.
- Provide weekly, written site inspections of the job site, notify the Trade Contractors of any unsafe practices and conditions for which they are responsible and will counsel them on the appropriate corrective actions when necessary. Site inspections shall be reviewed and discussed with the construction team.
- Identify the location where SDS sheets provided from the Trade Contractors/ subcontractors can be found for the project.
- Maintain required records and accident prevention materials at the job site so that an adequate history is maintained for the project.
- Review injury and first aid records during the project to identify injury trends to take positive action to reduce or eliminate such injuries from continuing to occur on the project.
- The General Trades Safety Coordinator will examine and familiarize himself/herself with the job site and adjacent areas from the standpoint of access and facilities regarding safety. The job site should be explored with regard to installing and operating the construction plan, and evaluating any difficulties that might be encountered in complete execution of the work safely. Make frequent inspections of the job site so as to initiate corrective measures to eliminate unsafe practices and conditions.
- The General Trades Safety Coordinator shall immediately investigate all accidents or near miss accidents and take corrective actions to help prevent reoccurrence.

See specific Responsibilities in the following sections

RESPONSIBILITIES – GENERAL TRADES SAFETY COORDINATOR

- The Safety Coordinator directs and administers the Safety Program on this Project. All reports, surveys, accident reports and other information relating to safety are to be submitted to the Safety Coordinator.
- The Safety Coordinator establishes a safety organization to assure the involvement of all personnel in the safety effort and to provide for their participation. The Safety

Coordinator evaluates individual subcontractor's safety performance for compliance with all applicable Federal, State, local laws and the Owner's safety requirements.

RESPONSIBILITIES –GENERAL TRADES PROJECT SUPERINTENDENT/COORDINATOR

Responsible For:

- The active control of the Project Safety Plan.
- Planning and requiring all work to be done in compliance with the Project Safety Plan.
- Weekly inspections relating to safety shall be made and documented.

RESPONSIBILITIES – CONTRACTORS

- Contractors with a staff and crew of 20 or more on site shall appoint a full time safety representative. Contractors with a staff and crew on site of less than 20 shall anticipate that the safety aspects of this position will encompass 20 hours or more of the work week and may occasionally require full time attention. For this reason, serious consideration shall be given to the ability of a superintendent or foreman to simultaneously meet the responsibilities of both positions.
- Each safety coordinator will meet the following criteria:
- A minimum of an OSHA 30-hour construction hazard recognition certification; be certified as a competent person in the type of work being performed; First Aid and CPR certified; experienced in the construction industry in the type of work being performed.
- Each Safety coordinator has the right and authority to stop any and all hazardous work being performed by their employer whenever imminent danger to life and health exists.
- Conduct regular and frequent inspections for their Contractors work areas
- Take immediate action to eliminate unsafe acts and/or conditions.
- Ensure that prior to the start of any work activity, every foreman has reviewed each task assignment with every affected employee to assure a comprehensive understanding of the safety requirements and precautions to be taken while performing this work.
- Ensure that appropriate personal protective equipment is provided and its use enforced.
- Each safety coordinator shall participate in accident and incident investigation involving their work and employees and those of their subcontractors.
- Each safety coordinator shall attend safety meetings as scheduled by Safety Coordinator.
- Contractor shall instruct each employee on project site in the recognition and avoidance of unsafe acts and/or conditions applicable to its work environment to control or eliminate injury or illness.
- Contractor is responsible for providing and requiring the use of appropriate personal protective equipment in all operations where there is an exposure to hazardous conditions. All records shall be maintained at a location accessible to Safety Coordinator.

- Contractor is responsible for notifying Safety Coordinator of any hazardous chemicals or substances that are brought or cause to have been brought on project site. Contractor shall provide Safety Coordinator with a copy of Contractor's Hazardous Communication Program, Chemical information list, and Safety Data Sheet(s) (SDS) for the chemical(s) or substance(s) intended for use on the site. The Safety Coordinator will provide a centrally located place for this information. Contractor is responsible for maintaining a copy of Contractor's Hazard Communication Program, Chemical Information List, and Safety Data Sheet(s) on site for Contractor's own reference and employee training. The proper storage, use and disposal of wastes of any hazardous chemicals or substances are the responsibility of Contractor.
- Contractor is responsible for conforming to OSHA and NFPA standards of fire protection and prevention practices. Contractor shall also comply with all fire and safety rules and regulations established on the project.
- If Contractor fails to correct safety violations, the Safety Coordinator will issue the Contractor written notification, outlining safety violations. Failure of the contractor to abate may result in the removal of the Contractor from the project site or other appropriate measures.
- Compliance with Federal, State, Local Laws and regulations is the contractual obligation of Contractors working on this project. Conflicts between current laws or contractual requirements shall be resolved by adhering to the more stringent requirement. Any project site safety regulations, which exceeds the minimum standards established by OSHA, shall be incorporated in Contractor's safety program.
- The Contractor shall ensure that its supervisors are aware of their responsibilities, which include:
- Become familiar with the requirements of all accident prevention standards and safety rules pertaining to their job.
- Be responsible for carrying out the procedures required by the project safety plan.
- Ensure that each employee under their supervision has received the initial project safety orientation provided by the Safety Coordinator.
- Explain to all employees applicable safe practice rules and regulations under their direct supervision.
- Supervise the instruction and training of new employees either personally or through delegated experienced persons until the new employee satisfactorily demonstrates their ability to perform the work in a safe and efficient manner.
- Be responsible for continuous housekeeping in their area and for the use and maintenance of all personal protective devices, equipment, and safeguards.
- Notify their direct supervisor and/or the contractor’s safety representative concerning work areas where they believe protective devices are required.
- NOTE: Such safety devices will include, but not limited to, the following: machine guards, operational shields, exhaust vent hoods and systems, welding shields, approved personal protective equipment, automatic stops and controls, barricades, railings, etc.
- Report to their own direct supervisor all cases of employees who, in their opinion, are not qualified for the work to which they have been assigned or who engages in unsafe practices.
- Attend and participate in all supervisors’ safety meetings.
- Conduct or arrange for weekly "toolbox" safety meetings for all employees under their supervision as required. Minutes of Tool Box Talks are to be maintained and a copy of

each Talk is to be given to the Safety Coordinator before end-of -shift the day given.

- Each Contractor shall complete a Safety Task Assignment Process form each day for all work crews, discuss with each work crew on a daily basis or when non-routine tasks occur and provide a copy to the Safety Coordinator at the end of the work day with their daily report.
- Report immediately, all accidents in which personal injury, property damage or a near-hit occurs.
- Should an accident occur involving a Contractor's employee, the Principal/Owner of the Contractor shall attend a "Principals" meeting at the project location to review the incident. The Safety Coordinator and JJC Project Manager will conduct this meeting.
- Assist in accident investigation and submit a report promptly on required forms. Lessons learned from such investigations shall be incorporated into all future daily activities and plans of the contractor.
- In the event a contractor utilizes employees whose primary language is not English, the contractor shall provide for appropriate interpretation to assure complete comprehension.
- Periodically analyze work methods in detail for the purpose of job simplification and for the establishment of safe work methods.
- Site safety inspections are to be an ongoing process and documented at least weekly. Contractors should document inspections on the Site Audit Checklist or approved Contractor's form and submit to The Safety Coordinator.
- Ensure that all hazards created in an area as a result of work activities are addressed before the crew leaves the area, including breaks or lunch.

- **In an effort to create an incident and injury free culture on the project, the JJC Project Manager may hold periodic Principals Meetings to discuss project safety with contractor principals. Project walkthroughs and worker feedback interviews will be part of these meetings. Contractor principal / owner attendance at these meetings is mandatory.**

RESPONSIBILITIES - EMPLOYEES

- No employee shall be required or knowingly permitted to work in an unsafe environment except for the purpose of making safety corrections and then only after proper precautions have been taken for their protection.
- Each employee is responsible for learning and abiding by those rules and regulations which are applicable to the assigned tasks and for reporting observed or anticipated hazards to their immediate Supervisor. If the hazard is not immediately corrected, the affected employee will report the hazard to Safety Coordinator
- **All employees shall observe the following rules of conduct:**
- **Courtesy**: Employees shall observe standards of behavior and conduct their work in a manner to avoid offending any Owner employees or visitors. **Each individual on this Project must be given the courtesy that would be extended to one's family or best friend.**
- **Personal Protective Equipment**: all persons on the site will wear hard hats, eye protection, gloves and work boots with substantial soles. All other personal protective equipment, including respirators or eye protection, as appropriate to assigned tasks, shall be utilized in the proper manner at all times while there is exposure to the hazards.

- **Clothing**: Clothing suitable for the weather and your work shall be worn. Torn or loose clothing, cuffs or neckwear, which may be a hazard, are not allowed. Shirts must be worn and have short sleeves. Pants must have legs (no shorts allowed). Clothing shall be maintained in a clean, neat and repaired fashion
- **Vehicles**: Employees shall park their vehicles in designated areas. Operation of vehicles on the project site shall conform to all local traffic laws. The maximum speed limit on the project site is 10 miles per hour.
- **Smoking**: **Smoking is permitted only in designated areas**
- **Intoxicants**: Consumption of alcoholic beverages or controlled substances is not allowed on the project. All workers who are taking physician-prescribed or over-the-counter medication must be fit for work. **All employees are specifically directed to the "Drug Policy" which is a part of this Project Safety Plan.**
- **Accidents**: All employees must immediately advise their Supervisor of any injury on the project or any non-injury accident, which involves damage to property or equipment.
- **Personal Conduct**: Practical jokes, horseplay, scuffling, wrestling or fighting is prohibited.
- **Good Housekeeping**: Good housekeeping on the project is mandatory and every employee must do their part daily to minimize dust and to clean up their work area to keep the project clean for safety and efficiency. **Controls shall be observed which keep dirt from being tracked into areas outside the workspace.** Clean up methods shall follow prescribed techniques to minimize the distribution of dust into the air.
- **Authorized Access**: Employees shall confine their activities to the areas designated as the work site. **The employee's Supervisor shall obtain permission from the appropriate Owner representative prior to entry into any areas outside the work site.**
- **Fire Protection**: Employees shall adhere to all fire protection regulations, and shall conduct their work in a manner to preserve the fire safety integrity of the building.
- **Music.** No televisions, radios, CD players or cassette tape players are allowed.

GENERAL REQUIREMENTS

ACCIDENT INVESTIGATION

- For all injuries or near-hits, the JJC Project Manager and the Safety Coordinator are to be notified immediately. Copies of ALL accident reports must be filed with the JJC Project Manager and the Safety Coordinator immediately.
- It will be each Contractor's responsibility to complete the First Report of Injury for his employees and to transmit copies of these reports immediately to JJC Project Manager and the Safety Coordinator. Any accident or incident resulting in a lost-time injury, fatality, damage to property or equipment exceeding U.S. $1,000, a serious "near-hit" or the recognition of a potential hazard to health and environment is to be investigated by a committee comprised of the following, as appointed by the Safety Coordinator: the JJC Project Superintendent, the JJC Project Manager, the Project Safety Coordinator and Contractors Supervisor or anyone familiar with the practices involved in the incident who can contribute to its analysis and make recommendations for action to prevent a reoccurrence. The investigation shall begin promptly after the incident. Results of the investigation and recommendations for preventive action shall be documented within five (5) workdays of the incident. If the Owner agrees, a brief news release shall be posted, for the information of workers, covering fatalities and serious occurrences. The

occurrences are also to be discussed at the regular or special safety meetings. This investigation and report shall be made immediately, but release may await any similar investigation and reports required by governmental regulations. Safety Coordinator shall also review first aid injuries to establish trends and practices that deviate from work standards and shall report and take corrective actions.

- The Safety Coordinator shall provide for the Owner, in the Monthly Progress Report, a safety report covering safety activities for the preceding month. The report shall include:
  - The accident experience, recordable, lost time, first-aid and near-hit incidents for the month.
  - The relationship of the accident experience to the number of people employed using a recognized national standard for recordable injuries and lost time injuries.
  - A review and summary of the safety activities, problem areas, and contemplated action, including fire hazards and environmental hazards.

ACCIDENT REPORTING PROCEDURES

For all fatalities, cases requiring hospitalization, OSHA Recordable events or possible lost-time injuries, JJC Project Manager and the Safety Coordinator are to be notified immediately. The Trade Contractor will immediately notify the Insurance Carrier's Claim Representative of all accidents and will immediately forward Employer's First Report of Injury Forms, General Liability Loss Notice Forms, subsequent inquiries or correspondence received relative to the matter, including Court Summons or other legal documents, to the Claim Representative with copies to the JJC Project Manager and the Safety Coordinator. Copies of ALL accident reports must be filed with the Safety Coordinator immediately.

CONCRETE (CAST-IN-PLACE)

All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI-A10.9-most recent version, "Safety Requirements for Concrete Construction and Masonry Work."

CONFINED SPACE ENTRY

- Contractor shall develop an entry procedure to be used when Contractor's employees are required to enter confined areas or spaces. Confined Space entry procedures will conform to OSHA 1910.146 and the owner's requirements.
- A confined space entry permit must be completed and posted at the entrance to the confined area.
- Documentation of appropriate formal training for all involved in the confined space activity (entrants, attendants, supervisor, and rescue personnel) shall be submitted to Safety Coordinator for approval prior to any entry.

CRANE SAFETY AND RIGGING

The Contractor shall conform to the more stringent of Federal, State, local, or client safety policy.

Contractors whose activities require the use of cranes shall be responsible for their proper set up and operation and shall advise the Safety Coordinator prior to the arrival on-site.

The contractor shall supply the Safety Coordinator with documented evidence of their competent person's training, and of their 'qualified persons', as required by 1926.1404, 1926.27, 1926.1428, and where specified in 1926.1400, including the Operators, Riggers, Signal Persons, and 'Assembly/Disassembly Director.

The Assembly/Disassembly Director shall be responsible to ensure that all provisions of safety

as specified in 1926.1404 are met including but not limited to: adequate site and ground bearing conditions, proper blocking and cribbing, knowing load weights and center of gravity, equipment capacity, support of booms and counterweights, rigging of boom and suspension systems, determination of safe wind speeds, etc.

Inspection

Inspections are required pre and post assembly in the configuration that the crane will be used, as well as in severe service and after adjustment or repair, for each piece of equipment.

Contractors shall provide the Safety Coordinator evidence of annual inspection by a third-party inspection agency not under the control or ownership of the crane owner and approved by the Safety Coordinator. All repairs and adjustments noted on the inspection shall be corrected prior to next use. 'Temporary alternative measures' as specified within OSHA regulations will not be accepted.

This applies to power-operated equipment used in construction that can hoist, lower and horizontally move a suspended load, as specified in 1926.1400. Such equipment includes, but is not limited to: articulating cranes (such as knuckle-boom cranes); crawler cranes; floating cranes; cranes on barges; locomotive cranes; mobile cranes (such as wheel-mounted, rough-terrain, all-terrain, commercial truck-mounted, and boom truck cranes); multi-purpose machines when configured to hoist and lower (by means of a winch or hook) and horizontally move a suspended load; industrial cranes (such as carry-deck cranes); dedicated pile drivers; service/ mechanic trucks with a hoisting device; a crane on a monorail; tower cranes (such as fixed jib ("hammerhead boom"), luffing boom and self-erecting); pedestal cranes; portal cranes; overhead and gantry cranes; straddle cranes; side-boom tractors; derricks; and variations of such equipment.

Inspections shall be performed by a qualified person designated by the contractor in accordance with 1926.1412, 1926.1413 and the manufacturer's recommendation and ANSI B30 Standard for the type of crane being inspected and the most current version. This inspection shall be completed prior to each shift starting work, as well as when equipment is modified, repaired or adjusted, post assembly, monthly, annually and in conditions of severe service.

Operation.

This certification will be for each crane and lifting device and associated rigging equipment brought onto the site. At least every 12 months, or if the crane or its associated rigging has sustained any incident which may have resulted in damage, in cases of severe service, or after if any repair or modification the crane and its associated rigging shall be fully re-inspected by a qualified person in accordance with OSHA regulations, with proof of inspection provided to the Safety Coordinator.

No work shall proceed without evidence of a current annual inspection meeting Safety Coordinator requirements. No claims will be accepted for losses sustained by the contractor for delays caused by failure to comply with these requirements. Temporary alternative measures for safety devices or operational aids will not be accepted.

Safety devices, including but not limited to: crane level indicator, boom and jib stops, foot pedal locks, check valves on hydraulic outrigger and stabilizer jacks, and horns, must be in proper working order before equipment operations can begin- temporary alternative measures are not permitted to be used.

Operational Aids, including but not limited to: boom hoist limiting device, boom angle indicator, load radius indicator, luffing jib limiting device, anti two-blocking device, load weighing device (such as a load moment indicator), and outrigger stabilizer position monitor must be in proper working order- temporary alternative measures are not permitted to be used.

Special Procedures

- A lift procedure shall be developed by the Contractor's qualified person, and overseen by the Contractors qualified and competent Assembly/disassembly director for the following and submitted to the Safety Coordinator prior to the lift taking place:
- Critical Lift (defined as when lifting a load where the weights are at or over 75% of the rated capacity of the crane and rigging as determined by the manufacturer);
- Multi-Crane Lift;
- 100 Tons or greater Lift;
- Any application that deviates from the manufacturers recommendations;
- When special or unique hazards are under or adjacent to the load at any time during the lift;
- When Safety Coordinator determines such a procedure is necessary.
- The Lift Procedure will include a Hazard Analysis developed by the Contractor and submitted to the Safety Coordinator along with Pre-Lift meetings, which shall be held at 30 days prior to the lift, the day prior to the lift and immediately prior to the lift with the actual workforce doing the lift. All concerned parties must be present for the meetings with minutes of the meeting recorded by the Safety Coordinator.
- The Lift Procedure will include documentation of calculations which incorporates weight deductions of all rigging equipment, a load chart for the crane(s) that will be used, a site plan and layout sheet which will include the path of travel of the load, swing radius protection and any other necessary factors.
- The Contractor's Crane Lift Plan Form, Crane Critical Lift checklist or equivalent, shall be used.

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Record Keeping

- All records pertaining to crane inspections shall be kept with the crane or in the trade contractor's site field office in accordance with applicable OSHA regulations.
- If during any safety inspection, the operator or supervisor cannot produce the required crane inspection sheets, the crane shall be shut down as soon as possible and shall be inspected.
- Where crane operators are required to be licensed by the State where the project is being built they shall have a current license and provide a copy to the Safety Coordinator when requested. Duplicates of Certification records shall be maintained on project site by Contractor and made available to the Safety Coordinator upon request. The contractor shall provide evidence of competency of the operator to the Safety Coordinator.

Rigging

- Only qualified riggers shall perform rigging operations.
- A Competent Person appointed by the Contractor shall inspect all rigging equipment. Inspection shall be done and documented prior to each shift starting work, monthly and annually in accordance with 1926.1413. If there are any deficiencies in equipment, it

shall be removed from service and corrected or replaced per manufacturer's criteria.

- All rigging equipment that is defective or damaged shall be immediately removed for the project site.
- Chain slings are not permitted to be used for any lifting operation unless specifically designed for a unique application.
- Wire rope slings shall bear a legible manufacturers capacity tag.
- Tag lines shall be used on all loads.
- All hooks used for overhead lifting shall be equipped with safety latches or alternate lifting methods such as clamps will be used. Shake-out/sorting hooks may only be used for unloading materials from trucks and will not be used for overhead lifting.

Signals

- The contractor shall appoint a qualified and trained signal person that meets the definition of 1926.1428 c and 1926.1430
- When hand signals are used, only the standard method for signals shall be used 1926.1400 App A.
- Operator and signal person shall meet prior to hoisting lifts to confirm understanding of signals.

Operator Qualifications

- The crane operator(s) shall be proficient in the operation of the crane(s) and licensed in the State/City where the operation is being performed, or certified by an accredited crane operator testing organization, such as the National Commission for the Certification of Crane Operators (NCCO), or by an audited employer program developed by an accredited crane operator testing organization and audited by a third party qualified auditor.

Power line Safety

- Crane and rigging operations are not permitted within 20 ft. of power lines unless the power lines are de-energized and confirmed by a qualified utility company representative.
- Where encroachment is required within 20 ft. from power lines in accordance with 1926.1408, Table A
  - A planning meeting shall be conducted with the assembly/Disassembly director, operator, crew and other workers in the area to review steps to prevent encroachment
  - Tag lines must be non-conductive
  - Dedicated spotters shall be used
  - Proximity alarms or range control warning device shall be used

Tower Cranes- please refer to Appendix C for Tower Crane erection and Dismantling procedures

DEMOBILIZATION

The Project Superintendent and each contractor shall organize and schedule the orderly removal of their project site offices and trailer facilities, the termination of temporary utility services, the transfer of telephone services to their offices, and the forwarding of mail. The site

shall be left in the conditions specified by the contract documents. The Project Superintendent shall inspect the site with the Owner to verify that all permanent security and safety devices are in place and performing their intended function.

DEMOLITION

Structural Demolition

- An engineering survey shall be completed before the start of demolition.
- All structural shoring shall have stamped drawing and calculations by a registered Professional Engineer.
- Areas being demolished must be secured by means of barricades to prevent unauthorized personnel from entering the area.
- Subcontractors must submit, prior to the start of construction, a detailed demolition plan to include, means and methods, related drawings, and other relevant safety plans.

DISCIPLINE - ENFORCEMENT

- All contractors and suppliers shall participate in the project safety plan. Should an Imminent dangerous condition be discovered, all work in the area of danger will be stopped until corrections are effected.
- Should the Safety Coordinator find contractor areas of work or individuals being or acting in non-compliance with OSHA or the Project Safety Plan, the Safety Coordinator shall have the authority to order immediate correction of the non-compliant occurrence.
- All costs of correction shall be borne by the Trade contractor deemed responsible.
- If more than one contractor is deemed responsible, the Safety Coordinator's division of responsibility shall be final.
- Nothing contained herein, however, shall serve to relieve the contractor of their liabilities and/or obligations under OSHA as well as other applicable Federal, State and local requirements as well as the Project Safety Plan.
- Repeated violations or lack of cooperation with regard to the Project Safety Plan by employees of a contractor will indicate non-compliance with provisions included in the contract and may be reason for the employee being barred from the project site and/or for termination of the contractor's contract.
- At orientation, new employees are given their first warning: These are the rules; if you fail to follow them you will receive a citation.
- **1st Citation**: Notice is sent to employer. Employee must come in and see the Safety Coordinator to review violation so we can be sure the employee knows how serious this citation is and what corrective action must be taken. A fine for the Contractor will be imposed.
- **2nd Citation**: The individual will be removed from the property. A fine on the Contractor will be imposed.
- This constitutes three (3) warnings. At this point, this person will be banned from further access to the site.
- **"Immediate removal from the property" Citations** will result when:
- Any employee, supervisor or manager exposes themselves or other employees to

imminent loss of life.

- Any employee, supervisor or manager openly exhibits disregard, defiance or disrespect for the safety plan.
- Any employee, supervisor or manager knowingly falsifies any investigative document or testimony involved in an investigation.
- Violent physical encounters (fighting) occur. All individuals involved in the incident are subject to removal.
- Threats are made against any safety personnel performing their duties.
- Theft or destruction of property occurs.
- Any employee, supervisor or manager consumes, possesses, distributes or is under the influence of alcohol/drugs.
- Other Citations: Violations of safety, traffic, housekeeping or material storage rules

Dispute Resolution

The Safety Coordinator whose decision is final and not subject to arbitration shall resolve all disputes involving the Project Safety Plan.

DISCIPLINE – FINES

Fines (Refer to Appendix A Table of Fines)

- The fines are not to be collected from the individual violator.
- Safety Coordinator will collect them from the principal of the respective company at the monthly Safety Meeting. This will be by separate check.
- These funds will be used to fund a reward/incentive program for those who work and are safe individuals or groups. Any money remaining at the completion of the project will be donated on behalf of all workers and companies employed on the project to a local charity.

SUBSTANCE ABUSE POLICY – MINIMUM

Purpose

The owner and the Safety Coordinator have a commitment to protect people and property and to provide a safe working environment. The purpose of this policy is to establish a drug-free work environment for each worker.

Policy

The owner and the Safety Coordinator prohibit the use, possession, distribution, or sale on the project premises, facilities, or work places of any of the following: alcoholic beverages, intoxicants drugs and related drug paraphernalia.

Workers must not report for duty or perform work while under the influence of any drug, alcoholic beverage, or intoxicant. Workers on the project premises will be subject to search as provided herein. Applicants and workers will be required to consent to drug testing as provided herein.

This policy will apply where state law or regulation and/ or collective bargaining agreements allow.

Definitions

When used herein, the following terms will have the meanings given below:

Alcohol - Ethyl (Ethanol). References to use or possession of alcohol include the use of any beverage, mixture, or preparation containing alcohol.

Drug - Any substance (other than alcohol) including prescription drugs which may impair mental or motor function; including, but not limited to, any psychoactive substance, controlled substance, marijuana, or designer or simulated drugs. This definition does not apply to prescription drugs, which have been disclosed to the Company and the Controlling Employer by the worker and are approved for use within prescription limits.

Employee - Any individual, salaried or hourly, who actually performs work for a Controlling Employer on the project premises.

Controlling Employer - Any individual or firm that provides workers to perform work on the project premises and is responsible for their hiring, advancement, payment, discipline, and termination, including the Owner, the Architect, all contractors, all sub-tier contractors, all vendors, all suppliers, all material dealers, any Other Contractors, and any others coming on the project premises.

Applicant - Any individual who is referred or makes application for employment on the project premises.

Project Premises - All parts of any office, work site, or other work location, including parking lots under the control of the owner.

Testing Facilities - A laboratory where a specimen can be tested for drugs and alcohol within threshold limits according to standards established by the U. S. Department of Transportation and is certified by the U. S. Department of Health and Human Services (HHS) under the National Laboratory Certification Program (NLCP) or in the case of a foreign laboratory is approved for participation by the U.S. department of Transportation with respect to Part 40.

Contraband - Considered including but not limited to the following: drugs, alcohol, and drug paraphernalia.

Drug Paraphernalia - Any article for the use, storage, or sale of drugs.

Accident - Any event resulting in injury to a person or property to which the Company believes a worker contributed as a direct or indirect cause.

Incident - Any event, which the Company determines, has all the attributes of an accident, except that no harm was caused to personnel or property.

Tobacco Products - Any article containing tobacco, including but not limited to cigars, cigarettes, pipe tobacco, snuff, and chewing tobacco.

Worker(s) – Any individual, salaried or hourly, of any employer who will be performing work on the project premises.

Drug Detection Thresholds will be in accordance with U.S. D.O.T.

All confirmatory drug testing shall be done in NLCP-certified facility

Prescription Drugs

Any worker using a prescription drug, which may impair mental or motor function, shall, as soon as possible, notify their employer who is to notify the Safety Coordinator and/or the Controlling Employer. For the safety of all workers, the Company may direct the Controlling Employer to not permit the worker on the project premises until released as fit for duty by the prescribing physician. The Company reserves the right to obtain a confirming medical opinion before allowing the worker to return to duty.

Worker Pre-Assignment Testing (per applicable State laws and Project Labor Agreements (PLA's))

All workers, salaried or hourly, who are hired, transferred or temporarily assigned to the project premises shall be required to consent to drug testing in accordance with applicable State laws prior to assuming project responsibilities Controlling Employers shall certify to Safety Coordinator in writing on company letterhead signed by an Officer of the company that their current workers have passed a drug test ***immediately prior*** to assignment to working on the project premises

Post Accident Testing (per applicable State laws and PLA's)

After an accident or incident, the Company will ask the Controlling Employer to test all those involved.

Reasonable Suspicion Testing (per applicable State laws and PLA's)

The Company will also ask the Controlling Employer to test workers when a reasonable suspicion exists that the worker has been using drugs or alcohol. The maximum level of alcohol blood content shall not exceed 0.08 g/100 ml blood or equivalent.

Random Testing (per applicable State laws and PLA's)

Urine and/or blood drug screening analysis of workers and others on the project premises may be conducted on a random basis at periodic, unannounced intervals during the construction of the project, in accordance with State laws and applicable PLA's. A minimum of 12% of active employees on site will be selected, at random, for drug screening, or as required per Regional Substance Abuse Program Consortium or PLA's. Controlling Employers must certify negative test results to the Company; otherwise worker shall not be permitted to return to the project premises

Discipline and Rehabilitation

Unless a Project specific Substance Abuse Policy by the Company or Owner is in effect, each Controlling Employer shall certify that they have a Substance Abuse Policy which incorporates as a minimum the following requirements:

A) When an applicant submits to pre-assignment testing and passes the required test, s/he will be eligible for further employment consideration.

B) If the applicant fails the required test, s/he may reapply for employment consideration after a period of no less than sixty (60) calendar days have elapsed. The Company may waive this sixty-day waiting period if the applicant completes an acceptable drug/alcohol rehabilitation program and presents acceptable proof of completion of the program to the Company Project management personnel. An applicant who fails the second test will not be considered for employment at the project premises for a period of no less than one year.

C) All workers who refuse to submit to a drug and alcohol test, or who fail to pass a drug and alcohol test will be removed from the project premises by the Controlling Employer and will be referred to their personnel management for disciplinary action.

D) A worker on the project premises, facility, or work place in possession of contraband is subject to disciplinary action, up to and including barring from the site by the Company and immediate termination by the Controlling Employer. Contractors and/or workers who are in possession of contraband are subject to removal and denial of future access to the project premises.

Financial Obligation of the Controlling Employer

The Controlling Employer will bear the cost of time, transportation, and testing for workers who

are being given drug and alcohol tests.

Confidentiality

The Company will take steps to maintain the confidentiality of information generated by the implementation and enforcement of this policy and these procedures. Disclosure will be made only in appropriate circumstances. The Controlling Employer shall be responsible for maintaining the confidentiality of all information generated by the implementation and enforcement of this policy and these procedures for their own workers. The Company shall have the right to audit compliance with this policy and these procedures by the Controlling Employer, which shall include access to this confidential information.

Training

Supervisors and management personnel will be trained to recognize appropriate symptoms and to administer the policy in a consistent, confidential, and intelligent manner.

Contractors and Suppliers

The Company and all Controlling employers will include the provisions of this policy and these procedures, in their contracts with contractors, suppliers, consultants, agents, and others involved in providing goods or services on the project premises, and will require that they do the same with respect to their lower-tier contractors, suppliers, etc.

Posting and Distribution

Significant sections of this policy and these procedures will be given to each applicant and worker upon request.

A warning notice will be posted in a conspicuous location on the project premises. This Substance Abuse Policy will be included in each pre-bid and pre-construction meeting as well as an integral part of the project Safety plan and contract documents.

The Company may revise and amend this policy and these procedures as required.

Procedures for Examination Post-Accident Screening When Required By Safety Coordinator

A Controlling contractor supervisor is to accompany injured employee or those employees involved in the accident or incident involving a Controlling contractor worker to the clinic or medical facility. Controlling Employers shall certify any worker(s) involved in an accident or incident tested negative for drugs and alcohol prior to allowing them to return to the project premises.

If the injured worker refuses to give a specimen of body fluid, the Controlling contractor supervisor is to notify the Company. The worker is to be advised, again, that the refusal to submit to drug screening is a violation of the Project Safety Plan's drug, alcohol and other prohibited articles safety policy and that refusal will result in removal from the site.

Results of all drug screenings and analyses must remain strictly confidential.

Workers must report all injuries immediately to their supervisor, whether the injury requires medical treatment or first aid only. Late reporting may result in denial of a claim.

Random Testing Policy

Drug screening analysis of workers and others on the project premises may be conducted on a random basis at periodic, unannounced intervals during the construction of the project, in accordance with State laws and applicable PLA's. Controlling employers shall advise their employee immediately prior to selection for Random testing and shall ensure workers submit to drug screening as soon as possible, and no longer than 1 hour from being notified. Controlling Employers must certify negative test results to the Company; otherwise worker shall not be

permitted to return to the project premises

ELECTRIC - TEMPORARY

- General:
  - All electrical work, installation and wire capacities shall be in accordance with the pertinent provisions of the National Electrical Code (most current version), ANSI and OSHA Standards.
- GFCI and AEGP:
  - All 120 volt, single phase, 15 & 20 amp temporary power circuits (with the exception of temporary lighting) shall have ground fault circuit interrupters installed. In addition all tools, cords and power sets shall have an assured equipment inspection program maintained on quarterly basis.
  - The color codes used for identifying inspected & tested equipment on this project are:

▪ January, February, March	▪ White
▪ April, May, June	▪ Green
▪ July, August, September	▪ Red
▪ October, November December	▪ Orange

  - (NOTE: The cycle of colors is repeated for the next year)
  - Portable tools will have the appropriate color code affixed to the male (plug) end following inspection. Extension cords, including portable GFCI pigtail sets, will have the appropriate color code affixed to both ends (plug & receptacle). The previous quarter's color code will be removed to avoid confusion.
  - When using permanent power, once established in new construction or in renovation work, Ground Fault Circuit Interrupters must be used in conjunction with the AEGC inspections.
- Extension Cords:
  - Extension cords used with portable tools must be a minimum12 gauge wire. Damaged electrical cords shall not be used.
  - All extension cords will be suspended seven feet (7') above finish floor or work platform. Extension cords will not be fastened with staples, hung from nails, or suspended by non-insulated wire.
  - Receptacles shall not be connected to the same ungrounded conductor of multiwire circuits which supply temporary lighting.
- Temporary Lighting:
  - Temp lighting circuits must be a UL approved assembly.

- . Open wiring, is NOT acceptable for temporary lighting circuits. 'Open wiring' refers to the individual conductors being physically separated (as in the McGill "String-O-Lights.)
- Lighting on barricades, fences, or sidewalk coverings shall be encased in metal raceway.
- Bulbs for Temporary lighting must have guards to prevent accidental contact
- Temporary lights must be suspended by the lamp fixture, and by nonconductive twine or cord or other material.
- All wiring used for temporary lighting shall be run using SJTW cord type, minimum 14/2 Gauge conductor.
- Splices in conductors, when required, shall have wire nuts and conductors protected by 5 tightly wrapped half lap wraps of 3M Scotch™ Super 33+ Vinyl Electric Tape or equal for a thickness of 35 mils. Otherwise, splices shall be made within a secured junction box.
- Portable electric lighting used in moist or other hazardous locations such as drums, tanks, vessels, bins, bunkers, etc., shall be operated at a maximum of 12 volts (non-explosive).
- All shop lighting and portable task lighting shall have a cover and guard installed when in use or available for use.

- Wiring Ground:
  - All temporary wiring shall be effectively grounded in accordance with the National Electrical Code (Articles 305 and 310).
  - All non-current carrying parts of electrical equipment must be grounded or have an approved double-insulated setup. Grounded circuits must have enough capability to carry all currents likely to be imposed on it.
  - All electrical equipment and wiring in hazardous locations must conform to the National Electrical Code standards. The frames of all cutting, welding (arc, heli-arc, gas-plasma-arc) machines shall be grounded.
- Protection of energized parts:
  - All temporary power panels shall have metal covers installed at all times, unless they are housed in a room where the door is closed and locked from unqualified persons. All open or exposed breaker spaces shall be adequately covered, and labeled.
  - Fish tapes or lines made of metal or any other conductive medium are prohibited. Nonconductive tapes and lines will be used in their place.
- Defective Electrical Tools and Equipment
  - All electrical tools and extension cords found to be defective (Examples: missing or broken ground pins, exposed internal conductors) will immediately be rendered in-operative by cutting off the plug end or by immediately removing from the project.
- Energized Electric Work/LOTO:
  - Electrical work (e.g. tie-ins, panel maintenance) shall be conducted only on de-energized (locked out and tagged out) systems. All circuit disconnects must be locked in the open position or otherwise appropriately identified with affixed tags stating "DANGER - DO NOT ENERGIZE" or other equivalent wording prior to working on the system or equipment. Employees are not permitted to work on

any energized circuits unless conditions mandate and written approval is obtained from the Project Safety Coordinator. The pre-task planning for all work on energized systems must be submitted for review. Additionally, work practices must conform to all applicable owner, state and federal requirements including the NEC and the most recent version of NFPA 70E.

ELEVATED WORK (OTHER THAN FALL PROTECTION)

Ladders

- Manufactured ladders on the project shall comply with the regulations of ANSI-A14.1-1968 (or most recent version), Safety Code for Portable Wood Ladders or ANSI-A14.2-1972 (or most recent version), as required by OSHA. All ladders shall be used in the manner and for the purposes for which they were designed and constructed.
- The side rails or extension shall extend 36 inches above the landing. When this is not possible, grab rails shall be installed. All ladders in use shall be tied, blocked, stabilized by a second worker or otherwise secured to prevent accidental displacement.
- When working on/from a ladder at elevations greater than six (6') feet or more above the work surface, all ladders (including stepladders) must be tied, blocked, stabilized by a second worker or otherwise secured against accidental displacement. Where adequate anchorages are available, workers shall tie off using a Personal Fall Arrest System or utilize a different means of gaining access (i.e., scissor lift, scaffold, etc.).
- Portable metal ladders shall not be used.

Scaffolding

- All employees erecting, using and dismantling scaffolds shall be trained in the hazards present and the safe procedures to be followed to eliminate exposure to those hazards and shall be provided with fall protection when 6-feet or more above the next lower level.

Concrete and Masonry

- All equipment and materials used in concrete construction and masonry work shall meet the applicable requirements as prescribed in ANSI-A10.9-1970 (or most recent version)"Safety Requirements for Concrete Construction and Masonry Work."

Stairways

- Upon delivery to the project site all office trailers and material storage trailers shall be provided with stairway access to all doorways and shall have landings with railings which allow for at least 20 inches of clearance in front of any door swing.
- Stairway placement shall follow placement of the upper floor deck, as soon as practical.

Hoists and Elevators

- Temporary personnel elevators and material hoists shall be constructed, installed and maintained in compliance with the manufacturer's instructions and the provisions of applicable statutes and regulations of governing authorities.
- No elevators or hoists are to be used for the movement of materials and personnel until the devices have been certified and licensed by a third party inspector qualified to approve the equipment.
- No person shall be allowed to ride on a material hoist except for the purposes of inspections and maintenance.

ELEVATED WORK - FALL PROTECTION

- A Fall Protection Plan must be developed by the contractor for all work with a fall exposure greater than 6-feet with a copy provided to Safety Coordinator prior to start of work.
- “Controlled Access Zones”, “Safety Monitoring”, and “warning Lines” are not permitted.
- Personal Fall Arrest systems shall be worn and used by all workers when working six (6') feet or more above the ground/floor or whenever working in a precarious position, unless other adequate fall protection such as guardrails or safety nets are provided.
- All lanyards are to be as short as possible, but in no event longer than six (6') feet. Shock absorbing lanyards must be used unless a Self-Retracting Lanyard is in use. Wire rope lanyards are prohibited unless approved by Safety Coordinator.
- Personal Fall Arrest System shall also be worn and attached to the manufacturer’s approved anchorage when working in aerial lifts and to vertical drop lines when working from suspended scaffolding.
- Only one individual shall use a vertical safety lines at a time.
- When wire rope is used as a guardrail providing fall protection, *please refer to pages 59-60* ‘Perimeter protection’ for design and installation details within this Safety plan.
- When wire rope is used a horizontal lifeline, it shall be designed by a registered Professional engineer and installed and maintained by a competent person. It shall be designed, installed and maintained to meet, at a minimum, the requirements of OSHA as contained in 29 CFR 1926.502.
- To eliminate the potential of a fall when working on a flat roof or deck, a warning barrier meeting the following requirements may be used 15 feet from the fall hazard. If a worker is between the warning barrier and the fall hazard, a positive means of fall protection must be used. Warning tape is not allowed as a warning barrier.
- Warning barriers shall consist of ropes, wires, or chains, and supporting stanchions erected as follows:
- The rope, wire, or chain shall be flagged at not more than 6-foot (1.8 m) intervals with high-visibility material;
- The rope, wire, or chain shall be rigged and supported in such a way that its lowest point (including sag) is no less than 34 inches (.9 m) from the walking/working surface and its highest point is no more than 39 inches (1.0 m) from the walking/working surface;
- After being erected, with the rope, wire, or chain attached, stanchions shall be capable of resisting, without tipping over, a force of at least 16 pounds (71 N) applied horizontally against the stanchion, 30 inches (.8 m) above the walking/working surface, perpendicular to the warning line, and in the direction of the floor, roof, or platform edge;
- The rope, wire, or chain shall have a minimum tensile strength of 500 pounds (2.22 kN), and after being attached to the stanchions, shall be capable of supporting, without breaking, the loads applied to the stanchions as prescribed in paragraph (f)(2)(iii) of this section; and
- The line shall be attached at each stanchion in such a way that pulling on one section of the line between stanchions will not result in slack being taken up in adjacent sections before the stanchion tips over.

Steel Erection - Refer to Section entitled “Steel Erection”.

Precast/Prestressed Concrete - Refer to Section entitled “Precast/Prestressed Concrete.

ELEVATOR SAFETY

Contractors shall comply with all applicable provisions of OSHA, ANSI, and Safety Coordinator Safety requirements, as well as the National Elevator Industry Inc., Field Employees Safety handbook

EMERGENCY PROCEDURES - MEDICAL – BLOOD-BORNE PATHOGENS

The Occupational Safety and Health Act (OSHA) 1910.1030, requires that each employee exposed to blood and other infectious materials be advised of the potential Blood-borne pathogen hazards and how to guard against those hazards. Each contractor, and each sub-contractor, whose employees are occupationally exposed to blood and other potentially infectious materials (including all body fluids in situations where it is difficult or impossible to differentiate between body fluids, etc.) must develop a list of all such tasks on the project; instruct the employees in the potential risks involved; develop a labeling system for all infectious materials; train all potentially exposed personnel in the hazards and the proper controls for all listed tasks; provide safety materials and equipment; and offer appropriate medical treatment and advice for any exposure. These steps are outlined in detail in the following material. Employee training for this requirement will be documented and acknowledged by signatures following each session using the documentation statement included in this Blood-borne Pathogen Safety Program.

Exposure Control Plan

- Every contractor will be responsible for development and maintenance of a list of tasks within the project operations, which involve occupational exposure to blood and other infectious materials. Each contractor will be further responsible for training their employees, obtaining medical services for their employees, and maintaining medical records for their employees assigned to all such hazardous tasks. One copy of the list identifying the hazardous tasks and of each employee assigned to perform those tasks will be forwarded to the Safety Coordinator.
- Employees will be allowed access to this Blood-borne Pathogen Safety Program and to information regarding those specific tasks in their work areas identified as involving exposure to blood and other infectious materials. All questions relating to the contractor's program should be directed to the contractor's superintendent or safety officer. All questions relating to the Project Safety Plan are to be directed to the Safety Coordinator.

Employee Information and Training

- All new and present employees will be given information regarding the requirements of this Blood-borne Pathogens Safety Program; the hazardous tasks present in their work place; and the potential health risks of these tasks. This requirement must be met through orientation sessions for all employees prior to assignment to the specifically identified hazardous tasks, and through annual refresher courses for all employees currently performing those tasks. The information and training shall include the following elements:
- The risks and symptoms of exposure to Blood-borne pathogens shall be identified.
- How to determine the presence of blood or other infectious materials in the work place.
- Methods to be used to reduce or prevent the exposure to blood and other infectious materials, such as control procedures, work practices, or personal protective equipment.

- Procedures to follow in the event of an exposure to blood or other infectious materials.
- Identification of the log maintained in the project office in which is listed all tasks involving occupational exposure to blood and other infectious materials on the site.
- How to review tasks to minimize the potential hazards of infection.
- When a task involves the handling of blood and other infectious materials, how those materials are to be contained, labeled and properly disposed.
- The necessity for proper housekeeping and personal hygiene techniques including hand washing shall be emphasized.
- Employees must have the opportunity to ask questions and obtain answers from the trainer who must be knowledgeable in the subject matter.

Container Labeling and Disposal

- The Contractor and the Safety Coordinator, will verify that all containers used to store or transport blood and other infectious materials generated at the site are clearly labeled with warning labels which include the orange or orange-red biohazard symbol, and indicate the contents, the hazards involved, and the name and address of the project.
- Red bags or containers may be used instead of labeling, but employees specifically trained in this program shall control the management of these receptacles.
- The Contractor and the Safety Coordinator will ensure that all secondary containers of the blood and other infectious materials have clear warning labels with the same information as the original container.
- Each contractor's superintendent, or safety representative if one is assigned, shall perform the above responsibilities for all their materials generated.
- All containers of blood and other infectious materials shall be controlled until delivered to an authorized disposal facility for incineration or decontamination by legally approved means.
- Arrangements may be made with a local hospital to receive and dispose of limited quantities of these regulated wastes in cases of first-aid treatment.
- Each contractor shall be responsible for proper disposal of all regulated wastes generated by their work.

Hazardous Non-Routine Tasks and Nearby Work

- In the event an employee is assigned to perform a non-routine task, or is assigned to work in an area where a hazardous task non-routine to their work, is being performed, the employee will be given the additional information and training related to the hazards, which may be encountered in the non-routine task.
- This information and training will be provided as described elsewhere in this program by the first-line foreman, contractor safety representative or a trainer who must be knowledgeable in this subject.
- The information will include the specific hazards of the task, the controls and protective measures required, the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.

Universal Precautions

- To ensure that employees who work on tasks presenting an exposure to blood and other infectious materials are afforded the greatest protection available, the following policy has been established:
- Prior to starting work on any task involving blood and other infectious materials, all

employees will review safety precautions, which should be taken. Universal precautions shall be observed which means treating all blood and other potentially infectious materials as if infectious. Particular attention shall be given to contaminated sharp objects which may penetrate the skin including, but not limited to, needles, broken glass, and exposed ends of wires. Work practices and engineering controls shall be followed diligently including the provision and use of the following:

- Gloves, latex.
- Masks and eye protection.
- Resuscitation bags and mouthpieces.
- Gowns, aprons or specialized clothing where required by established engineering practices.
- Hand-washing facilities, and other decontamination where required by established engineering practices.
- Trained personnel following approved procedures shall conduct decontamination of the above personal protective items.
- Disposable items shall be discarded into red bags or properly labeled containers and delivered for disposal as required elsewhere in this program.
- Items, which are reusable and any work areas, which were contaminated by blood and other infectious materials, shall be cleaned and disinfected with a solution containing a strong concentration of chlorine bleach.

Audit and Review

- It will be the responsibility of the Safety Coordinator to review the entire Blood-borne Pathogen Safety Program at least annually, and revise and update the material contained herein to reflect all changes in the management, disposal, storage, and handling of blood and other infectious materials generated at the project site.
- It will be the further responsibility of the Safety Coordinator, to periodically audit procedures in use on tasks identified as exposing employees to blood and other infectious materials in order that they meet the requirements as set forth in the OSHA 1910.1030 standards.
- Each contractor's superintendent or safety representative shall perform the above responsibilities for all of their tasks and procedures.

Hepatitis B Vaccination

- Hepatitis B vaccinations shall be made available to all employees who have occupational exposure to blood within ten (10) working days of assignment, at no cost, at a reasonable time and place, under the supervision of a licensed physician or health care professional and according to the latest recommendations of the U.S. Public Health Service (USPHS).
- Prescreening may not be required as a condition of receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may later opt to receive the vaccine at no cost to the employee. Should booster doses later be recommended by the USPHS, employees must be offered them.

Post-Exposure Evaluation and Follow-Up

- OSHA standard 1910.OSHA standard 1910.1030 specifies detailed procedures to be made available to all employees who have had an exposure incident. An accredited laboratory at no cost to the employee must conduct these procedures and any laboratory tests. Follow-up procedures must include a confidential medical evaluation documenting

the circumstances of exposure, identifying and testing the source individual if feasible, testing the exposed employee's blood with the employee's consent, post-exposure prophylaxis, counseling and evaluation of reported illnesses.

- Health care professionals must be provided specific information to facilitate the evaluation and their written opinion on the need for hepatitis B vaccination following the exposure. Information such as the employee's ability to receive the hepatitis B vaccine must be supplied to the employer.
- All diagnoses must remain confidential.

Record keeping

- Medical records shall be maintained on each employee, with occupational exposure to blood and other infectious materials, for the duration of employment plus thirty (30) years. Medical records must be made available to the subject employee, anyone with written consent of the employee, OSHA and NIOSH. Medical records are not available to the employer. Disposal of medical records must be in accord with OSHA's standard covering access to records. These employee medical records must be confidential and must include the following information:
- Employee's name and social security number.
- Hepatitis B vaccination status, including dates.
- Results of any examinations, medical testing and follow-up procedures.
- Copy of the health care professional's written opinion.
- Copy of the information provided to the health care professional.
- Training records shall be maintained for a period of three years and must include the dates, contents of the training program or summary, trainer's name and qualifications, names and job titles of all persons attending the sessions.

EMERGENCY PROCEDURES - MEDICAL SERVICES

Contractor's Responsibilities

- Prior to commencement of work, provisions must be made for prompt medical attention in case of serious injury. Each contractor shall have a minimum of one First Aid/CPR trained individual on the project and inform Safety Coordinator of their name.
- Ensure that adequate first aid supplies shall be easily accessible when required.
- Provide proper equipment for prompt transportation of the injured person to a physician or hospital, or a communication system for contacting necessary ambulance service.
- Telephone numbers and addresses of the physicians, hospital and ambulance shall be conspicuously posted.
- Contractor shall complete and provide to Safety Coordinator an "Employer's First Report of Injury" within 24 hours of any/all incidents involving work activities associated with the project. Contractors are advised to maintain their own OSHA 300 Log as an OSHA requirement.
- Contractor shall ensure that each of its lower-tier contractors meet these medical requirements.
- If the injured employee is released by the doctor for light or restricted work duty, the Contractor shall make available restricted duty work for the injured employee.
- Each occupational illness or injury shall be reported immediately by Contractor's employee to Contractor's first aid attendant and the Safety Coordinator.
- Contractor's first aid attendant or other competent person shall treat the injured

employee as often as necessary to ensure complete recovery, or until a decision is made to seek medical treatment.

- Contractor must provide for the prompt transportation of the injured person to a hospital or other emergency facility.
- A representative of the Contractor shall drive the injured employee to the medical facility and remain at the facility until the employee is ready to return. Contractor's representative shall carry necessary forms; i.e., authorization slips, return to work notices to the medical facility
- If it is necessary for the Contractor's first aid attendant to accompany the injured employee, provisions must be made by Contractor to have another employee, properly trained and certified in first aid, available to render same during the absence of the regular first aid attendant.
- If the employee is able to return to the project site the same day, he/she must return with a statement from the doctor stating same and containing such information as date, employee's name, and date of return to regular or restricted duty, date he/she is to return to doctor, diagnosis, signature and address of doctor. If the injured employee is unable to return to the project site the same day, the employee who transported him/her should bring this information back to the project site and report it to Safety Coordinator.
- If it is necessary to call the outside medical facility, this call should be made by Safety Coordinator while the injured employee is being transported.
- Medical cases requiring ambulance services would be such cases as severe head injuries, amputations, heart attacks, severe bleeding, stopped breathing, etc. Should ambulance service be necessary, the following procedures should be taken immediately:
- Contact Contractor first aid attendant or nearest employee properly trained and certified in first aid.
- While first aid is being administered, contact the Safety Coordinator immediately.

EMERGENCY PROCEDURES - ALARMS, FIRE, BOMB, WEATHER, ENVIRONMENTAL, PUBLIC DEMONSTRATION

- In order that necessary emergency services may be supplied promptly, each contractor and sub-contractor shall post in a conspicuous place a list of emergency telephone numbers along with the type of information to be transmitted for each emergency situation.
- All accidents are to be handled by the ranking person present, with whoever is available to assist. The ranking person shall direct someone to notify first-aid personnel, and to call for emergency services as necessary. The Project Superintendent is to be notified as soon as this can be done without delaying assistance to the injured. He will then take appropriate action.
- In accidents resulting in injury to personnel, individuals qualified to administer first-aid will assist the injured, will stabilize their condition, and will arrange for transportation to a hospital if further treatment is required.
- Except when necessary to avoid further injury, or to prevent additional damage to the work, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or the person designated to make the investigation and report. As soon as the Project Superintendent can release the area from this constraint, contractors concerned will clean up and make repairs to return to a normal situation.

- Where a specific procedure has not been established, reasonable judgment should be used in determining what course to follow.

Alarms

- The JJC Project Manager and the Safety Coordinator shall be notified of all emergencies and notify the appropriate emergency service of the incident and initiate appropriate action.
- Fire alarms within the area of new construction will consist of three short blasts on an air horn or other suitable alarm located at the means of egress, stairway, ladder, or building entry. Telephone notification of the fire department will be initiated immediately after sounding the air horn alarm. Telephones are available in the project site office. Radio contact with the project site office and the Safety Coordinator shall be used to inform all concerned regarding the fire.
- A continuous long blast on the air horn may be used to summon first aid assistance in the event of an accident.

Fire

The following procedures are established in the event of a fire. "RACE"

R **R**escue... anyone in immediate danger.

A **A**larm... activate pull station; go to phone and dial 911.

C **C**ontain... close doors and windows, isolate the fire.

E **E**xtinguish... use correct extinguisher.

Accident Involving Serious Injury or Death

- The following procedures are established in the event of an accident involving serious injury or death to employees or members of the general public.
- Individuals qualified to administer first-aid will assist the injured, will stabilize their condition, and will arrange for transportation to the hospital emergency room if further treatment is required.
- The JJC Project Manager and the Safety Coordinator is to be notified immediately. Immediate notification (within 8 hours) of the local OSHA office is required in the event of a fatality or serious injuries, which may lead to a fatality.
- All non-essential personnel shall be removed and/or kept back from the area.
- Rescue personnel shall be provided assistance as requested.
- No comments shall be made. All inquiries shall be referred to the Safety Coordinator.
- No on-site photographs are to be taken without the specific approval of the Safety Coordinator and the Project Superintendent.
- The Safety Coordinator shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.
- As soon as the Safety Coordinator can release the area from the above constraint, contractors concerned will clean up and make repairs to return to a normal situation.
- **Property Damage Accidents**
- The following procedures are established in the event of accident involving property

damage.

- The Safety Coordinator is to be notified as soon as this can be done without delaying efforts to prevent further damage. He will then take appropriate action and direct other personnel to assist as necessary.
- Efforts shall be taken to protect against further damage where possible.
- All non-essential personnel shall be removed and/or kept back from the area.
- No comments shall be made. All inquiries shall be referred Safety Coordinator.
- No on-site photographs are to be taken without the specific approval of Safety Coordinator
- The Safety Coordinator shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Safety Coordinator.
- As soon as the Safety Coordinator can release the area from the above constraint, contractors concerned will clean up and make repairs to return to a normal situation.

Severe Weather

- The following procedures are intended to prepare the project site in the event of severe weather conditions. Since severe weather may be reasonably anticipated to occur during the duration of the project, yet without significant advance warning, all work activities and project site conditions must be planned with a concern for emergency preparations.
- Each contractor, at the time of mobilization, shall deliver to Safety Coordinator a complete list of the contractor's supervisors with the complete after hours telephone numbers. The list shall be kept current and shall be updated accordingly.
- Each contractor shall insure that his field trailers and his sub-tier contractors' field trailers are anchored in at least three locations.
- Upon notification of a Severe Weather Watch by the U. S. Weather Bureau, the following actions are to be initiated.
- Each contractor having on-site generators which are fuel-powered are requested to notify the Safety Coordinator of the numbers and wattage. Generators may be needed to provide temporary power for rescue or clean-up activities.
- All materials shall be secured to prevent them from becoming air borne during high winds. Particular attention needs to be given to picking up scrap materials and hauling or covering trash containers.
- Crawler and mobile cranes shall have booms lowered at the end of the shift. Cranes not capable of lowering booms shall be permitted to weathervane or free swing. Check to assure that swinging booms will not contact other objects such as power lines, structures, etc.
- Sufficient flashlights, batteries, and bulbs shall be provided to assigned emergency response personnel. A supply of fresh batteries shall be maintained at the project for use in an emergency response.

Other Major Catastrophe

Examples of other major catastrophes include:

- Major fire.
- Collapse of large portions of structures or large sections of scaffolds.
- Heavy damage by wind or floods.
- The owner's security or local authorities will be provided with an emergency call list to summon the Safety Coordinator's and the contractor's personnel to the site in the event of a major catastrophe outside working hours, on Saturdays or Sundays, etc. The JJC Project Superintendent or his best-qualified alternate will cooperate fully with the directives of the hospital staff or local emergency authorities in the event of a major catastrophe. He will take any or all of the following actions as appropriate.
- Initiate fire fighting, tie down building, etc.
- Call for assistance from outside: fire trucks, ambulances, electricians, life flight helicopters, Civil Defense Support, police.
- Stop work.
- Call for site evacuation, to clear site access roads.
- Issue instructions to supervisors and to others as necessary.
- Set up security control at the disaster area.
- Set up communications center in site trailers: radio/telephone.
- Call in operators for heavy equipment such as front loaders, cranes, etc.
- Other actions considered necessary in the particular situation.

Bomb Threat

- When a bomb threat is received or if a suspicious article is found, Safety Coordinator will take the following actions.
- Work shall be stopped immediately and the project and office shall be evacuated of all personnel. A count will be made to assure that all are present.
- Local police, fire or bomb disposal authorities shall be notified. A search of the premises will be made as directed by appropriate authorities.
- If a suspicious article is found, DO NOT TOUCH IT, notify the appropriate authorities.
- Do not allow anyone except authorized personnel to re-enter the area.
- If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
- No comments shall be made. All inquiries shall be referred to Safety Coordinator.
- No on-site photographs are to be taken without the specific approval of Safety Coordinator
- The Safety Coordinator shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
- If repeated threats occur within a short period of time, Safety Coordinator, will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day.

Environmental Spill

- In the event of a spill of environmentally damaging materials, immediate response is required to prevent or minimize the impact this event will have upon the environment and the public welfare. All personnel shall continue to observe standard precautions for handling the materials as detailed in the manufacturer's product Safety Data Sheet (SDS), including the use of personal protective equipment. Where conditions warrant,

the contractor shall have emergency spill containment supplies available for immediate use. The following general procedures apply to the immediate response which must be initiated:

- Immediately, all personnel in the immediate area of the release shall be alerted to the hazardous material and the nature of the immediate danger to themselves and the environment. As soon as possible, the Safety Coordinator shall be notified and requested to initiate emergency containment and clean up procedures.
- The Local Fire Department shall be notified to mobilize their hazardous materials response units and shall be given the necessary information regarding the materials, which were released.
- If safe to do so, every effort shall be made to contain the materials within berms, by absorbent materials, or through other appropriate means, until proper handling and disposal personnel may be mobilized at the site. Particular attention needs to be taken to avoid contamination of surface water, storm sewers, sanitary sewers, ground, plants and animals.
- All non-essential personnel shall be removed and kept back from the area.
- No comments shall be made. All inquiries shall be referred to the Safety Coordinator.
- No on-site photographs are to be taken without the specific approval of the Safety Coordinator and the Project Superintendent.
- The Safety Coordinator shall make a full investigation and file an Accident/Injury Report within twenty-four (24) hours of the occurrence.
- Within the immediate area of the accident scene, nothing is to be disturbed nor removed after proper evacuation of the injured personnel. Except when necessary to avoid further injury, equipment will not be moved, or the position of items, parts, pieces, controls, etc. will not be changed until photographs have been made and notes taken by the Project Superintendent or other person designated to make the investigation and report.
- Purchasing shall be notified to initiate the response of available environmental remediation contractors who are under standby contract.
- As soon as the environmental remediation contractor has cleared the site, the Project Superintendent will release the area for contractors concerned to clean up and make necessary repairs to return to a normal situation.

Public Demonstrations

- When a public demonstration is expected or occurs, the Safety Coordinator will take the following actions.
- Work on the project site shall continue where not encumbered by the public demonstration; however work in the immediate area shall be stopped and all project employees shall be evacuated. A count will be made to assure that all are present.
- Local police shall be notified, and all employees shall cooperate fully with the law enforcement authorities.
- Do not allow anyone except authorized personnel to enter the project site. All visitor passes are revoked and all visitors shall be escorted from the project site.
- If necessary to stop or detour traffic away from the affected area, local police or flagmen shall be utilized.
- No comments shall be made. All inquiries shall be referred to the Safety Coordinator.
- No on-site photographs are to be taken without the specific approval of Safety Coordinator.

- The Safety Coordinator shall make a full investigation and file a report within twenty-four (24) hours of the occurrence.
- If repeated public demonstrations occur within a short period of time, Safety Coordinator will evaluate the situation and take appropriate action. This action may include shutting down the project site for that day or obtaining a judicial restraining order.

ENVIRONMENTAL - ASBESTOS

Occupational Safety and Health Administration (OSHA) regulations have been promulgated to protect workers from exposure to airborne asbestos fibers. Under the Asbestos Control and Licensing Act, a contractor must be licensed by the Department of Labor and the State in which the work is being performed in order to remove asbestos.

Notification - Before starting asbestos removal work, the United States Environmental Protection Agency (USEPA) and the Local Department of Environmental Management must be notified in writing by the contractor and appropriate permits must be on file. Safety Coordinator and/or its agent will verify this information by way of contract requirements.

Training - Employees of the contractor must be appropriately trained and licensed prior to the removal of any asbestos contaminated material. Any contractor's employees who may be exposed to Asbestos must be trained in the recognition of hazards and appropriate controls.

Posting - The asbestos material removal area shall be cordoned-off to discourage entry. Appropriately worded caution signs must be posted at all approaches to the area at such interval to allow individuals to take any necessary protective steps before entering the removal area.

Asbestos Handling - The encapsulation, removal and/or disposal of ACM shall be performed by a Contractor licensed to do such work in which the work is being performed and in accordance with all applicable Federal, State and Local Regulations per approved abatement plans.

Work Practices - Asbestos containing materials shall be worked in a wet state sufficient to prevent the emission of airborne fibers in excess of the permissible exposure limits. Work areas are to be adequately protected, through appropriate type enclosures, so as to ensure that no asbestos contaminated material will be permitted to leave the controlled area.

Personal Protective Equipment - In instances where re-usable clothing is used, the following precautions must be followed:

Contaminated clothes must be appropriately bagged and labeled. Notification and transportation to authorized laundries and haulers.

All employees working in asbestos removal areas shall wear appropriate personal protective equipment.

Cleanup - There shall be no dry sweeping of asbestos material. Use floor coverings to prevent debris from falling to lower floors and to speed up house-keeping.

Labeling and Waste Disposal - Appropriately worded labels must be affixed to all materials, waste, debris, etc., containing asbestos friable materials. Asbestos waste and/or asbestos contaminated material must be collected and discarded in sealed, labeled, impervious containers by contractor.

The following label content is acceptable to both the EPA and OSHA:

CAUTION

CONTAINS ASBESTOS FIBERS

AVOID CREATING DUST

BREATHING ASBESTOS DUST MAY

CAUSE SERIOUS BODILY HARM

The Safety Coordinator shall be provided with copies of all air monitoring reports and certified disposal receipts prior to final payment.

ENVIRONMENTAL – LEAD

Lead Painted Components

- Lead based paint can possibly be identified on numerous surfaces throughout these facilities. In keeping with the requirements of the Occupational Safety & Health Administration's (OSHA's) Lead Exposure in the Construction Industry Standard (29 CFR 1926.62), every painted surface shall be considered a potential lead hazard.
- A potential source of lead emission is the disturbing of painted surfaces of structures and components within these facilities. Typical activities that would significantly disturb a painted surface include the following:
- Removal of all or part of the paint by hand or power tools
- Removal of all or part of the paint by blast cleaning
- Removal of all or part of the paint by other means such as the use of chemical strippers or a heat gun
- Structural work to the surface such as welding, burning, cutting, or drilling
- Manual demolition of buildings, portions of buildings, or the building components.
- The primary consideration when specifying work methods shall be the requirement to protect workers from exposure to lead above the Permissible Exposure Limit (PEL). Further considerations when specifying work methods shall be the effort to reduce the release of lead into the air, water and soil, and to reduce to a minimum the generation of debris.
- At all times when activities which disturb paint are in process, the Site competent person for lead shall have unrestricted access to the work area for inspection, and shall have the authority to stop work when the control measures being utilized are not as specified in this section or the OSHA Standard, if the control measures are not adequately controlling exposures or if other hazards are identified which require work to be stopped.
- All air monitoring conducted by the Site competent person for lead or other qualified representative shall be performed in accordance with the OSHA Standard.
- Detailed and accurate records of all monitoring and other relevant data used in conducting employee exposure assessments shall be kept and maintained in accordance with the OSHA Standard.
- Signs shall be posted in each work area where work on painted surfaces disturbs the paint in such a way so as to expose personnel to lead contaminated dust, debris, or lead fumes. At minimum they shall read:

WARNING

LEAD WORK AREA

POISON

NO SMOKING OR EATING

- All worker protection requirements will, at minimum, meet the current OSHA Standard. These requirements include but are not limited to:
- Signage, Barriers & Access

- Exposure Monitoring
- Respiratory Protection
- Medical Surveillance & Records
- Education & Training
- Decontamination & Clearance
- All work involving lead removal or re-coating shall be conducted in a manner that minimizes the release of lead and lead containing materials into the air, water, and soil.
- All lead containing hazardous wastes that are generated shall be contained, collected, segregated, labeled and held at a location
- Designated or approved by the Owner or Safety Coordinator Building Co. pending the appropriate disposition.
- Contractor shall provide for proper disposal of waste, including EPA identification number, notification, certification, manifest, etc.
- All waste containers must be leak proof and capable of being securely covered.
- All waste containers shall be clearly labeled with weather resistant labels using indelible ink to identify the type of waste they contain.

ENVIRONMENTAL - ON-SITE HAZARDS

Material that is designated as a hazardous substance requires special attention by the Contractor and workers to minimize the exposure. A plan addressing the proper handling, storage and disposal of hazardous material must be developed. Safety Coordinator and the Owner, must be immediately notified of any hazardous material leak or spill. Any Contractor-caused oil spills must be reported immediately to the Safety Coordinator.

ENVIRONMENTAL - SILICA

- Contractors shall submit their silica protection program for review by Safety Coordinator prior to the pre-construction conference. As a minimum the contractor's silica protection program shall comply with OSHA regulations and shall address the following items:
- Statement of the contractor's commitment to prevent silicosis and to comply with OSHA's standards.
- Description of air monitoring to determine the silica levels generated by tasks to provide a basis for:
- Selecting engineering controls,
- Selecting respiratory protection,
- Selecting work practices to reduce dust, and
- Determining if a medical surveillance program is necessary.
- Description of engineering controls which are proposed for the project to eliminate or reduce the amount of silica in the air and the build-up of dust on equipment and surfaces.
- Description of less hazardous materials than crystalline silica which are proposed for abrasive blasting and automatic blast cleaning machines or tools to be utilized.
- Description of high-efficiency particulate air filter vacuums to be used by employees and work practices to vacuum, hose down, or wet clean work areas and equipment.
- Description of warning signs and other barriers proposed to identify work areas where respirable silica may be present and to limit access to only authorized employees.

- Description of personal protective equipment and clothing to be provided to employees and changing facilities if necessitated by the level of silica dust exposure.
- Certification of training provided to employees about health effects of silica exposure, engineering controls and work practices that reduce dust, the importance of maintenance and good housekeeping, as well as the proper type and fitting of respirators; and include a statement that the employee is or is not enrolled in a medical surveillance program.

ENVIRONMENTAL - POWERED EQUIPMENT INSIDE ENCLOSED STRUCTURES

If internal combustion engines are used on powered equipment in enclosed areas, the contractor is responsible for monitoring the quality of breathing air for harmful contaminants and adequate oxygen and is responsible for providing adequate ventilation.

EXCAVATION

- The contractor must designate a competent person trained in soil classification and the recognition of trenching and excavation hazards. This person must be on-site when excavating or trenching is being done.
- Appropriate documentation to meet the OSHA trenching and excavation standards is to be maintained on site.
- Where protective systems as defined in 29 CFR 1926.650-652 are designed by a licensed Professional Engineer, who is not a regular Safety Coordinator employee, the resulting design documents must be reviewed by Safety Coordinator prior to the commencement of the work to assure that the documents set forth the accurate and complete assumptions (as set forth in the current, applicable contract specifications) upon which the design is based.
- Prior to opening any excavation or trench an excavation permit from Safety Coordinator is required. Contractor shall notify necessary personnel to determine whether under-ground installations; i.e. sewer, telephone, fuel, electric lines, etc., may be encountered and where they are located. Excavation permits shall be required on a daily basis while the excavation is open.
- Trenches 4 feet and over in depth or presenting a hazard to the worker shall be shored or walls cut back to protect employees from cave-in.
- All trenches and excavations shall be properly barricaded to prevent persons from walking into them.
- When an excavation will remain open longer than one work shift, a barrier sufficient to protect people from falling into the excavation or erected at a minimum of 6-feet from the excavation in order to warn of the fall hazard must be erected and maintained for the time duration that the excavation remains open.
- Excavation contractors will provide a spill kit for use on site in the event of a hazardous material spill.
- Drilled caissons will have fall protection provided both during and upon completion of the drilling by use of personal fall protection, guardrails or use of casing extending a minimum of 42 inches above the ground.

EYE AND FACE PROTECTION

- Appropriate eye protection meeting the requirements of ANSI Z87 (most recent version) with side shields are required to be worn in a manner to protect the eyes while in construction areas at all times.

- In addition, approved eye and face protection is required as follows:
- Goggles, welding hoods and shields, or face shields will be required to be properly worn at all times when in the area of operations, such as when welding, burning, grinding, chipping, chemical handling, corrosive liquids or molten materials, drilling, sawing, driving nails, power actuated tools, concrete pouring, tampers and gasoline fueled hand operated equipment (i.e. chain saws). This section will also apply to those employees of Contractors who are assisting any worker as an apprentice or helper.
- Prescription glasses must meet the requirements of ANSI Z87 (most recent version), or be covered with over-the-glass safety glasses or face shield.

FIRE PROTECTION

- Contractor shall be responsible for fire protection in its work and operational areas, including offices, tool rooms, and storage areas twenty four (24) hours per day, seven days per week through the duration of this Contract.
- The contractor, as required by OSHA and the local fire protection code, must provide appropriate fire suppression equipment.
- The contractor for all Hot Work Operations will provide a fire watch and at least one fire extinguisher of appropriate size & type.
- A minimum 20 pound multi-purpose ABC extinguishers are allowed on the project.
- Only safety containers approved by UL and the local Fire Marshall, and properly labeled as to their contents, are to be used for handling and/or storage of flammable liquids in quantities more than one gallon.
- All tarpaulins and plastic used for temporary covers shall be of fire resistant manufacture.

STANDPIPES

- Fire Protection Standpipes shall be installed in accordance with NFPA 241, International Fire code-1413, International Building Code-3311, and OSHA, including but limited to:
- At least one standpipe shall be installed in buildings four or more stories in height, and shall be installed where the progress of the building is not more than 40 ft. in height above the lowest level of fire department access.
- During construction, the standpipe installation shall be installed so that it is never more than one floor below the floor having secured decking or flooring.
- Standpipes shall be provided with fire department hose connections at accessible locations to usable stairs.
- Standpipes shall be installed and maintained so that they are always ready for use.
- For building under demolition, standpipes shall not be demolished more than one floor below the floor being demolished, and shall be maintained in an operable condition for use by the fire department.

HAND PROTECTION

General requirements. Employers shall select and require employees to use appropriate hand protection when employees' hands are exposed to hazards such as those from skin absorption of harmful substances; severe cuts or lacerations; severe abrasions; punctures; chemical burns; thermal burns; and harmful temperature extremes.

Selection. Employers shall base the selection of the appropriate hand protection on an

evaluation of the performance characteristics of the hand protection relative to the task(s) to be performed, conditions present, duration of use, and the hazards and potential hazards identified.

Refer to Appendix B Hand Protection Reference for additional information

HAZARD COMMUNICATION PROGRAM

- The Occupational Safety and Health Act (OSHA) requires that each employee potentially exposed to hazardous chemicals be advised of the potential hazards and how to guard against those hazards. Each contractor whose employees are potentially exposed to hazardous chemicals must develop a list of all such chemicals used on the project; gather Safety Data Sheets (SDSs) for those materials; develop a labeling system for all materials; and train all potentially exposed personnel in the hazards and their controls for all listed compounds.
- These steps are outlined in detail in the following material.
- Employee training for this requirement will be documented and acknowledged by signatures following each session.

Safety Data Sheets (SDSs)

- Every contractor will be responsible for development and maintenance of a list of hazardous chemicals utilized within the project operations and will be further responsible for obtaining and maintaining SDSs for all such hazardous chemicals.
- Employees will be allowed access to this information and the specific SDSs for chemicals utilized in their work areas.
- All questions relating to the program should be directed to the contractor's superintendent or safety representative.
- A copy of each SDS will be delivered to the Safety Coordinator prior to work starting involving that substance.

Employee Information and Training

- All new and present employees will be given information regarding the requirements of the Chemical Hazard Communication Program; the hazardous chemicals present in their work place; and the physical and health risks of these chemicals. This requirement may be met through orientation sessions for new employees, and refreshers for all during toolbox talks. The information and training will also include the following elements:
- The symptoms of overexposure to the chemicals.
- How to determine the hazardous presence or release of a chemical in the work place.
- Methods to reduce or prevent the exposure to hazardous chemicals, such as control procedures, work practices, or personal protective equipment.
- Procedures to follow in the event of an exposure to hazardous chemicals. The location of the log containing the SDSs, which apply to their work place and the location of the written Chemical Hazard Communication Program.
- How to review SDSs to obtain the hazard information for the chemical, and how to read the labels, which are required on the chemical containers. When a new hazardous chemical is obtained for use, each employee who could be exposed will be given the information and training as described above, and a copy of the SDSs for the chemical will be obtained and distributed to those who actually use the chemical in the work place. The SDSs will be available to all employees during each work shift.
- Proper disposal procedures of waste materials shall be enforced. Labeling of waste containers and disposal of all hazardous materials by a licensed disposal facility is

required.

Container Labeling

- All chemical containers at the site must be clearly labeled as to the contents, the hazards involved, and the name and address of the manufacturer. Adhere to the OSHA Global Harmonization law.
- All secondary containers of hazardous chemicals are to be clearly labeled with the same information as the original container.
- Each contractor's superintendent or safety representative shall perform the above responsibilities for all their materials.

Hazardous Non-Routine Tasks and Nearby Work

- In the event an employee is assigned to perform, or is assigned to work in an area where a hazardous task, non-routine to their work, the employee will be given the additional information and training related to the hazardous chemicals which may be encountered in the non-routine task.
- The first-line foreman, contractor superintendent, or contractor safety representative will provide this information and training. The information will include the specific chemical hazards of the task, the controls and protective measures required, the types of personal protective equipment required, how to use the equipment, the nature of other work being performed in or near the non-routine task, and what emergency procedures are involved with the task.

Demolition

To the best of the Owner's knowledge, there is no asbestos, lead, polychlorinated biphenyl (PCB), or hazardous materials anywhere in the designated work areas. AIA-A201 Subparagraph 10.1.2 applies: Contractor shall stop the Work if material reasonably believed to be asbestos, lead, polychlorinated biphenyl (PCB), or hazardous materials is encountered in the Work area.

Chemicals in Unlabeled Pipes, Vessels and Containers

- To ensure that employees who work on unlabeled pipes, vessels or containers have been informed as to the hazardous materials contained within, the following policy has been established: Prior to starting work on unlabeled pipes, vessels or containers, employees are to contact their foreman for the following information:
- Type of chemical in the pipe, vessel or container.
- Potential hazards.
- Safety precautions which should be taken.

Audit and Review

- It will be the responsibility of each contractor's superintendent and safety representative to review the entire Hazard Communication Program, and to revise and update the material contained herein to reflect all changes in the purchase, use, storage, and handling of hazardous chemicals at the project site.
- It will be the further responsibility of the superintendent and safety representative to periodically audit that procedures in the use of the hazardous chemicals meet the requirements as set forth in the SDS’s.

HAZARD ANALYSIS

- Prior to beginning work, each contractor shall prepare a hazard analysis that defines the activities to be performed and identifies the sequence of the work, the specific hazards,

and the methods to be used to eliminate or minimize each hazard. The hazard analysis shall be submitted prior to, and will be reviewed during the pre-construction meeting by Safety Coordinator, and the contractor's supervisors and safety representative. The hazard analysis shall be written in a form acceptable to the Safety Coordinator.

- Hazard Analysis shall be done when the scope of the work or conditions change.
- Each Contractor Foreman will inform their work crew of the Hazard Analysis for their work activity each day prior to start of work or when conditions change.
- Each contractor shall submit for review by the Safety Coordinator a site specific safety program which addresses all the elements of this safety plan as they will be implemented by the contractor, its contractors, vendors and suppliers. The hazard analysis will be included as an appendix to the contractor's site-specific safety program.

HOUSEKEEPING

- On a daily basis, all debris and scrap material shall be removed from the work area.
- Debris and other loose materials shall not be allowed to accumulate in stairwells.
- Containers shall be provided for the collection and separation of waste, trash, oily and used rags and other refuse. Metal (dumpster type) containers must be used and emptied promptly.
- Garbage and other waste shall be disposed of at frequent or more regular intervals in a manner approved by the Safety Coordinator.
- Contractor shall notify the Safety Coordinator of any hazardous waste it will generate during performance of the Work. Contractor has the direct responsibility of maintaining proper storage of these wastes while on site and will verify to the Safety Coordinator in writing that the wastes have been disposed of in a legal manner. A copy of the haulers manifest must be provided to the Safety Coordinator.
- Contractor shall not pour, bury, burn, nor in any way dispose of a chemical on the work project site.
- Contractor shall clear all combustible debris to a solid waste disposal project site properly licensed under the laws of the State having jurisdiction. NO OPEN BURNING OF DEBRIS, OR RUBBISH WILL BE PERMITTED ANYWHERE ON THE PROJECT SITE.
- Materials and supplies shall be stored in locations, which will not block access-ways, and arranged to permit easy cleaning of the area. In areas where equipment might drip oil or cause other damage to the floor surface, a protective cover of heavy gauge, flame resistant, oil proof sheeting shall be provided between the equipment and the floor surface sheeting so that no oil or grease contacts the concrete. This requirement is applicable to both finished and unfinished floors.
- All hoses, cables, extension cords, and similar materials shall be located, arranged and grouped so that they will not block any access-way and will permit easy cleaning and maintenance.

INCENTIVES AND AWARDS

Safety awareness and recognition campaigns during construction will include the posting of banners, posters and signs emphasizing safety awareness, the proper use of safety equipment and safe work practices.

INFECTION CONTROL

INFECTION CONTROL MEASURES FOR USE DURING MAINTENANCE, CONSTRUCTION, AND RENOVATION AT (Insert Project Name)

GENERAL INFORMATION

- The level of risk in any given area is determined by the Owner in conjunction with Industrial Hygiene professionals, and may be modified with changes in patient population. The Owner will complete an Infection Control Risk Assessment (ICRA) before work begins.
- All contractors will be required to comply with infection control measures.
- The infection control measures to be taken for any given project will be determined on the basis of the guidelines of the ICRA.
- Prior to the start of work the Owner will confirm to Safety Coordinator that areas under construction are free of any hazardous materials or medical wastes.

The Safety Coordinator Responsibilities

- The Safety Coordinator and responsible contractors will review blueprints and be involved in pre-construction planning meetings for patient care areas at hospital and outpatient facilities. This involvement is to provide input into project planning to identify infection control issues in the planned space and, to help implement and monitor measures to control infection risk generated by construction.
- the Safety Coordinator will assist the Owner and Architect in pre-construction planning
- Safety Coordinator will monitor the implementation of infection control measures and document any nonconforming conditions.
- The Safety Coordinator will implement a work permit system whereby the Safety Coordinator will walk the site with contractor personnel to determine that all appropriate controls are in place according to the ICRA.
- The Safety Coordinator will coordinate with the Owner, to identify conditions that may change, which may alter the Infection Control Risk Assessment.
- The Safety Coordinator will monitor the project's infection control measures, including the infection control measures of the contractors.
- The Safety Coordinator will Contact the Owner's Infection Control Representative upon completion of each phase of the project for final assessment, before occupancy.
- The Safety Coordinator will notify the Owner of any known breaches of the infection control requirements and implement corrective actions with the Trade Contractors.
- The Safety Coordinator will report all sewage spills to the Owner and coordinate the clean-up.

Contractor Responsibilities

- All project employees will comply with the infection control measures, including blood borne pathogen training.
- All project employees will be required to attend a project orientation, which includes

infection control requirements, prior to start of work.

- All workers exposed to sewage or bodily fluids must report the exposure immediately to their supervisor. Their employer should offer any workers, who may have been exposed to sewage as a part of their job, vaccination. Employers must offer vaccine at no additional cost to the worker.
- Construction workers with communicable infections or exposure to communicable infections, such as chickenpox or tuberculosis, must have the permission of their occupational health provider to work.
- Each Contractor will identify a person responsible for monitoring their employees' compliance with the ICRA. The person must be present onsite during all working hours of their personnel.

Guidelines for Orientation to Infection Control

- Review of color coded floor plan of areas to be worked showing moderate and high risk areas as developed by the Owner's ICRA.
- Review Project-specific ICRA including Classes of Work and associated precautions.
- Facility access restrictions and security measures.
- Worker circulation routes.
- Working around the building exterior
- General work practices on controlling dust, odor, vibration and noise.
- Required use of Personal Protective Equipment (provided by employer) – only in containment and patient areas.
- Cautions relating to existing MEP equipment.
- Access into enclosed spaces (above ceilings, into chases, behind walls and as otherwise determined by Safety Coordinator.
- Barrier requirements and monitoring.
- Exiting a containment area, both in emergency and routine cases.
- Reporting an emergency.
- Removal of equipment, tools or trash/debris from a containment area.
- Cleaning requirements, techniques and frequency.

Attendance is to be documented with a dated, signed sheet showing the attendees employer and the full name of the attendee both printed and with signature. This is to be stored with the Safety Coordinator safety file.

INSPECTION AND AUDITING

Purpose and Scope

To establish a basic inspection/audit program for the elimination of unsafe practices by employees and to establish a hazard free work environment for all employees on the project.

Objectives

To reaffirm the Trade Contractor's basic responsibility for the actions of the employees as originally assigned under the General Provision of the Occupational Safety and Health Act of 1970 (revised). The exercise of these responsibilities by all project trade contractors will be the

effective deterrent to accidents arising from unsafe practices and physical conditions, that will materially enhance the construction efficiency of this project.

Procedures

Control will be achieved only when each trade contractor fulfills their contractual and statutory responsibilities and applies all practical steps to maintain safe and healthful work practices and conditions.

Project Controls

Continued monitoring/audit of the performance of the Contractor and their supervision under this section will be made by Safety Coordinator. Contractors will be notified of any unsafe practices observed. The Contractor's safety supervisor, the Project Safety representative and the General Trades Safety Coordinator's field staff shall utilize the "Construction Safety Survey".

Supervisory Control

Contractor

Each Contractor will be responsible for conducting continuous daily surveys of their operations to insure they are aware of the probable sources of potential injury or loss due to unsafe acts of procedures.

Planning

Contractors must extensively plan the procedures to be followed for each operation using Hazard Analysis procedures and submit such plans to the Project Safety Coordinator.

Personnel chosen to perform any such planned operation shall be thoroughly briefed in all aspects of the procedure, including emergency actions to be taken in the event of a mishap.

Inspections

In addition to inspections conducted by the Project Safety Coordinator, Insurance Representatives, and each Contractor, construction activities are subject to periodic inspection by OSHA Compliance Officers.

Each Contractor is required to notify* the Safety Coordinator *in writing prior to starting work if they, by their Company policy, they will require a warrant for OSHA to inspect their work.* the Safety Coordinator *does not require a warrant.

Contractors shall forward copies of any and all inspection reports and/or citations received by the Contractor from OSHA to the Safety Coordinator. All information will remain confidential.

In the event a OSHA Compliance Officer visits the site, he/she will be directed to the Safety Coordinator office. The appropriate Contractors will then be notified so that an Opening Conference may be conducted. The Safety Coordinator will organize an inspection party, consisting of both employer and employee representatives.

Notification of Hazards

Each Contractor shall notify the Safety Coordinator verbally or in writing of the existence of any hazardous conditions, property, or equipment at the work site, which are not under the Contractor's control. However, it is the Contractor's responsibility to take all necessary precautions against injury until corrected by the responsible party.

Equipment and Facilities

All Contractors operating equipment and facilities used shall be, inspected, and maintained as directed by this manual; as dictated by the applicable Federal and State safety and health regulations. In the event of conflict, the more stringent requirement will take precedence.

INTERIM LIFE SAFETY MATTERS FOR OCCUPIED FACILITIES

Specific Measures

- Whenever construction affects the facility's ability to accommodate occupants (either because of disruption of services, interruption of normal operations, or when hazards are present), it will become necessary to implement interim life safety measures, as follows:
- Ensure that all exits are clear. This includes areas directly affected as well as all other exits.
- Ensure that there is free access to emergency services, that vehicles, material, etc. are not blocking the access route.
- Disabling of fire protection systems. A small disaster could escalate if the fire protection system is not functional. Care should be given to provide an alternate system while the primary system is off-line. This includes scheduled maintenance, upgrade, repairs, or adding of coverage resulting in disabling system, and disabling system to allow maintenance or repairs to be completed on other systems (e.g. hot work).
- Fire alarm, detection, and suppression systems must not be impaired. A temporary (but equivalent) system shall be used if the system is impaired. These temporary systems must be tested monthly.
- Temporary construction partitions shall be smoke tight and noncombustible. Adequate signage shall discourage casual observers from opening or entering the partitions.
- Additional (double) fire-fighting equipment must be provided, as well as personnel trained in its use.
- Smoking is prohibited on campus, in and adjacent to all construction areas. Strict enforcement must occur.
- Construction site shall be kept clean and orderly. This includes material piles, debris, platforms, and break areas.
- Hazard surveillance of sites shall be increased and documented. Attention is to be given to evacuation routes, construction areas, storage, office/lunch areas, and fuel storage.
- Whenever the safeties of adjacent areas are compromised because of construction, staff shall be informed. Alternate exit routes shall be identified.
- Facility-wide education programs are conducted explaining interim life safety matters and current life safety deficiencies.
- The construction site must be restricted from all but authorized staff. Adequate signage shall be provided.
- Alternate access must be provided for public and emergency traffic whenever disruption occurs.
- Policy and procedures must ensure that roads and pathways are clear of mud, debris, materials, etc.
- Proper notification must be made to local authorities (fire, police, other) whenever life safety is diminished.
- Governing body shall be kept apprised of status of life safety during project.
- Construction workers must be made aware of egress routes.
- Construction workers' egress routes must be inspected daily to ensure no obstacles.
- Effective storage, housekeeping, and debris-removal policies and procedures must be in place to reduce collection of combustibles in construction areas.
- Whenever fire zones are altered, the owner's staff will be informed in regard to new or different life safety measures regarding their changed compartmentation and fire safety.

LINE BREAK

- Policy - Any entry into an operating Process System under installation, testing, or operating conditions is subject to the procedures for “line breaking”.
- All employees are to be informed of the inherent dangers of working on operating process systems.
- Entries can be made only with approval of the Owner and the Safety Coordinator.
- Added hazard potential exists when cooling occurs, vacuums, which may be holding liquids in pockets often break without warning and liquid is released to run to the lowest point. Plugs (particularly solidified process materials) can move and release materials after the first connection has been broken.
- The Owner and the Safety Coordinator must agree on the location of first breaks
- All systems must be considered as having the potential to discharge contained energy/material from open ends of lines or broken flanges at any time even after the line has been drained and vented.
- Cautions
- No Contractor may enter an operating piping system or equipment until the requirements of this procedure are met. Systems activated for testing purposes fall under this procedure.
- Under no circumstances will any line/system be violated other than via the lock and tag procedure.

LOCKOUT/TAGOUT PROCEDURES

- The contractor must adhere and strictly follow either the Project Lockout and Tagout requirements, the owner’s requirements or the contractors own requirements, whichever is the most stringent.
- Electrical work (e.g. tie-ins, panel maintenance) shall be conducted only on de-energized (locked out and tagged out) systems. All circuit disconnects must be locked in the open position or otherwise appropriately identified with affixed tags stating "DANGER - DO NOT ENERGIZE" or other equivalent wording prior to working on the system or equipment. Employees are not permitted to work on any energized circuits unless conditions mandate and written approval is obtained from the Project Safety Coordinator. The pre-task planning for all work on energized systems must be submitted for review. Additionally, work practices must conform to all applicable owner, state and federal requirements including the NEC and the most recent version of NFPA 70E.

Lockout Devices

- Only individually keyed padlocks shall be used. Padlocks are to be painted per the craft color code for easier detection and craft identification.
- A lockout device of the standard scissor type that will allow the placing of more than one padlock is required, when more than one individual is working on a circuit or mechanical process.
- A piece of chain or cable may be necessary to complete a lockout on some valves or controls and shall be used wherever needed.

Danger Tags

'Danger Tags' are not 'Danger Signs', and shall not be used where a sign is needed.

Two standardized Danger Tags shall be used on this project. They are described as follows:

"DANGER - DO NOT USE": This tag must be attached to each padlock on a lockout.

"UNSAFE - DO NOT USE": This tag does not require an attachment to a padlock, but may be used if needed. This tag shall be used to identify tools, equipment, vehicles, etc.

Procedure

If device, valve, switch, or piece of equipment is locked out, a "Danger Tag" shall be attached.

No device, valve, switch or piece of equipment shall be operated with a "Danger Tag" and/or lockout attached regardless of circumstances! ! !

- Systems consisting of electrical components will be checked, locked and tagged first by electrical craft employee working on the circuit. The electrical craft will be the first lock on, and the last lock off.
- Where placing of lock is not feasible, the circuit conductor will be disconnected from the breaker and tagged out.
- The panel cover must be of the type that will cover all breakers when closed and must be equipped with a hasp in order to secure a lock to prevent the panel door from being opened.
- If panel cover is of a type that cannot be locked closed, a cover must be secured over the panel cover and be locked closed and tagged while any work is being performed on any of those circuits.
- If the above cannot be accomplished, each circuit will be tagged out as prescribed and an electrician will stand by the panel board to prevent breakers from being tampered with. This physical presence will continue daily until the work is complete.
- All "Danger Tags" must be dated and signed. Also on tag, must be the intended work and equipment for which tag has been placed.
- If employees of more than one craft or crew are to work on a system, circuit, machinery, or component, the supervisor from that craft shall place his individual lock and tag; and verify that the system, circuit, machinery or component being tagged, is indeed the system that is to be worked on.
- Only the person that placed the lock and tag shall remove it without special authorization from the Safety Coordinator, General Trades Safety Coordinator or Craft Superintendent.
- Padlocks, Lockout Devices and "Danger Tags" shall be made available as specified above.
- Padlocks shall be color coded for craft identification and shall only be used by that craft for lockout purposes, i.e. valves, switches, electrical components, etc.
- Padlocks shall be issued from the contractor responsible where a sign in/out log will be maintained. Locks and tags shall be issued to the foremen or supervisor responsible for the craft performing the work. The contractor of each craft discipline will be responsible for assuring all padlocks are personally identified, that will be used for lock and tag purposes. The Contractor Superintendent(s) will be responsible for ordering their own craft's padlock. A master key will also be provided.
- Any employee(s) or person(s) found to have removed another's lock and/or tag will be subject to disciplinary action up to and including dismissal from the project.

Special Situations

- When due to the nature of work, a supervisor who has employees assigned to work on systems that are between construction and client turnover that is to be locked and

tagged out in order to perform work, the below shall be applied:

- Prior to the electrical foreman de-energizing the system, the foreman will ascertain whether system or device has been turned over and accepted by the client; If system is signed off, the client shall assume responsibility for de-energizing system and becoming the tagging authority.
- Contractor Electrical foreman/craft journeyman places lock and tag and tries to engage the equipment.
- The electrical journeyman or lead man will meter the tagged equipment to verify that it is de-energized.

Operating Facilities and Equipment

All systems covered under this section whether electrical, mechanical or others are considered those systems where no future construction activity is warranted.

Electrically Operated Systems

- Client representative or designee de-energizes system demonstrating accuracy to construction electrical supervisor, then locks and tags.
- Construction electrical foreman/journeyman ascertains that fuses, breakers or throws have been removed, when applicable; tags, locks and tries system.
- Electrical foreman/journeyman, meters the side of the system to be worked on to verify it is de-energized and safe.
- Upon completion of work, the journeyman removes their lock/tag and advises the construction electrical supervisor.
- Client representative or designee clears system, removes lock and tag and re-energizes if necessary.

Other Systems

- Plant engineer or designee de-energizes system and makes system safe.
- Client mechanics or designee(s) makes first break in flanges, places blanks, blinds or valves, and demonstrates that the system is empty and decontaminated.
- Construction (Client) Coordinator or designee verifies that the system is de-energized and tagged.
- Construction Craft supervisor locks, tags and tries system, surrenders the key to the journeyman who will then perform the assigned task.
- Upon completion of work, the journeyman will return the key to the assigned supervisor and tag and lock are removed.
- Construction (Client) Coordinator or designee assures that system is clear, and then removes lock and tag.
- Client mechanics or designee(s) re-energize system.
- **Construction**
- All systems under this section whether electrical, mechanical or others, are considered those systems that are still in the construction phase.
- Equipment or circuits that are de-energized shall be maintained inoperative at their main power source and shall have locks and tags attached to prevent accidental turn on.
- A staff member shall be designated from the electrical department (Superintendent or General Foreman), to assume the responsibility, for the removal of locks and tags, and activation of power from the main switchgear through end line component.

MEETING - PRE-CONSTRUCTION

- The Contractor, before starting work at the project site, shall attend a pre-construction “award” meeting to understand the project conditions and safety requirements.
- A project site tour shall be made to confirm the Contractor's awareness of potential safety hazards.
- The contractor to assure a safe work place shall provide appropriate methods, equipment, devices and material.
- The Contractor shall provide or develop his own project specific safety program and submit it to the Safety Coordinator for review prior to starting work at the project site.
- Such review shall not relieve the Contractor of responsibility for safety, nor shall such reviews be construed as limiting in any manner.
- It is the Contractor's obligation to undertake any action, which may be required to establish and maintain safe working conditions at the project site.

MEETINGS

- A project start safety conference will be held with the superintendent(s), safety coordinator and Foremen of each new Contractor prior to coming on the site.
- The Safety Coordinator will issue the project start package information and he will issue special instructions to the Contractors in support of the Project Safety Plan when needed.
- The Safety Coordinator will conduct regularly scheduled meetings with the Supervisors of new Contractors coming on the site and explain safety goals, contents of this manual and otherwise provide site orientation, safety activities and information. All Supervisors will be required to attend this orientation after coming on the site.
- Contractor meetings will be held as necessary and as directed by the Project Safety Coordinator. All Contractors actually working on the Project will have a representative at the safety meeting to maintain all safety requirements for their trade.
- The Safety Coordinator will conduct safety Meetings on a regularly scheduled basis. Minutes of the meeting will be a topic of all scheduling and progress meetings.
- All Contractors are required to hold weekly 10-15 minutes **"Tool Box" safety meetings** for all employees. Topics related to work assigned, and current safety problems will be discussed. Monthly meetings for supervisory and clerical employees will be held. The Safety Coordinator will monitor these "Tool Box" meetings through personal attendance or by reviewing a copy of the meeting report.
- Prior to starting any major operation, which would involve locking/tagging procedures, a meeting must be set up involving the Safety Coordinator, and every Contractor Superintendent and every Contractor Safety representative affected by the work.
- Specific procedures must be adopted and reviewed by all concerned with the operation prior to commencement of the work.

MASONRY

In addition to the requirements contained in OSHA 29 CFR 1926. 706, the following is required:

- A person, appointed by the Masonry Contractor, who meets the OSHA definition of Qualified Person, will prepare a Hazard Analysis. The Hazard analysis will be reviewed with the Safety Coordinator and the JJC Project Superintendent prior to start of work.

- The Mason's qualified person shall approve all changes in the Hazard Analysis.
- A copy of the Hazard Analysis shall be maintained at the project site showing all approved changes with a copy provided to the Safety Coordinator.
- The implementation of the Hazard Analysis shall be by a person appointed by the Masonry contractor who meets the OSHA definition of Competent.
- The Hazard Analysis shall be reviewed with each person working on the masonry wall each day prior to starting work.
- A safe means of access to the level being worked shall be maintained.
- There shall be protection provided to prevent tools and material from striking any person below the work/storage level.
- A tag line shall be used to control all loads.
- When loads are being hoisted, all personnel are to be prevented from walking under the load.
- No one shall be permitted to ride a load under any circumstances.
- A measuring device to accurately determine wind speed shall be provided by the masonry contractor with observations made available to the Safety Coordinator upon request.

Masonry Wall Bracing

- The masonry contractor shall provide to the Safety Coordinator a design, prepared by a Professional Engineer, meeting the requirements of OSHA 29 CFR 1926.706 (b) and the Standard Practice for Bracing Masonry Walls under Construction as developed by the Council for Masonry Wall Bracing.
- No one shall be permitted within the limited access zone of an unbraced or braced wall subjected to winds of more than 35 mph (20 mph if during the initial period of construction).
- A DANGER sign shall be placed on every unsupported masonry wall that is more than 6 feet in height, braced or unbraced, and 50 feet or less in length. The sign shall be placed at each end of the wall and at intervals of not more than 100 feet along each side of the wall. The sign shall contain the words *DANGER* and *THIS UNSUPPORTED WALL IS UNSTABLE IN WINDY CONDITIONS.*

Fall Protection (See Elevated Work - Fall Protection)

- All employees engaged in masonry work, including overhand laying or any other activity that exposes them to a fall of 6 feet or greater shall be provided with and use fall protection. This protection shall be either a personal fall arrest system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. "Controlled Access Zones" are not permitted.
- Fall protection requirements shall be rigorously enforced with any observed violation cause for removal from the project.
- Body belts are not permitted as part of a fall restraint system. Only full body harnesses will be used as part of a personal fall arrest system.

Perimeter Protection

A guardrail system will be constructed in accordance with OSHA 29 CFR 1926.500. Or alternative fall protection consisting of safety nets or personal fall arrest equipment provided.

MOTOR VEHICLES AND EQUIPMENT

- All equipment must be inspected daily before use by Contractor's operator. Contractor must also make documented and complete inspections at 30-day intervals with proper documentation maintained at the project site by Contractor and copies shall be made available to the Safety Coordinator upon request.
- Defective equipment shall be repaired or removed from service immediately.
- All Contractors' operators of construction equipment should be properly licensed and certified by a competent person. Copies of the certifications shall be maintained on project site by Contractor and made available to the Project Safety Coordinator upon request.
- Vehicles used to transport employees shall have seats firmly secured and adequate for the number of employees to be carried and all passengers shall be properly seated with seat belt used. Standing/kneeling on the back of moving vehicles is prohibited.
- Locations for storage of all fuels, lubricants, starting fluids, etc., shall be reviewed by the Safety Coordinator prior to use by Contractor for storage and shall conform to the requirements of the NFPA as well as the local Fire Marshal.
- Where required, contractors shall provide equipment diapers to protect from environmental spills.
- Drivers of motor vehicles shall have a valid state drivers license (CDL when applicable) and be instructed to exercise judgment as well as observe posted speed limits.
- All contractors' means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
- Pedestrians always have right-of-way over motorized traffic.
- Horns shall be sounded at blind corners, when passing, and/or for warning.
- Established hand signals or turn signals are to be used.
- Reckless driving or other non-observance of these instructions will be cause for withdrawal of driving privileges on the project.
- Any ATV's used on the project shall be "four"- wheeled, not three-wheeled.
- All vehicles permitted access to the site must display an appropriate vehicle identification badge from the rear view mirror or other conspicuous location at all times while on the project.
- Seat belts shall be worn by all employees operating motor vehicles and any equipment with rollover protection structures during performance of work.
- Properly trained and equipped flag persons shall be used whenever construction traffic accesses or exits from public highways as well as when construction traffic and deliveries interfere with the planned flow of traffic on public highways.

OSHA REQUIRED TRAINING

- Instruction and training of employees is a requirement of OSHA and will be enforced on this project.
- Training of contractor personnel is the responsibility of the contractor.
- All contractor personnel must attend the Safety Coordinator New Employee Orientation

prior to their starting work on their first day on the project.

OSHA - INSPECTION

- It is the Safety Coordinator's policy to allow OSHA to conduct an inspection of the project. If a contractor wishes to assert their rights under the U.S. Constitution regarding inspection by OSHA, then the contractor must so notify OSHA prior to the start of an inspection.
- The Safety Coordinator will accompany the OSHA inspection party at all times and will make arrangements for the necessary meetings between OSHA, contractors and organized labor representatives (if any). The Safety Coordinator x does not assume liability or responsibility for the presence of any alleged hazards or their correction.
- Contractors will inform the Safety Coordinator of the issuance of any OSHA citations and provide a copy when requested.

POWDER ACTIAUED TOOLS

Powder-actuated tools (also driving tools), when used by the Contractor, shall use *lead-free* Powder loads. Safety Data Sheets shall be submitted to Safety Coordinator for verification. Requests for variances to the *Lead-Free* requirement must be submitted in writing to Safety Coordinator and include a copy of all lead dust provisions and controls that will be implemented in accordance with 29 CFR 1926.62 including but not limited to negative exposure assessments, respiratory protection, dust controls, housekeeping and training. "

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PRECAST/PRESTRESSED CONCRETE

Fall Protection for all employees engaged in work with a fall exposure of 6 feet or greater above a lower level shall be either a guardrail system, a safety net system or personal fall arrest system. The use of "Safety Monitoring" and "Warning Line System" and "Controlled Access Zones" are not permitted. Refer to the Section "Elevated Work Fall Protection" for additional requirements.

A pre-construction meeting between the Safety Coordinator, The JJC Project Superintendent, the Fabricator and the Erector must be held to discuss the following topics:

- Sequence of erection;
- Schedule of delivery by load list;
- Crane capacities;
- Crane lift plan with calculations based on load and crane location;
- Anchor bolt certification;
- Review of the structural plans and details;
- Stabilization plans for the structure during all phases of erection;
- Temporary bracing and guying procedures and equipment for deck members, columns and wall panels.

The Erector is to provide the Safety Coordinator the following:

- Written erection plan prepared by a Company Officer or Professional Engineer indicating complete details of all phases of erection that shall include at least the

following:

- Crane lift plans with load calculation based on the cranes to be used and various setup locations,
- Written stabilization plans for all phases including the use of temporary guying and bracing for columns and wall panels,
- Written documentation of temporary connection details for use until permanent connections are completed including capabilities of workers doing the installation, types of welds or adequacy of bolted connections.
- Listing of competent persons for fall protection, crane operation and erection along with phone numbers for emergency contact.
- Fall protection plan in accordance with the Safety Plan including Leading Edge protection both during installation and after. Sequencing breaks and end of workday protective measures will also be detailed. Interior floor hole protection must be provided per OSHA Subpart M greater than 2 inches in the least dimension.
- Custody of Guardrail cables following completion of precast erection. Erector to present a plan detailing how the cables will be safely removed utilizing Personal Fall Arrest Systems; or safety nets.
- Silica protection of workers during cutting of concrete.
- Hazard Analysis of all operations, presented to all workers prior to each shift on hazards specific to the day's operation.
- Proof of training for all erection crewmembers.
- Delivery locations for trailers including adequate ground preparation and plan for unloading.
- Wind loading considerations including when operations will be suspended due to high winds.
- Any proposed field modifications to the approved Erection Plan shall be approved by a Company Officer or the Professional Engineer of Record, added to the plan, which shall be available at the jobsite. A copy must be submitted to the Safety Coordinator prior to any change.
- Lifting inserts, which are embedded or otherwise attached to precast concrete members, shall be capable of supporting at least four times the maximum intended load applied or transmitted to them, and shall be used in accordance with the manufacturer's recommendations.
- Lifting hardware shall be capable of supporting at least five times the maximum intended load applied or transmitted to the lifting hardware.
- Adjustment of precast members, after initial placement, which requires the lifting of the members in any manner, shall not be made unless wire rope safety tiebacks are used or the members are attached to the crane load line.
- Chains are not permitted to be used as slings. Chain "come-along" are permitted with proof of required inspections and certification.

PROJECT - CODE OF SAFE PRACTICES

Each individual working on this project will be required to attend a safety orientation meeting at the start of their assignment. At the conclusion of the meeting, each will be required to sign a Code of Safe Practices as follows, indicating their agreement to follow that Code while on the Project. This does not relieve the trade contractor of any responsibility to properly orient and train their employees for the specifics of their work.

Project Name:

Employee Name: _____

Company: _____

I agree to abide by the following Code of Safe Practices while on this project:

1. To assist the project in being incident and injury free, I have granted permission to the General Trades Safety Coordinator to discuss all aspects of working safely with me. Likewise, I have the right to discuss safety issues with the General Trades Safety Coordinator, other trades (regardless of trade jurisdiction or craft) and to stop work at any time I feel there is an unsafe condition to myself or to others.
2. I understand there are Above OSHA Requirements in the Project Safety Plan, and I will abide by those requirements.
3. I will work in a safe manner, protecting others, and myself and will report observed hazards to my supervisor. If not addressed, I will further report these hazards to the General Trades Safety Coordinator Superintendent.
4. I will dress appropriately for the project, wearing a long or short-sleeved shirt, long pants, and work boots with ankle protection, and substantial soles.
5. I will use personal protective equipment as required by my trade, and will wear my hard hat and safety glasses at all times.
6. I will abide by the six-foot fall protection rules, including the use of a harness where required.
7. I will park only in designated areas & observe a ten mile per hour speed limit on site.
8. I will only smoke or use tobacco products in designated areas.
9. I will eat only in designated areas and dispose of trash in proper containers.
10. I will not use any intoxicants or other controlled substances on the project.
11. I will report all injuries and accidents involving persons or property.
12. I will not bring any weapons, including knives with blades over 4 inches, onto the site.
13. I will conduct myself in a professional manner and not engage in any violence, horseplay, practical jokes, or other behavior obnoxious to the general public. I will not harass anyone else on site or any member of the public, sexually or otherwise. I will not bring, write or draw any sexually explicit materials on site.
14. I will not use headset-type radios, music players, personal televisions, or other personal entertainment devices on site.
15. I will not use my cell phone in work areas, around heavy equipment, or while engaged in work activities. If I must use a cell phone, I will do so in safe areas, and only to conduct jobsite business, or for a personal emergency.
16. I will comply with the security procedures established throughout the project, for entrance to the site.

Signed _____

PROJECT - SAFETY RULES

- All personnel on this project, including the employees of Contractor, will be required to comply with these rules. Contractor shall ensure and indicate that all its employees have read these rules and understood its contents. The employee must sign a declaration, which shall then be retained by Contractor with the employee's personnel file. In addition, Contractor shall comply with the following:
- Long or short sleeve shirts shall be worn at all times. All shirts shall be tucked in trousers at all times. All shirts shall be hemmed at neck, sleeve and tail. “Muscle Shirts” are prohibited.
- Long pants are required. “Shorts” are prohibited.
- A well-constructed boot/shoe that provides ankle protection with a substantial, flexible sole shall be worn. Exposure to hazard dictates whether or not a protective toe guard will be required. Sandals, tennis shoes, or any other street type shoes (even if equipped with ANSI toe protection), will not be permitted.
- Loose fitting clothes or dangling jewelry shall not be worn around moving machinery, grinding operations, welding, or other hazardous operations.
- Hair, which could come in contact with, or be caught in machinery, shall be protected by a hardhat or hair net, as appropriate.
- Approved hard hats meeting specifications contained in the most current addition of the American National Standards Institute (ANSI), Z89.1 and/or Z89.2 are required. “Cowboy-type” hard hats are not allowed. Baseball caps and other soft headwear is not allowed under the Hard Hat suspension.
- All contractors’ means of ingress and egress shall be adequately marked and kept clear of stored material, debris and equipment.
- No firearms are allowed on the project site.
- Practical jokes, horseplay, scuffling, wrestling and/or fighting are prohibited and may be grounds for immediate dismissal.
- Reflective vests or clothing shall be worn by all personnel exposed to equipment during the site work and excavation phases of the project or when deemed necessary by Safety Coordinator.
- Stilts may only be used where allowed by local regulation and then only where the floor is clean and free of debris and obstructions, there are no uncovered floor holes, where there are no pipe- stub-ups and all guardrails are raised to provide adequate fall protection.
- Drinking and/or possession of intoxicants on The Owner's property are forbidden. The use of narcotics, unless authorized by a physician, and the Safety Coordinator/Superintendent notified, is forbidden. Violation(s) of the above will result in immediate dismissal.

PROTECTION OF THE PUBLIC

Access to the Site

- No work shall be performed in any area occupied by the public unless specifically reviewed and permitted by the Safety Coordinator. In that the project interfaces with the public, precautions to be taken include, but are not limited to:
- Each Contractor shall take such necessary action as is needed to protect and maintain public use of sidewalks, entrances to buildings, lobbies, corridors, aisles, doors, exits and vehicular roadways. The Contractor shall protect the public with appropriate sidewalk sheds, canopies, catch platforms, fences, guardrails, barricades, shields, and adequate visibility as required by laws and regulations of governing authorities. Such protection shall guard against flying materials, falling or moving materials and equipment, hot or poisonous materials, flammable or toxic liquids and gases, open flames, energized electric circuits or other harmful exposures. Guardrails shall be made of rigid materials complying with the requirements for standard guardrails as defined by OSHA and the Project Safety Plan. Temporary sidewalks, ramps or stairs shall be provided with guardrails on both sides whenever permanent sidewalks, ramps or stairs are obstructed by the work. The Safety Coordinator may authorize barricades, secured against accidental displacement, meeting the requirements of local authorities, where fences, sheds, walkways and/or guardrails are impractical. During the period when any barricade, fence, shed, walkway, or guardrail is removed for the purpose of work, a watchman shall be placed at all openings.
- Appropriate warnings, signs and instructional safety signs shall be conspicuously posted where necessary. In addition, a signalman shall control the moving of motorized equipment in areas where the public might be endangered. Warning lights, including lantern, torches, flares and electric lights, meeting the requirements of governing authorities shall be provided and maintained from dusk to sunrise along guardrails, barricades, temporary sidewalks and at every obstruction to the public. These warning signs and lights shall be placed at both ends of such protection or obstruction and not over 20 feet apart alongside of such protection or obstructions.
- With respect to operations being performed on public roadways, all DOT and/or municipality requirements towards public safety will be strictly observed.
- Access to the site is limited to the entrance designated for construction traffic as indicated on the site plans issued with the construction documents. At no time is Contractor personnel or vehicles to obstruct traffic on public streets or Owner entry driveways. All material deliveries shall be scheduled in advance with the Project Superintendent and shall be completed within the time segment allocated for the specific delivery.
- A temporary six-foot high fence, in compliance with laws and regulations of governing authorities, shall be provided and maintained around the perimeter of operations on the project site to control access to the work by employees, to protect the public, and to restrict access by unauthorized individuals.
- The above shall be implemented only where allowed by the governing authority. Where the owner of the property specifically prohibits such protective devices, rules and regulations of the governing authority shall apply.

Authorized Visitors

All visitors to the site are required to register with the Safety Coordinator upon arrival. Each Contractor will be expected to regulate their visitors accordingly. All visitor passes expire upon departure from the site and are to be surrendered to the gate security guard.

Fire hydrants and all designated fire lanes shall remain clear at all times for the use of emergency vehicles.

Employee Identification

Where required, all project site employees will be issued an identification badge and hardhat sticker upon completion of their initial safety orientation and after having passed their alcohol and drug test. All persons without a hardhat identification sticker shall report to the Safety Coordinator's office for verification of employment status, attendance at an orientation session, or issuance of a single day visitor pass. This identification badge will remain the property of the Owner. The identification badge shall be maintained in good condition and on the person to whom it is issued. The identification badge shall be returned to the Safety Coordinator or the Owner when employment on the Project is terminated or when requested by the Safety Coordinator, or other authorized and designated person. All lost or stolen identification cards shall be immediately reported to the Safety Coordinator or the Owner.

Tours

It is of the utmost importance that a high degree of protection be afforded all persons touring the project site.

The following guidelines shall be complied with by personnel who are responsible for the organization, direction and safe conduct of the tours:

All group tours will be cleared through the Owner's representative and the Safety Coordinator, allowing for maximum notice.

All tours will be coordinated by the Safety Coordinator to accommodate the Project schedule, to make necessary preparations, and to assure safety precautions are observed.

The Safety Coordinator will review the following items with the person requesting the tour:

Number of visitors.

Individual tour groups in non-hazardous areas should be limited to no more than 10 persons per tour guide (i.e. a tour group of 20 will require at least two tour guides).

Clothing

Tour groups will be required to wear appropriate clothing (i.e. slack and low-heeled shoes).

Children

Children under the age of 12 will not be permitted to accompany tours. An adult must accompany each child age 12 to 15. Only those 18 years of age and older are permitted to work on the project.

Protective equipment

Hard hats, boots, raincoats, eye protection, etc., will be supplied as required.

Release and Hold Harmless Agreement

Each visitor will be required to sign this form prior to the start of the tour. In the case of children, an adult must sign for them, preferably a parent.

Immediately prior to entering the project site, all visitors shall be briefed about the need for careful and orderly conduct, including mention of any special hazards, which may be encountered.

Technical and official visitor tours will be conducted in accordance with the above safety precautions. Since technical tours are often conducted through areas of more hazardous work, it is recommended that the number of people on such tours be proportionate to the degree of hazard involved.

Pressure Testing Safety Requirements

Pressure testing involves hazards, such as the release of hazardous energy, being struck by loose fittings or burst pipe. In addition, if an inert gas, such as nitrogen is used, it can displace oxygen and can create an oxygen-deficient atmosphere, which can be harmful or fatal. If flammable gas is used, it can cause an explosion if there is an ignition source.

The following procedure shall set forth the minimum requirements to ensure that pressure testing is performed safely. Contractors shall also develop a site/task specific Job hazard Analysis (JHA), as well as their own procedures for safely pressure testing pipe, and review with the Safety Coordinator prior to starting this activity.

- Contractor performing pressure testing shall barricade area off and place signage restricting access to only authorized personnel.
- Authorized personnel shall wear appropriate PPE consistent with the contractors JHA. (Examples should include: hard hat, safety glasses, face shield, gloves, etc. in accordance with the SDS for testing medium).
- All mechanical devices, such as valves and blinds used to isolate the system shall have a lock and tag affixed by the contractor to prevent accident pressure release.
- Contractor and authorized personnel shall walk down the system and check the integrity of all connections, caps, seals and fittings within the system to be tested to ensure they are secure.
- Contractor shall install additional supports on piping necessary for increased pressure or weight of testing medium.
- Test equipment and gauges shall be inspected by the contractor and confirmed to be in proper working order before testing is begun.
- Maximum test pressure and duration of the test shall be communicated to the contractor's authorized testing personnel and Safety Coordinator.
- Contractor to develop a Venting procedure for dissipating inert gas safely.
- Contractor shall develop a Drain procedure to drain water or other fluids safely, without polluting drains or creating slippery conditions.
- Contractor shall review the JHA with all authorized personnel prior to the test.
- Testing shall be performed under the supervision of the contractor supervisor.
- Testing shall be conducted in accordance with pipe and testing equipment manufacturer's precautions and specifications.
- Test pressure shall not exceed the maximum allowable test pressure for any vessel, pumps, valves, or other components in the system.
- All repairs or adjustments to the system being tested shall be done only after the system pressure is safely and completely relieved and the test gauges indicate 0 psig pressure.
- Only mechanical devices, such as gate or ball valves shall be used for incremental release of flow in depressurizing systems. The opening or 'breaking' of flanges shall never be used as a means of depressurizing a tested system.
- Upon acceptance of the pressure test, pressure in the system shall be completely relieved so that the test gauges indicate 0 psig, and verified by contractor's supervisor.
- Contractor shall conduct all testing in accordance with applicable laws, codes, and ASME B31, B16 and related standards.

SANITATION

Housekeeping

- The site, work areas, and all premises occupied by contractor's personnel will be maintained in a clean, healthy and sanitary condition.
- Work areas, passageways and stairs, in and around buildings and structures, shall be kept clear of debris. Construction materials shall be stored in an orderly manner. Storage areas and walkways on the site shall be maintained free of dangerous depressions, obstructions, and debris. Construction equipment shall be stored or placed in an orderly manner.
- Good housekeeping on the project is mandatory and every employee must do his part daily to minimize dust and to clean up his work area to keep the project clean for safety and efficiency. Controls shall be observed which keep dirt from being tracked into areas outside the workspace. Immediate cleanup is required when dust, dirt or debris may affect the owner's operations.
- Eating within the construction project shall be confined to areas designated by the Safety Coordinator for such purposes. Employees shall properly dispose of all lunch refuse and drink containers in trash receptacles
- Failure to maintain adequate housekeeping and to perform daily clean-up will result in the following actions:
- Written Notice: Upon receipt, the contractor shall take immediate action to perform housekeeping and clean up.
- If having been given sufficient notice, the contractor fails to clean up; the work will be performed by others, and the errant contractor backcharged for all related costs.
- Daily and final clean up must be performed in accordance with contract documents.

Facilities

The locations of lunch areas and employee toilet facilities will be designated by Safety Coordinator and approved by the Owner.

Refuse and Garbage

Each contractor will provide an adequate number of covered garbage containers. The site will be cleaned and garbage and refuse will be collected at least daily and removed from the building.

Potable Water

Each contractor shall provide potable water at the work site and test it at least weekly if delivery is from other than municipal supplies.

Sanitary facilities shall be provided for personal hygiene.

SIGNS, SIGNALS, BARRICADES AND LIGHTS (MOTOR VEHICLE EXPOSURE)

Signs, signals and barricades shall be visible at all times where a hazard exists and will be in compliance with ANSI D6.1 (most recent version), Uniform Manual of Traffic Control or regulations promulgated by the local authority.

SCAFFOLD

- The Contractor's designated Competent Person shall inspect all scaffolds prior to each work shift with written documentation provided to Safety Coordinator on a daily basis. All scaffolds shall bear a tag, signed and dated by the contractor's competent person, denoting that the scaffold has been inspected and is safe to use prior to any employee utilizing that scaffold that day.
- Any contractor using scaffolding shall provide to Safety Coordinator the name of their

Competent Person along with the content of the Competent Person's training program and proof of Scaffold User Training for all employees who may work on scaffolding.

- Ladder Jack scaffold are not permitted.
- Scaffolds with a width less than 60 inches must have guardrails (top, mid and toe) installed when the work platform is in excess of 48 inches above the floor or lower work area.
- Scaffold cross bracing is not permitted to be used as a substitute for guardrails. Swing gates will be provided at all ladder or stair access points. Where material is being landed on a scaffold, the outrigger extension will not be used to support the material unless it is deemed adequate by the manufacturer and a factor of safety of 4 is provided.
- All non-mobile scaffold frames shall have base plates installed.
- All mobile scaffolds will have wheels locked when in use and stationary.
- Nominal grade lumber is not allowed as scaffold planking.
- All individuals who are in scissor lifts shall wear a full body harness and be tied off by a lanyard to a manufacturer's approved anchorage point within the scissor lift. Standing on guardrails is not allowed. Only approved anchorages shall be used for fall arrest anchorage points.
- A mast climbing elevating work platform that may be adjustable by manual or powered means must meet the requirements of ANSI Standard ANSI/SIA A92.9-1993, American National Standard for Mast- Climbing Work Platforms.

STAIR SCAFFOLDS

- 'System' scaffold stairs shall be erected as early as possible during the building construction to facilitate safe access to all working levels, once the steel erector has released the floor/level to other contractors use. Scaffold stairs shall remain in place until the permanent stairs are constructed and made available for use.
- Stair scaffolds shall be constructed in accordance with manufacturer's instructions by trained and qualified workers under the direction of a competent person.
- Stair scaffolds shall be inspected daily by a competent person, authorized by the Safety Coordinator, at the beginning of each shift. The competent person shall date and initial a Scaffold tag, and place the tag at the entrance to the stair scaffold.
- Stairs used during winter months shall be enclosed to prevent ice and snow from creating slippery conditions. Temporary lighting in accordance with OSHA requirements shall be installed on all enclosed stair scaffolds.

STEEL ERECTION

Erection Plan

- An erection plan will be prepared by the Steel Erector's Qualified Person and reviewed with the Project Safety Coordinator and/or JJC Project Superintendent prior to start of work. Refer to OSHA 1926, Subpart R, Appendix A.
- The erection contractor's qualified person shall approve all changes in the safety erection plan.
- A copy of the erection plan shall be maintained at the project site showing all approved changes with a copy provided to the Project Safety Coordinator.
- The implementation of the erection plan shall be under the supervision of a competent

person.

- A safe means of access to the level being worked shall be maintained. Climbing and sliding on columns or diagonals, is not allowed.
- Containers, such as buckets or bags, shall be provided for storing or carrying bolts or rivets. When bolts, driftpins, or rivet heads are being removed, a means shall be provided to prevent accidental displacement. Tools shall be secured in such a manner to prevent their falling.
- Fall protection provisions, such as lifeline attachments, dynamic fall restraints and other such devices shall be considered during shop drawing preparation, shall be incorporated in fabricated pieces, and shall have safety lines or devices attached prior to erection wherever possible.
- A tag line shall be used to control all loads.
- For the protection of other crafts on the project, signs shall be posted in the erection area by the erection contractor reading, "*Danger Men Working Overhead*" and only ironworkers allowed in this area. This will include shakeout areas, erection areas and the load travel path from the storage area to the erection area.
- When loads are being hoisted, all personnel are to be prevented from walking under the load.
- No one shall be permitted to ride a load under any circumstances.
- Crane personnel platforms will not be used for any purpose without the written approval of Safety Coordinator.
- Material shall not be hoisted to a structure unless it is ready to be put into place and secured.
- Bundles of metal decking or small material shall be so secured as to prevent their falling out from the rigging.

Fall Protection (See Elevated Work - Fall Protection)

- All workers engaged in steel erection activities including connecting, bolting-up, decking, welding or any other activity that exposes them to a fall of 6 feet or greater shall be provided with and use fall protection. This fall protection shall be either a personal fall arrest system consisting of a full-body harness, double, shock-absorbing lanyard, and anchorage or a safety net or a guardrail. Nether “Controlled Decking Zones” nor “Safety-monitor systems” are permitted. Metal deck is not considered a form of fall protection.
- Fall protection requirements shall be rigorously enforced during steel erection with any observed violation cause for removal from the project.
- Body belts are not permitted as part of a fall restraint system. Only full body harnesses will be used as part of a personal fall protection system.

Perimeter Protection

- A guardrail system of a minimum of two (2) 3/8-inch diameter 7 x 19 galvanized new aircraft cable. Top rail of the wire rope cables shall be erected at 43 ½ inches from the finished floor and the midrail of the wire rope cable shall be installed approximately halfway between the finished floor and the top guardrail- approx. 22 inches.
- Wire rope guardrails shall be tensioned to 2,400 pounds of force, initially, and maintained to comply with OSHA fall protection requirements. Wire rope guardrails shall

be installed immediately following the erection of beams and columns. The length of cable shall not exceed 120 feet without being terminated. Cables shall be terminated at all 90 degree turns and shall be 'looped' connections with 3 wire rope clips used at all connections (line splicing is not permitted). All sequence breaks will require a two (2)-cable assembly.

- Steel angle stanchions shall be installed and spacing on perimeter bays shall be as follows:
- In bays with column spacing greater than 30 feet, at least two intermediate stanchions
- In bays with column spacing less than 30 feet, at least one intermediate stanchion.
- Steel stanchions used at corners shall have diagonal supports installed to at least 80% of the height of the stanchion.
- Turnbuckles shall be installed on top and midrail wire rope cables at each perimeter side, and at intervals not to exceed 120 feet, or as directed by Safety Coordinator. Loading bays shall have separate guardrail and turnbuckle assemblies installed.

Interior Protection

- Installation of guardrails at interior floor openings, i.e. stair or mechanical shafts, shall conform to one, or a combination of the following:

  Option 1

  - Install 3/8" galvanized air craft cable through stanchions at 43 ½ inches above finished floor. Terminate cables at 90 degree turns.

  Option 2

  - Bolt 2 ½" x 2 ½"x ¼"steel angles onto stanchions. A mid-stanchion / post is required for spans greater than 8 feet.

  Option 3

  - Secure 2"x 4" construction grade lumber to steel stanchions. A mid-stanchion / post is required every 8'

    - Guardrails shall not be used as a horizontal lifeline as part of a personal fall arrest system unless designed by a Registered Professional Engineer and installed under the supervision of the steel erector's competent person.
    - Top and Midrail cables, as outlined above, shall also be used at all sequence breaks.

Stretch and Flex Program

Purpose

Soft tissue injuries are a major source of disabling injuries to our workforce, and result in significant costs and lost productivity to our industry. Warm up stretches before work begins can reduce the incidence and severity of soft tissue injuries. Therefore, all contractors of every tier shall ensure that all employees participate in stretching exercises at the beginning of each workday.

Program Requirements

All contractors and tradesmen are required to design and implement a Stretch and Flex Program for their employees. The purpose of the program is to gently condition the muscles

and tendons of the workers before they engage in their duties in order to avoid injury.

A Stretch and Flex Program shall be developed by each Contractor and submitted to the Project Safety Coordinator prior to commencing activities on site.

Stretch and Flex activities shall be performed every day work activities are scheduled and they shall be performed before the work activities begin. Everyone is required to participate.

Recommendations

Consult with a licensed Physician/Physical Trainer/Stretching Instructor/Yoga Instructor for the most suitable stretches for your work crew.

Incorporate incentives for active participants.

See Appendix E for an example of a Stretch and Flex Program.

Check with your Company's insurance carrier. They may provide services, suggestions and guidance for your company's program.

THIRD PARTY INSPECTIONS

In addition to visits and safety inspections by its own corporate or insurance representatives, Contractor is advised that authorized third parties may inspect the Project from time to time. Among others so authorized are representatives of the Owner and/or its agent, insurance companies and OSHA. Upon their proper identification and clearance through security, they are entitled to access and courteous consideration. Safety Coordinator must be made aware of their presence upon arrival, and in any case as soon as possible, of the purpose and results of such visits which relate to safety.

TEMPORARY HEAT

- No Kerosene, oil fueled, solid fuel burning, or convection heaters (a.k.a. 'Pot' heaters) are permitted.
- Only gas fired (propane vapor or natural gas), hydronic, steam, electric or infrared heaters are permitted, based on the application and use.
- Gas heaters must conform to the specifications
  a. Direct Fired heaters shall conform to ANSI Z 83.7 or Z 83.4
  b. Indirect Fired heaters shall conform to ANSI Z 83.8
  c. Infrared heaters shall conform to ANSI Z 83.6
  d. All flexible connectors must be UL approved and conform to specifications L -83.
- All heaters shall conform to applicable OSHA, ANSI, UL, NFPA, NEC, and related standards for design, construction, installation, clearance and use, as well as to all local codes. All heaters shall be AGA certified
- Temporary construction heaters proposed shall be approved for use by the AHJ, the Project Safety Coordinator, and shall conform to the approved Heating plan, and shall also conform to manufacturer installation requirements, applicable Codes and Standards, and local fire official's requirements.
- Heater supplier and Contractor shall provide their construction heating plan to the x Safety Coordinator for review and approval. This Plan must include specifications for the heaters, and heater and fuel placement and storage, as well as heater maintenance, service and inspection schedule and competent persons to implement the Plan.
- Whenever heaters are operating during non-working hours, the Contractor may be required by the client, local fire officials, or the Project Safety Coordinator to provide a qualified person to monitor and maintain the heaters. In such cases, the qualified

person shall be trained by qualified person in the safe operation of the heaters.

- All heaters specified shall be an approved appliance meeting or exceeding safety features outlined in appropriate specifications (see above)
- Installation of an appliance meeting the following specifications shall be made by a qualified technician according to safety measures as outlined in ANSI 10.10, NFPA – 58, NFPA – 54, U.L., the operators/manufacturers manual, and local codes
- Installation must be a coordinated effort between the Project Safety Coordinator, the JJC Superintendent, the heating appliance supplier, the fuel supplier and local trades, referring to the heating plan, with instruction.
- Flammable and combustible material shall be kept away from the heater a minimum of 10 feet or more, as indicated by heating unit manufacturer, local fire authority, owner, or unique conditions of the site.
- Each heating appliance is to be inspected by a qualified person, at least at the beginning and end of each working day.
- Contractor shall monitor Carbon monoxide levels when operating heaters indoors and shall ensure levels are below the ACGIH TLV(The American Conference of Governmental Industrial Hygienists Threshold Limit Value of 25 ppm (parts per million or 29 mg/m(3)) as a Time Weighted Average for a normal 8-hour workday and a 40-hour workweek

TOOL BOX TRAINING

- Instruction and training of employees is an OSHA requirement and, as such, will be required on this project. Examples of such required training to be provided by Contractor are:
- Newly employed, promoted and/or transferred personnel shall be verbally instructed in the safety practices required by their work assignments.
- All work assignments must include specific attention to safety. "Follow-up" monitoring is required in order to prevent accidents.
- OSHA requires that employees performing specific non-routine tasks or operating specific equipment be trained in its usage.
- Training of contractor personnel is the responsibility of the contractor.
- Conduct Tool Box safety meetings for all employees at least once a week.
- Maintain an attendance record by having employees sign the reverse side of the Toolbox Safety Meeting Report, or equivalent form.
- Complete the Report and submit it to the Project Safety Coordinator’s Office within 24 hours after each meeting.
- File all toolbox meeting reports and summaries so that they are available for review at any time during project operations or for a period of five years following termination of the project.
- It is the responsibility of Trade Contractor supervision to explain the hazards involved in an assignment to all employees, either individually or in a group before they actually begin an assigned task.
- This task may only require a few words, but in many cases it will require the actual demonstration of how the project can be done safely and the pointing out of the hazards that may be or will be encountered in any task.

WELDING, CUTTING AND BURNING – HOT-WORK

Electric Arc Welding

- A suitable, approved fire extinguisher shall be ready for instant use in any location where welding is done. Screens, shields, or other safeguards should be provided for the protection of men or materials, below or otherwise exposed to sparks, slab, falling objects, or the direct rays of the arc.
- A dedicated fire watch shall be present at all welding operations and remain for at least 1 hour after the hot work has halted.
- The welder shall wear approved eye and head protection. Men assisting the welder shall also wear protective glasses, head protection and protective clothing. Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
- Electric welding equipment, including cables, shall meet the requirements of the National Electric Code.
- All arc welding and cutting cables shall be of the completely insulated flexible type capable of handling the maximum current requirements of the work.
- Cables in need of repair shall not be used.
- The frames of all arc welding and cutting machines shall be grounded either through a third wire in the cable connecting the circuit connector or through a separate wire which is grounded at the source of the current.
- All ground connections shall be inspected to insure that they are mechanically strong and electrically adequate for the required current.
- Welding practices shall comply with all applicable regulations.

Gas Welding or Cutting

- When gas cylinders are stored, moved, or transported, the valve protection cap shall be in place.
- When cylinders are hoisted, they shall be secured in an approved cage or basket. The valve cap shall never be used for hoisting.
- All cylinders shall be stored, transported, and used in an upright position. If the cylinder is not equipped with a valve wheel, a key shall be kept on the valve stem while in use.
- At the end of each work day or if work is suspended for a substantial period of time, compressed gas cylinder valves must be closed, regulators removed and properly stored.
- Cylinders containing oxygen or acetylene or other fuel gas shall not be taken into confined spaces.
- Cylinders containing oxygen or acetylene or other fuel gas shall be stored in designated areas outside the structure as approved by Safety Coordinator.
- No one shall use a cylinder's contents for purposes other than those intended by the supplier.
- All hose used for carrying acetylene, oxygen or other fuel gas shall be inspected at the beginning of each working shift. Defective hose shall be removed from service.
- Oxygen cylinders and fittings shall be kept away from oil and grease. Oxygen shall not be directed at oily surfaces, greasy clothes or hands.
- Regulators, gauges, backflow check valves, and torches shall be kept in proper working order.

- An approved fire extinguisher shall be readily available.
- Flash arrestors are required on the oxygen and acetylene hoses, at the regulators.
- Appropriate personal protective equipment, such as burning glasses, shields, and/or gloves shall be used. Adequate exhaust ventilation shall be maintained at all welding and cutting work areas.
- Work permits shall be obtained daily, prior to any burning or cutting operations on the site.

WORK PERMIT PROCEDURES

General Procedures

- A copy of this section of the Project Safety Plan will be issued to all Contractors, and will serve as notice by the Project Safety Coordinator that a work permit as specified by the Project Safety Coordinator is necessary before starting any hazardous work activity.
- The work permit shall be obtained from the Project Safety Coordinator before starting each day's work. The procedures for initiating a hazardous work permit are listed on the permit application appropriate to the type of work.
- Hazardous work Permits include, but are not limited to the following activities: Hot Work, Confined space entry, Guardrail removal, Line Breaks, after Hours work, Trenching and excavation, Crane use and Barricade installation.
- Additional job-specific hazardous work permits may be required, due to special project conditions, to be incorporated into the project safety plan. These will also be considered as a contract commitment.

Hot Work

- Hot work is defined as a process or procedure, which could result in a fire if not properly controlled. Common types of hot work are welding, burning, cutting, brazing, soldering.
- Hot work will usually be permitted only during normal working hours. Permits will be issued the day before work is to be accomplished, and the work area will be inspected to verify that adequate control has been established.
- A copy of the permit will be available at the point of work. An adequate number of fire extinguishers will be available within 50-feet of the point of work for which a permit is issued.
- The Contractor will take the necessary precautions when welding or burning above walls to assure that protection is maintained on both sides of the wall and that areas below are protected on multilevel buildings.

Confined Space

- When work in confined spaces is scheduled, such as a caisson, boiler, deep excavations, etc., consideration must be given to two major known and recognized hazards:
- The possibility of fire or explosion, flammable gases, fumes, vehicle fumes, vapors, or dusts.
- The possibility of injury to the worker (or loss of consciousness) as a result of inhalation or absorption through the skin of toxic materials or from oxygen deficiency.
- For work in a confined space, the responsibility for recognition and advance notification is the Contractor's. The Project Superintendent and the Project Safety Coordinator will be notified and will evaluate the situation, issuing a work permit in those cases for which

he considers it necessary. The Contractor will be responsible for providing equipment and special instructions for the worker, such as ventilating units, respirators, safety belts and life lines, etc., and for conformance to all applicable OSHA standards.

- It is required that the "buddy system be used and that an observer will tend all workers in a confined space. Rescue procedures should be agreed upon beforehand.

Guard Rail Opening

The Project Superintendent and the Project Safety Coordinator may approve work, which requires the opening of guardrails or the removal of holes covers to be performed, in advance. Particular attention shall be given to the alternate means of fall protection, which will be required to safely perform the work and protect other workers in the vicinity of the fall exposure. Specific plans for providing alternate fall protection shall be described in the request for the work permit.

Off-Hours Work

The Project Superintendent and the Project Safety Coordinator shall approve work, which is required to be performed outside normal working hours established at the site, in advance. Any work occurring within the existing Owner facility shall be at the convenience of the Owner, and shall comply with all conditions imposed by the contract specifications and the work permit issued by the Project Safety Coordinator or other persons identified by the Owner.

OWNER REQUIREMENTS

Refer to the attached Owner Requirements for additional provisions, which must be followed.

APPENDIX A TABLE OF FINES

Violation	First Offense	Second Offense
Assured Grounding Program violation	$200	$400
Clothing not adequate	$50	$100
Confined Space violation	$1000/ Removal	N/A
Electrical Cord defective	$250	$500
Electrical cords not protected on floor or not raised	$250	$500
Equipment violation	$250	$500
Eye Protection Missing	$250	$500
Failure to protect public	$1000	$2000
Fall Protection not present	$1000/ Removal	N/A
Fire Extinguisher missing	$500	$1000
Fire Watch missing	$500	$1000
Footwear not adequate	$100	$200
Gas Cylinders stored incorrectly/not identified	$200	$400
General Duty Violation	$500	$1000
Guard Rail removal	$1000/ Removal	N/A
Hard Hat Missing	$250	$500
Hearing Protection missing	$250	$500
Hot Work Permit missing	$500	$1000
Housekeeping poor	$500	$1000
Ladder defective	$250	$500
Ladder not secured	$500	$1000
Lockout violation	$1000	$2000
Material storage improper	$500	$1000
SDS missing	$100	$200

Open Hole	$1000/ Removal	N/A
Orientation not attended	$200	$400
Power Tool defective	$500	$1000
Scaffold Violation	$500	$1000
Smoking in non-designated area	$500	$1000
Standing on top of Ladder	$500	$1000
Tool Box Meeting not held	$100	$200
Traffic citation	$50	$100
Trench/Excavation Permit missing	$200	$400
Trenching violations	$2000/ Removal	N/A
Uncertified Lifting Device	$500	$1000
Urinating/Defecating in building	$1000/ Removal	N/A
Written Haz Com Program missing	$100	$200
Hand protection violation	$250	$500
Radio and headsets	$250	$500
Infection Control violation	$1000	$2000

APPENDIX B
HAND PROTECTION REFERENCE

PURPOSE

To aid in the prevention of hand and finger injuries when performing construction operations.

OBJECTIVE

- To ensure hand protection is used in situations where there are known hazards present.
- Identify specific areas which historically have caused injuries.
- Establish mandatory guidelines for the use of hand protection.

SCOPE

This procedure identifies specific situations which require the use of hand protection, but is not meant to be all inclusive. Other situations not identified in this document should be identified/reviewed during pre-task planning. Gloves should be worn for hand protection in any situation where exposure to hazards exist.

Procedure

- **Mandatory Hand Protection While Working**

  - **When metal materials with sharp edges are being handled such as:**

- Handling or working around sheet metal siding, roofing, etc.
- Metal unistrut materials and all thread rods
- Handling or working around tie-wire
- Handling metal floor grating
- Handling wire rope during rigging operations
- Handling or working around metal studs
- Handling of metal duct work

  - **Cutting operations involving hand-held, non power-operated cutters:**

- Using hand-held tubing cutters for cutting metal and hard plastic-type piping
- Using hack saws for cutting metal
- Using cross-cut saws for wood cutting

  - **Handling of wood materials:**

- Placing plywood sheeting on floors, scaffolds, etc.
- Unloading and loading wood of any type

- ❖ Moving and transfer of wood

- **Concrete operations where hands are exposed:**

- ❖ Power and hand troweling operations
- ❖ During the cleaning of chutes used for delivery of concrete
- ❖ During concrete removal operations

- **During the use of utility knives or exacto knives:**

- ❖ Cutting sheet rock
- ❖ Trimming wire sheathing or other stripping operations
- ❖ Cutting insulation
- ❖ Trimming temporary plastic walls
- ❖ Cutting/scoring paper, vinyl tiles, etc.

- **Sharpening knives, saws and blades**

- **While pulling wire in or around electrical panels**

- **While performing Energized Electrical Work (EEW) operations**

- **During use of impact-type tools:**

- ❖ Using impact hammers to chip concrete
- ❖ Using jackhammers on concrete and similar operations
- ❖ Using fence post drivers for driving posts and/or stakes
- ❖ Using power-actuated power tools

- **During welding operations**

- **While operating a grinder:**

- ❖ The grinding helper shall also utilize gloves to prevent impalement by flying debris

- **Working on or near materials affected by extreme temperatures:**

- ❖ Mechanics working on or around hot parts
- ❖ Workers performing operations around refrigerant or argon lines

- **Handling hazardous materials which require the use of hand protection to avoid skin contact, as indicated on the Safety Data Sheet (SDS) for the material, to include but not limited to:**

- ❖ Paints, solvents, adhesives, caustics or corrosives
- ❖ Petroleum products such as gasoline, diesel, hydraulic fluids and used motor oil

- Working with glass materials where the edges are exposed and present a hazard

- Personnel involved in the removal and handling of trash

- Protective gloves may be worn for hand protection in the Clean Rooms when hands are exposed to hazards described by this procedure. Clean Room Protocol should be contacted to review glove selection for work performed within the Clean Room

Different exposures require the use of different types of gloves. Evaluate each situation to ensure which is the appropriate type of hand protection. (See chart below)

OPERATION	***GLOVE TYPE***
Energized Electrical Work (EEW)	Electrically insulated-rated rubber gloves with leather protectors
Welding operations	Gauntlet-type leather welding gloves
Grinding Operations	Tight-fitting leather gloves
Exposure to sharp edges & metal burrs (handling ductwork, metal studs)	Cut-resistant gloves (Kevlar® or tight-fitting leather)
Utility knives, hacksaws, & cross-cut saws	Cut-resistant gloves (Kevlar®)
Concrete work	Rubber or leather gloves
Exposure to petroleum products	Chemical-resistant gloves per the SDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Exposure to hazardous materials such as solvents, paints, adhesives, etc.	Chemical-resistant gloves per the SDS requirements & manufacturers requirements (Neoprene, PVC, Nitrile or Rubber) *
Working around machinery	Tight-fitting leather gloves should be utilized when hand protection is necessary around rotating equipment to prevent entanglement of gloves/hands in machinery Kevlar® heat resistant gloves and sleeves. Tight-fitting leather gloves.

OPERATION	*GLOVE TYPE*
Proximity & exposure to excessive heat, or hot piping and equipment.	Tight-fitting leather gloves.
Using saws – portaband, and reciprocating.	Cut-resistant gloves - Kevlar®
Handling wire rope/rigging.	Tight-fitting leather gloves
Handling glass	
Handling wood	

GLOVES *

Neoprene – Protects from acids, caustics, oils, greases and many solvents

PVA – protects from aromatics, ketones and chlorinated solvents (Xylene, Trichloroethylene)

Butyl – protects against common organic acids and caustics, alcohols, esters, acetone and ketones

PVC – protects against chemicals, oil and greases, acids and petroleum hydrocarbons

Nitrile – protects against greases, oils, acids and solvents

APPENDIX C
TOWER CRANE ERECTION AND DISMANTLING PROCEDURE

Background:
Given the numerous and tragic tower crane accidents that have occurred around the country in recent months, Safety Coordinator Building Company has issued this Policy to control the risks associated with the erection, climbing/jumping and dismantling of cranes on our projects.

Applicability:
This Policy applies to all projects and must be included in all current and future Bid packages.

Tower Crane Safety Coordination Meeting

Prior to the planned erecting, dismantling or jumping of tower cranes, a 'Safety Coordination Meeting' shall be conducted with Safety Coordinator Building Company and the following stakeholders as applicable.

The stakeholders that must be present at the meeting shall be:

a. General Contractor Superintendent / Designee

b. Subcontractor providing, leasing or using the crane

c. Independent Third party Crane Inspector

d. Crane Operator and Oiler

e. Lead Tower Rigger (and Rigging Crew, if available)

f. Assembly/Disassembly Director

g. Crane Site Safety Coordinator

h. Site Safety Manager

i. Flagmen/Communications Personnel

j. All Other Personnel Taking Part in the Operation

k. State or local regulatory agency representative, if applicable.

The following topics are to be covered during the Tower Crane Safety Coordination meeting:

Scope and sequence of work

Site and Logistics Plan

Crane mat engineered design drawings

Roles and responsibilities

Required Licenses and certifications

Rigging to be used (including softening material if nylon web slings used)

Inspection scope and frequency of all rigging equipment, materials and tools prior to erection, dismantling and raising/lowering

Rigging diagrams, capacities and specific sequence of rigging operations

Engineering specifications and inspection schedule of all equipment including but not limited to collars, ties, and bolts

Permit validity and qualifications and training of personnel

A Plan for tower cranes during inclement weather, including relevant weather warnings and compliance with manufacturer's manual (including maximum recommended wind speeds for erection/dismantling, and anemometer equipment/location)

All Loads weights of tower crane components and lifting components and capacities (a scale on site to verify the weights is preferred)

Communications systems

Self-rescue devices for the operator and tower riggers

All engineered drawings and certifications

Foundation designs and structural bracing design and installation

Crane Installation inspection (see note)*

Specifications of the assist/erection Crane and rescue crane.

*Inspection & Certification: A third party independent Tower Crane inspector shall inspect all tower crane components upon arrival to the project to ensure they were not damaged during transport. Once fully erected, the third party Tower Crane inspector for the crane must provide Safety Coordinator Building Company with a certified and signed report stating that he or she has inspected the crane installation. This certified report must verify that the crane is installed in accordance with plans filed with Safety Coordinator and the city or state where applicable, and that the third party Tower Crane inspector for the crane has reviewed the appropriate technical testing records, including torque, plumb, and magnetic particle reports for the crane. In addition, once every twelve (12) months, the crane shall be inspected by a qualified 3rd party, independent crane inspector.

The engineer of record for the crane must submit written plans and specifications to Safety Coordinator and the applicable state or federal agency that detail the erection, jumping and dismantling procedure for the crane that is to be erected, jumped or dismantled at the site. These plans must be prepared by the licensed engineer and in conjunction with the licensed rigger and must be received prior to the safety coordination meeting.

During the safety coordination meeting the Plan for the Erection, Dismantling, Raising & Lowering of the Tower Crane ('The Plan') shall be reviewed.

The Plan for Erection, Dismantling, Raising & Lowering of the Tower Crane shall include:

Crane set up procedures, including steps for on-site assembly of the Tower crane and assist crane.

A written job plan which describes the intended operation of the subject crane including specific uses of the crane and the nature and weight of anticipated loads.

A site specific Job Hazards Analysis describing the steps involved in tower crane erection, jumping, dismantling and operation, the related hazards, and the controls to be implemented to mitigate these hazards. (Note-the JHA shall also address protection from fall hazards to the erection crews, and fall rescue.).

The sequence of jumping operation

Climbing schedule, in advance.

Rigging materials to be used

Weights of all crane components

Site Logistics plans including:

Crane swing radius plans, including plans to ensure multiple tower cranes on site will not strike each other.

Site plans showing ground storage space for each component, including truck positioning and off-loading activities as well as assembly area.

A description of the relationship of the crane to the building under construction, including minimum clearances between the tower, counter-weights, jibs, and any other relevant moving parts of the crane to parts of the building, including thrust-outs, cornices, window bays, and any other fixed points.

A description of the maximum permissible radius and load ratings for the configuration and the site location of the tower crane, and the building component weights to be lifted.

Description of the proximity of high voltage overhead powerlines to the operating radius of the tower crane, and tower electrical grounding methods.

Communication plans for ground-men, riggers and other crane operators and others on site.

Identification of each lift with respect to weight, the necessary mobile crane reach and rigging accessories required (refer to Safety Coordinator Crane Lift Plan). A scale on site to verify the weights of each component is recommended.

Counter-weight specifications if they are prepared on site.

Safety, proximity and redundancy systems and limit switches to be installed

Size of banners to be applied as ‘wind sails’, (Note- banners, signs or flags cannot be affixed to any mast or jib section, per manufacturer’s instructions.)

Location and type of wind measuring devices and manufacturers maximum recommended wind speeds for erection, climbing, dismantling, and operation.

Certifications, including:

Operators shall have current applicable state Hoisting license (or where no applicable state Hoisting license is issued) shall hold a current certification by NCCCO as a certified tower crane operator.

Riggers shall be qualified, and may be required to hold a current certification by NCCCO as a certified rigger.

Riggers who rig (connect) loads lifted by a tower crane shall be qualified to ANSI A10.42 , or hold a current certificate by NCCCO as a certified Rigger.

Signalpersons who provides hand or verbal signals to a tower crane operator shall be qualified and trained, or hold a current certificate by NCCCO as a certified Signalperson.

Written statement of each crane operator's experience and qualification to operate the type of tower crane utilized, shall be included with the copy of applicable state issued license or NCCCO certificate.

A certification issued by a state-licensed Crane Certifier and/or independent third party crane inspector for subject tower crane, current to within 1 year of the operation period of the crane on the project.

The manufacturer's erection sequence for counter-jib, jib, counter-weight machine deck, and tower spire and procedures for installation of jib and counter-jib support pendants.

The type and calibration of torque wrenches and/or belt-stretchers and the procedure to be used for all tower sections and slew-ring bolts, including re-torqueing after final assembly.

A procedure for written verification of all slew-ring and tower section bolt torques to be maintained at the worksite or on the crane.

Documentation of compliance with FAA and other state and local permits as applicable.

A plan stamped by a Registered Professional Engineer detailing the tower crane supports, such as foundation, railway, floor support and tie-in collars, as well as soil stability and bearing capacity, reinforced steel design, foundation tower anchor placement and concrete specifications.

Verification by the crane employer that during the time periods of erection, climbing and dismantling of the tower crane, a third party independent Tower Crane inspector will be present on site to assure that such processes and operations are performed in accordance with the manufacturer's recommendations and any applicable state and federal safety regulations.

Verification that the erection, dismantling, raising and lowering of the tower crane will be conducted in compliance with the manufacturer's recommendation for the specific crane.

Verification that, before each climb, the following have been performed:

Inspection of the load bearing members of the climbing and support system

Balancing the crane per the manufacturer's instructions

Inspection of the crane to determine that there are no obstructions to the free movement of the mast (tower).

Verification that no employees, other than those engaged in the erection, climbing or dismantling of the crane, are to be permitted in the area below the crane during erection, climbing and dismantling work. This 'exclusion zone' below the crane shall be that open area below the current activity where employees are exposed to potential hazards within the maximum radius of the crane measured from its base.

In addition, erection, climbing/jumping or dismantling shall be conducted off hours, or weekends-when no other workers, other than those engaged in the erection, climbing and dismantling of the crane, are present.

Further, only those workers actually engaged in erection, climbing or dismantling of the crane shall be allowed on the crane during the erection, climbing or dismantling processes. No other work shall be performed on the crane while these processes are taking place.

Inspections and Testing (including);

An inspection conducted by a state-licensed independent Tower Crane inspector for subject tower crane prior to erection, upon erection and every 3 months, or bi monthly in adverse conditions, and after lighting strikes or significant environmental events, and after tower erection or jump.

Capacity testing of tower crane after erection and climbing. This shall be performed with a known weight to ensure proper calibration, per manufacturer's instructions.

Proof Load testing in accordance with manufacturer's requirements within 12 months preceding the cranes arrival and use on site.

Visual, and functional motion tests or all systems and components by the third party tower Crane inspector in accordance with manufacturer's requirements. In addition, the inspection shall include, but not limited to: non-destructive testing and x-ray welds, visual inspection of boom lattice, turntable, bolts, pins, load blocks, weight ball, slings, hoist lines, limit switches,

counterweights, walking surfaces, braces and collars, etc.

Non-destructive inspection of all welds and magnaflux testing on all suspect welds.

Inspection responsibilities of supervisors, inspection intervals and what is to be inspected, i.e., a written crane inspection program.

A written crane maintenance and preventive maintenance program.

A written testing schedule (in accordance with manufacturers requirements and ASME B30.3) for functional motions, limiting devices and brakes, including, but not limited to: load hoisting and lowering, boom hoisting, lowering and traversing the trolley, swing motion, brakes and clutches, and limit, locking and safety devices.

Safety meeting intervals, who will conduct meetings and what general and specific topics will be discussed.

Safety Log. The General Contractor, or his or her designee, shall keep a log on site and available at all times of all safety coordination meetings held, inspection logs, certifications, engineering plans, work orders, manufacturers specifications, etc.

General – all provisions of 1926.14000 and 1926.1435 shall be complied with, unless stricter requirements are specified herein.

Work Site Inspections

Non-capital Projects
Work site inspections may be conducted by EHS or other designated college personnel. These inspections are conducted solely for the benefit of the college, and shall not relieve the contractor of responsibility for enforcement of, and compliance with, OSHA, NFPA or EPA regulations.

In the event that work site conditions exist that potentially impact the safety of college employees, students, or the public, the college inspector shall issue a verbal or written warning to the Contractor and shall notify the Project Coordinator. If the unsafe conditions cannot be immediately corrected and represent a danger or have a potential to hard college employees, students or the public, then the college inspector will:

- Detail the NFPA, EPA or OSHA violations that were noted, and explain the potential impact upon college employees, students or the public,
- Require that the Project Coordinator have the Contractor either stop work or implement measures to isolate the hazardous condition until the unsafe condition can be mitigated,
- Issue a formal written report of the violation(s) to the Contractor. This report shall be copied to the Project Coordinator.

Reports of deficiencies may be factored into the evaluation of the contract by the college, and may be included in a vendor complaint file that is available for review by other state agencies. Repeat safety violations of a similar nature and/or a single serious willful safety violation by a Contractor may warrant review and termination of the contract.

Capital Projects
Work site inspections may be conducted by EHS or other designated college representatives. Such inspections shall be coordinated with the Field Engineer and/or Project Manager. These inspections are conducted solely for the benefit of college personnel who may be working on the site and shall not relieve the contractor of responsibility for enforcement of, and compliance with NFPA, EPA, and OSHA regulations.

In the event that work site conditions exist that potentially impact the safety of college employees or the public, EHS shall notify the college Field Engineer and the Contractor of the hazard, and will assure that other college personnel present on-site are warned to avoid the area of the hazardous condition. The Contractor shall take prompt action to correct the hazardous condition. If the hazardous condition cannot be immediately corrected, the Contractor shall take effective steps to isolate the hazardous condition and/or shall stop work that is causing the hazardous condition until the hazard can be mitigated.

In the event that work site conditions exist that present an immediate safety hazard for the Contractors personnel, EHS may, as a courtesy, notify the Field Engineer and the Contractor of the hazardous condition. The Contractor shall take prompt action to correct the hazardous condition as required by the *General Conditions of the Construction Contract*.

Agencies/Firms Where No Formal Contractual Relationship Exists
When hazardous condition are identified by EHS related to work performed by agencies/firms conducting work on JJC property where no formal contractual relationship exists between JJC and the agency/firm, the hazardous condition shall be immediately corrected. If the hazardous condition cannot be immediately corrected, the agency/firm shall stop work and shall take effective steps to isolate the hazardous condition from personnel and the public. Repeat safety violations of a similar nature or willful disregard for the NFPA, EPA or OSHA requirements or the requirements outlined in this program will result in immediate removal from JJC property.

Definitions
Capital Project: A capital project is one whose total project cost exceeds $500,000.

Competent Person*:* As related to excavation, trenching or shoring work, the Contractor's "competent person" means one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Confined Space*:* A confined space is a space that is large enough for a person to enter, that has limited means for entry or exit, and that is not designed for continuous occupancy. Example include tanks, silos, storage bins or hopper, utility vaults and pits.

Contracting Department*:* The Department at the college that has contracted for work to be performed by a Contractor. In regards to agencies/firms conducting work on JJC property, where no formal contractual relationship exists between JJC and the agency/firm, the department that is coordinating or approving the work of the agency/firm is the Contracting Department.

Contractor*:* An entity or agency employed by the college to perform the installation or maintenance of equipment or the renovation or construction of a building, room or space on college property, or that provides services to the college on college property including, but not limited to, vending, supplies, erection of tents and other services.

Field Engineer: The representative from JJC's Facility Services department that oversees capital construction and/or renovation activities.

Friable Asbestos: An asbestos material that is capable of being reduced to powder by hand pressure when dry, or a nonfriable asbestos material that is subject to grinding, sanding, cutting or abrading or that is otherwise rendered by mechanical means.

Lockout/Tagout: A program used to ensure that employees are protected from sources of potentially hazardous energy. The program requires that hazardous energy sources be identified and locked and/or tagged-out before work is done on the system(s).

Permit-required confined space: A permit-required confined space is a confined space that contains potential or known safety hazards that must be dealt with prior to or during entry to assure the safety of those employees performing the work.

Project Coordinator: The individual(s) within a Department that has been assigned duties related to oversight or coordination of work performed by a Contractor as defined in this program.

Project Manager: The representative from JJC's Facility Services department that coordinates the work of the Field Engineer and the Architect/Engineer related to capital construction and/or renovation projects.

Serious, willful safety violation: "Serious, willful safety violation" is defined, for the purposes of this program, as a work activity with a substantial probability that death or serious physical harm could result and where the hazard was known or should have been known, but where the work activity was continued regardless of the existence of the safety hazard.

LABOR MANAGEMENT PROJECT AGREEMENT

This Agreement is entered into this ____day of ____, 20___ by and between Joliet Junior College, Illinois Community College District 525 of Will, Grundy, Kendall, LaSalle, Kankakee, Livingston, and Cook, Illinois, (hereinafter called the "Owner"); and _____ (hereinafter called the "Project Contractor"); and the _____Building Trades Council (hereinafter called the "Union"), acting in their own behalf and on behalf of their respective affiliates and members; and the THREE RIVERS CONSTRUCTION ALLIANCE, acting on their own behalf and on the behalf of their respective affiliates and members, with respect to all construction projects at Joliet Junior College, which includes the Master Plan and Capital Improvement Plans thru August 2013, located in Will County, Illinois.

WITNESSETH:

WHEREAS, to accomplish the goals of quality, cost effectiveness and timelessness requires that all participants exhibit a positive attitude intent on success; and

WHEREAS, there must exist amongst all parties a willingness to cooperate fully in devoting themselves to the goals of the Project; and

WHEREAS, this program has no room for adverse relationships, but only a true spirit of cooperation and commitment; and

WHEREAS, it is essential that the work required to construct this Project be accomplished in an efficient and economical manner so as to provide productivity, the highest levels of quality and the total elimination of delays thereby fostering new plateaus in labor/management cooperation; and

WHEREAS, Joliet Junior College, Illinois Community College District 525 of Will, Grundy, Kendall. LaSalle, Kankakee, Livingston, and Cook, Illinois, (hereinafter referred to as

the "Owner"), its general Contractor(s), its subcontractor(s) of whatever tier, the local Building Trades Council, the THREE RIVERS CONSTRUCTION ALLIANCE dedicate themselves to the goal that together, in full cooperation, local labor, and management will produce a project of excellent quality, as economically as possible, in a safe environment, under favorable working conditions; and

WHEREAS, nothing contained herein shall prevent the Owner form considering bids for the Project so long as the General Contractor and its Subcontractors agree to abide by the terms and provisions of this Agreement.

NOW, THEREFORE, for and in consideration of the mutual covenants above-contained and other good and valuable consideration, as hereinafter set forth, the parties do hereby agree as follows:

SECTION 1. Introduction

It is understood by the parties to this Agreement that other contractors awarded construction work directly or indirectly by the Owner will execute this Agreement and become signatory contractors for the purpose of this work.

The intent of the parties to this Agreement is to establish labor and management cooperation between the Owner, Project Contractor, all Contractors and Subcontractors performing construction work in this Project site, and the appropriate Unions signatory to this Agreement for the express purpose of producing a quality project on schedule, and, as economically as possible, in a sage environment under favorable working conditions.

SECTION 2. Scope of the Agreement.

A. This Project Agreement shall apply and is limited to the recognized and accepted historical definition of new construction work under the direction of and performed by the

Contractor(s), of whatever tier, which may include the Project Contractor, who have contracts awarded for such work on the Project. Such work shall include site preparation work and dedicated off-site work.

It is agreed that the Project Contractor shall require all Contractors of whatever tier who have been awarded contracts for work covered by this Agreement, to accept and be bound by the terms and conditions of this Agreement by executing the Letter of Assent (Attachment A) prior to commencing work. The Project Contractor shall assure compliance with this Agreement by the Contractors. It is further agreed that, where there is a conflict, the terms and conditions of this Agreement shall supersede and override terms and conditions of any and all other national, area, or local collective bargaining agreements, except for all work performed under the NTL Articles of Agreement, and the National Stack/Chimney Agreement, the National Cooling Tower Agreement. All instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and the National Agreement of the International Union of Elevator Constructors, with the exception of Section 4, 5 and 6 of this Agreement, which shall apply to such work.

B. Nothing contained herein shall be construed to prohibit, restrict or interfere with the performance of any other operation, work, or function which may occur at the Project site or be associated with the development of the Project.

C. This Agreement shall only be binding on the signatory parties hereto and shall not apply to their parents, affiliates or subsidiaries.

D. The Owner and/or the Project Contractor have the absolute right to select any qualified bidder for the award of contracts on this Project without reference to the existence or non-existence of any agreements between such bidder and any party to this Agreement;

provided, however, only that such bidder is willing, ready and able to become a party to and comply with this Agreement, should it be designated the successful bidder.

E. The provisions of this Agreement shall not apply to Owner, and nothing contained herein shall be construed to prohibit or restrict Owner or its employees from performing work not covered by this Agreement on the Project site. As areas and systems of the Project are inspected and construction tested by the Project Contractor or Contractors and accepted by the Owner, the Agreement will not have further force or effect on such items or areas, except when the Project Contractor or Contractors are directed by the Owner to engage in repairs, modifications, check-out, and warranty functions required by its contract with the Owner during the term of this Agreement.

F. It is understood that the Owner, at its sole option, may terminate, delay and/or suspend any or all portions of the Project at any time.

G. It is understood that the liability of any employer and the liability of the separate unions under this Agreement shall be several and not joint. The unions agree that this Agreement does not have the effect of creating any joint employer status between or among the Owner, Contractor(s) or any employer.

SECTION 3. Labor-Management Cooperation Committee

The parties to this Agreement hereby reaffirm the necessity for joint cooperation and participation by Labor and Management in interpreting and analyzing the effectiveness of management's application of this Agreement as well as Labor's response and any other matter affecting quality, safety, working conditions and productivity. Therefore, to secure this end, it is hereby agreed that a "Labor-Management Cooperation Committee" will be established composed of three representatives from Labor and three representatives from Management; one

representative from labor and one from Management shall be Co-Chairpersons of this Committee.

The Labor-Management Cooperation Committee shall meet a minimum of once each month, at the job site, and shall discuss the following; reports concerning any violation, dispute, questions or interpretation of the application of practices arising out of this Agreement; safety; working conditions; absenteeism; labor turnover; availability of qualified journeymen; need for training; and any other matter affecting productivity and efficiency on this project.

In the event a dispute is not resolved by the Labor-Management Cooperation Committee, such matter shall then be settled as outlined by the grievance procedure and/or arbitration provisions contained in Section 6 or 7 of this Agreement. The Labor-Management Cooperation Committee shall have no authority to render a decision involving a jurisdictional dispute.

SECTION 4. Contractor's Commitment

A Work assignments will be made in accordance with area practice, consistent with the efficient and economical performance of the work.

B. Before performing the work at the job site, the Contractor or Subcontractors of whatever tier actually performing the work will become signatory to the appropriate collective bargaining agreement.

C. The Contractors and Subcontractors shall exercise their management rights. These rights shall include planning, directing, hiring, dismissal, lay-off, transferring, appointing foremen and general foremen and otherwise directing the work force.

D. The Project Contractor agrees that neither it nor any of its contractors or subcontractors will subcontract any work to be done on the Project except to a person, firm or corporation who is or agrees to become party to this Agreement. Any contractor or subcontractor

working on the Project shall, as a condition to working on said Project, become signatory to and perform all work under the terms of this Agreement.

SECTION 5. Union (Craftsman) Commitment

A. Qualified and skilled craftsmen will be furnished as required by the Contractor in the fulfillment of its obligations of the Owner.

B. Craftsmen shall be at their place of work at the regular starting time and shall remain at their place of work until quitting time. There shall be no limit on production by Craftsmen nor restrictions on the use of tools or equipment other than that which may be required by safety practice.

C. Where stewards are appointed by respective unions, the steward shall be qualified craftsmen performing the work of his craft who shall exercise no supervisory functions. There shall be no non-working stewards.

SECTION 6. Disputes and Grievances

A. This Agreement is intended to provide close cooperation between management and labor. Each of the Unions will assign a representative to this Project for the purpose of completing the construction of the Project economically, efficiently, continuously, and without interruptions, delays, or work stoppages.

B. The Contractors, Unions, and the employees, collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes in accordance with the grievance-arbitration provisions set forth in this Article.

C. Any question or dispute arising out of and during the term of this Project Agreement (other than grievances not covered by a local Collective Bargaining Agreement or trade

jurisdictional disputes) shall be considered a grievance and subject to resolution under the following procedures:

Step 1. (a) When any employee subject to the provisions of this Agreement feels he or she is aggrieved by a violation of this Agreement, he or she, through his or her local union business representative or job steward, shall, within five (5) working days after the occurrence of the violation, give notice to the work-site representative of the involved Contractor stating the provision(s) alleged to have been violated. The business representative of the local union or the job steward and the work-site representative of the involved Contractor and the Project Contractor shall meet and endeavor to adjust the matter within three (3) working days after timely notice has been given. The representative of the Contractor shall keep the meeting minutes and shall respond to the Union representative in writing (copying the Project Contractor) at the conclusion of the meeting but not later than twenty-four (24) hours thereafter. If they fail to resolve the matter within the prescribed period, the grieving party may, within forty-eight (48) hours thereafter, pursue Step 2 of the Grievance Procedure, provided the grievance is reduced to writing, setting forth the relevant information concerning the alleged grievance, including a short description thereof, the date on which the grievance occurred, and the provision(s) of the Agreement alleged to have been violated.

(b) Should the Local Union(s) or the Project Contractor or any Contractor have a dispute with the other party and, if after conferring, a settlement is not reached within three (3) working days, the dispute may be reduced to writing and proceed to Step 2 in the same manner as outlined herein for the adjustment of an employee complaint.

Step 2. The International Union Representative and the involved Contractor shall meet within seven (7) working days of the referral of a dispute to this second step to arrive at a

satisfactory settlement thereof. Meeting minutes shall be kept by the Contractor. If the parties fail to reach an agreement, the dispute may be appealed in writing in accordance with the provisions of Step 3 within seven (7) calendar days thereafter.

Step 3. (a) If the grievance has been submitted but not adjusted under Step 2, either party may request in writing, within seven (7) calendar days thereafter, that the grievance be submitted to an Arbitrator mutually agreed by them. The Contractor and the involved Union shall attempt mutually to select an arbitrator, but if they are unable to do so, they shall request the American Arbitration Association to provide them with a list of arbitrators from which the Arbitrator shall be selected. The rules of the American Arbitration Association shall govern the conduct of the arbitration hearing. The decision of the Arbitrator shall be final and binding on all parties. The fee and expenses of such Arbitration shall be borne equally be the Contractor and the involved Local Union(s).

(b) Failure of the grieving party to adhere to the time limits established herein shall render the grievance null and void. The time limits established herein may be extended only by written consent of the parties involved at the particular step where the extension is agreed upon. The Arbitrator shall have the authority to make decisions only on issues presented to him or her, and he or she shall not have authority to change, amend, add to or detract from any of the provisions of this Agreement.

D. The Project Contractor and Owner shall be notified of all actions at Steps 2 and 3 and shall, upon their request, be permitted to participate in all proceedings at these steps.

SECTION 7. Jurisdictional Disputes

A. The assignment of work will be solely the responsibility of the Contractor performing the work involved; and such work assignments will be in accordance with the Plan for the

Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

B. All jurisdictional disputes on this Project, between or among Building and Construction Trades Unions and employers, parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Contractors and Unions parties to this Agreement.

C. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Contractor's assignment shall be adhered to until the dispute is resolved. Individuals violating this section shall be subject to immediate discharge.

D. Each Contractor will conduct a pre-job conference with the appropriate Building and Construction Trades Council prior to commencing work. The Project Contractor and the Owner will be advised in advance of all such conferences and may participate if they wish.

SECTION 8. Joint Commitment (Contractor/Union)

A. Utilization of Union apprentices will be maximized consistent with the best interest of the job in compliance with Local Union Agreements. The high level of union apprenticeship training will be maintained to provide the Industry with productive and knowledgeable craftsmen for the long term.

B. Every reasonable and practicable measure, consistent with the protection of human-dignity, will be taken to assure a work place free of alcohol and drugs. The use of liquor, drugs or any other illegal activities at the Project site, including parking lots, is strictly prohibited.

C. Employees will take their breaks only in their immediate work areas.

D. Acknowledging the safety concerns of Owner and its risk management professionals, we assure the Owner that the parties are committed to safe working practices on the project. The parties, drawing upon the comprehensive safety programs and resources developed by the union construction community, will comply with federal, state and local safety regulations. Both contractors and union craftsmen are well trained in safety practices and commit themselves to applying such practices on this job.

E. The Contractors and Unions agree that there will be no lockouts or work stoppages.

(1) The Contractors and Subcontractors shall not cause, incite, encourage or participate in any lockout of employees on the project during the term of this Agreement.

(2) The Union and its members, agents, representatives, and employees shall not allow, incite, encourage, condone or participate in any strike, walkout, slowdown, picketing, sympathy strike or other work stoppage of any nature whatsoever, whether jurisdictional or otherwise, or observe any picket of any nature during the term of this Agreement. Any such action by the Union or its members, agents, representatives or employees shall be considered a violation of this Agreement.

(3) All employees shall continue to work and to perform all their obligations on the project despite the expiration of any local or other collective bargaining agreement. Any future wage or fringe benefit increase, decrease or modification legally negotiated and established by appropriate local collective bargaining agreement of the Local Unions which are signatories to this Agreement shall be paid retroactively to the expiration date of the preceding local Agreement.

(4) Should any unauthorized strike, slowdown, stoppage of work or interference with construction occur, the Union shall take all necessary steps to bring such activity to a prompt resolution.

SECTION 9. Helmets To Hardhats

A. The Contractors and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Contractors and Unions agree to utilize the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

B. The Unions and Contractors agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

SECTION 10. Term of Agreement.

A. This Agreement shall become effective on _____, 20___, and shall remain in full force and effect as long as signatory contractors are working on this project.

B. Any of the undersigned parties shall have the right to terminate this Agreement by notifying all other parties in writing, within at least thirty (30) calendar days from the proposed termination date.

SECTION 11. Notices

The address and telephone number of all of the undersigned shall be on file with Owner's Director of Facility Services at the Highland Building, 1215 Houbolt Road, Joliet, Illinois, 60431, Attention: Patrick VanDuyne. All notices, request and other communications under this Agreement shall be in writing and shall be personally served or sent by certified mail, postage prepaid, return receipt requested, facsimile, or by licensed overnight courier to the appropriate party at the address set forth below or as may otherwise be on file with the Director of Physical Plant as provided herein. Notice shall be deemed given at the time delivered, if personally delivered, at the time indicated on the duly completed postal service return receipt, if delivered, at the time indicated on the duly completed postal service return receipt, if delivered by certified mail, at the time the facsimile is transmitted, if delivered by facsimile, or on the next business day after such notice is sent, if delivered by overnight courier. If a person elects to change their address, they shall do so by notifying the Owner's Director of Facility Services in the manner as provided for herein for the delivery of a notice.

SECTION 12. Miscellaneous Provisions.

A. Assignment. No party may assign its rights hereunder without the prior written consent of the other parties.

B. Entire Agreement. This Agreement contains the entire agreement between the parties with respect to the subject matter hereof and may not be modified, except in writing signed by the parties hereto. Furthermore, the parties hereto specifically agree that all prior agreements, whether written or oral, relating to the subject matter hereof shall be of no further force or effect from and after the date hereof.

C. Non-Partnership. This Agreement shall not create a partnership, joint venture or other joint enterprises between the parties hereto.

D. Severability. If any phrase, clause or provision of this Agreement is declared invalid or unenforceable by a court of competent jurisdiction, such phrase, clause or provisions shall be deemed severed from this Agreement, but will not affect any other provision of this Agreement, which shall otherwise remain in full force and effect. If any restriction or limitation in this Agreement is deemed to be unreasonable, onerous and unduly restrictive by a court of competent jurisdiction, it shall not be stricken in its entirety and held totally void and unenforceable, but shall not be deemed rewritten and shall remain effective to the maximum extent permissible within reasonable bounds.

E. Prevailing Party. The prevailing party or parties in any litigation arising out of or from this Agreement shall be entitled to recover from the non-prevailing party or parties all costs and expenses reasonably incurred litigating such action, including without limitation, reasonable attorneys' and paralegals' fees and court cost.

F. Neutral Reading. It is the intent of the parties that this Agreement be deemed to have been prepared by all of the parties hereto.

G. Waiver. No waiver of any breach or default hereunder shall be considered valid unless in writing and signed by the party given such waiver and no such waiver shall be deemed a waiver of any subsequent breach or default of the same or similar nature.

H. Headings. The section and subsection headings contained herein are for convenience of the parties only and are not intended to define or limit the context of said Sections and subsections.

I. Governing Law; Venue. The validity, construction and interpretation of this Agreement shall be governed by the State of Illinois. The parties hereto irrevocably agree that all actions or proceedings in any way, manner or respect arising out of or from or related to this Agreement shall be litigated only in the Circuit Court Twelfth Judicial Circuit, Will County, Illinois.

J. Counterparts. This Agreement may be executed in two or more counterparts, each of which may be deemed to be an original.

IN WITNESS WHEREOF, the parties have executed this Agreement on the day and year first above written.

SIGNED FOR THE OWNER:

Firm: Joliet Junior College

Title: Director of Facility Services

Date: 4-15-09

Address: 1215 Houbolt Road
Joliet, Illinois 60431

SIGNED FOR THE UNION:

Ronald C. Zyi

Will/Grundy Building Trades Council

Title: President

Date: 4-15-09

Address: 2062 Oakdale St.
Joliet IL 60436

SIGNED FOR THE ALLIANCE:

Bob Boich

Firm: Three River's Construction Alliance

Title: Co-Chair TRCA

Date: 4/15/09

Address: 2134 Maxim DR.
Rockdale IL. 60436

SIGNED FOR BY THE CONTRACTOR:

Firm: _____

Title: _____

Date: _____

Address: _____

Skilled Union Craftsmen
Professional Union Contractors

BLUEPRINT FOR SUCCESS

A Labor-Management Project Agreement

I. Preamble

To accomplish the goals of quality, cost effectiveness and timeliness requires that all participants exhibit a positive attitude intent on success. There must exist amongst all parties a willingness to cooperate fully in devoting themselves to the goals of the project.

This program has no room for adverse relationships, but only a true spirit of cooperation and commitment. It is essential that the work required to construct this project be accomplished in an efficient and economical manner so as to provide productivity, the highest levels of quality, and the total elimination of delays. This commitment will establish new plateaus in labor/management cooperation.

Therefore, Joliet Junior College, Illinois Community College District 525, of Will, Grundy, Kendall, LaSalle, Kankakee, Livingston and Cook, Illinois, (hereinafter referred to as the "Owner"), its subcontractor(s) of whatever tier, the Will & Grundy Counties Building Trades Council, and the THREE RIVERS' CONSTRUCTION ALLIANCE dedicate themselves to the goal that together, in full cooperation, local labor and management will produce a project of excellent quality, as economically as possible, in a safe environment, under favorable working conditions.

II. Introduction

This Agreement is entered into this 15th day of April, 2009, by and between Joliet Junior College (hereinafter called the "Owner"); and Gilbane (hereinafter called and the "Project Contractor"; and the Will & Grundy Counties Building Trades Council (hereinafter called the "Union"), acting in their own behalf and on behalf of their respective affiliates and members: and the THREE RIVERS CONSTRUCTION ALLIANCE, acting on their own behalf and on behalf of their respective affiliates and members, with respect to all construction projects at Joliet Junior College, which includes the Master Plan and Capital Improvement Plan projects thru August 2013 located in Will County, Illinois.

It is understood by the parties to this Agreement that other contractors awarded construction work directly or indirectly by the "Owner" will execute this Agreement and become signatory contractors for the purpose of this work.

The intent of the parties to this Agreement is to establish labor and management cooperation between the Project Contractor, all Contractors and Subcontractors performing construction work on this project site, and the appropriate Unions signatory to this Agreement for the express purpose of producing a quality project on schedule and as economically as possible, in a safe environment under favorable working conditions.

III. Scope Of The Agreement

A. This Project Agreement shall apply and is limited to the recognized and accepted historical definition of new construction work under the direction of and performed by the Contractor(s), of whatever tier, which may include the Project Contractor, who have contracts awarded for such work on the Project. Such work shall include site preparation work and dedicated off-site work.

It is agreed that the Project Contractor shall require all Contractors of whatever tier who have been awarded contracts for work covered by this Agreement, to accept and be bound by the terms and conditions of this Project Agreement by executing the Letter of Assent (Attachment A) prior to commencing work. The Project Contractor shall assure compliance with this Agreement by the Contractors. It is further agreed that, where there is a conflict, the terms and conditions of this Project Agreement shall supersede and override terms and conditions of any and all other national, area, or local collective bargaining agreements, except for all work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, all instrument calibration work and loop checking shall be performed under the terms of the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, and the National Agreement of the International Union of Elevator Constructors, with the exception of Article V,VI, and VII of this Project Agreement, which shall apply to such work.

B. Nothing contained herein shall be construed to prohibit, restrict or interfere with the performance of any other operation, work, or function which may occur at the Project site or be associated with the development of the Project.

C. This Agreement shall only be binding on the signatory parties hereto and shall not apply to their parents, affiliates or subsidiaries.

D. The Owner and/or the Project Contractor have the absolute right to select any qualified bidder for the award of contracts on this Project without reference to the existence or non-existence of any agreements between such bidder and any party to this Agreement; provided, however, only that such bidder is willing, ready and able to become a party to and comply with this Project Agreement, should it be designated the successful bidder.

E. It is understood that the Owner, at its sole option, may terminate, delay and/or suspend any or all portions of the Project at any time.

F. It is understood that the liability of any employer and the liability of the separate unions under this Agreement shall be several and not joint. The unions agree that this Agreement does not have the effect of creating any joint employer status between or among the Owner, Contractor(s) or any employer.

IV. Labor-Management Cooperation Committee

The parties to this Agreement hereby reaffirm the necessity for joint cooperation and participation by Labor and Management in interpreting and analyzing the effectiveness of management's application of this Agreement as well as Labor's response and any other matter affecting quality, safety, working conditions and productivity. 'Therefore, to secure this end, it is hereby agreed that a "Labor-Management Cooperation Committee" will be established composed of three representatives from Labor and three representatives from Management; one representative from Labor and one from Management shall be Co-Chairmen of this Committee.

The Labor-Management Cooperation Committee shall meet a minimum of once each month, at the jobsite, and shall discuss the following: reports concerning any violation, dispute, questions or interpretation of the application of practices arising out of this Agreement; safety; working conditions; absenteeism; labor turnover; availability of qualified journeymen; need for training; and any other matter affecting productivity and efficiency on this project.

In the event a dispute is not resolved by the Labor-Management Cooperation Committee, such matter shall then be settled as outlined by the grievance procedure and/or arbitration provisions contained in Articles VII or VIII of this Agreement. The Labor-Management Cooperation Committee shall not have authority to render a decision involving a jurisdictional dispute.

V. Contractors' Commitment

A. Work assignments will be made in accordance with area practice, consistent with the efficient and economical performance of the work.

B. Before performing work at the job site, the Contractor or Subcontractors of whatever tier actually performing the work will become signatory to the appropriate collective bargaining agreement.
C. The Contractors and Subcontractors shall exercise their management rights. These rights shall include planning, directing, hiring, dismissal, lay-off, transferring, appointing foremen and general foremen and otherwise directing the work force.

D. The Project Contractor agrees that neither it nor any of its contractors or subcontractors will subcontract any work to be done on the Project except to a person, firm or corporation who is or agrees to become party to this Agreement. Any contractor or subcontractor working on the Project shall, as a condition to working on said Project, become signatory to and perform all work under the terms of this Agreement.

VI. Union (Craftsmen) Commitment

A. Qualified and skilled craftsmen will be furnished as required by the Contractor in the fulfillment of its obligations to the Owner.

B. Craftsmen shall be at their place of work at the regular starting time and shall remain at their place of work until quitting time. There shall be no limit on production by Craftsmen nor restrictions on the use of tools or equipment other than that which may be required by safety practice.

C. Where stewards are appointed by respective unions, the steward shall be a qualified craftsman performing the work of his craft who shall exercise no supervisory functions. There shall be no non-working stewards.

VII. Owner Commitment

A. The Owner agrees that during the life of this agreement he shall assign construction work on this project only to contractors who are signatory to this agreement and applicable local collective bargaining agreements.

VIII. Disputes & Grievances

A. This Agreement is intended to provide close cooperation between management and labor. Each of the Unions will assign a representative to this Project for the purpose of completing the construction of the Project economically, efficiently, continuously, and without interruptions, delays, or work stoppages.

B. The Contractors, Unions, and the employees, collectively and individually, realize the importance to all parties to maintain continuous and uninterrupted performance of the work of the Project, and agree to resolve disputes in accordance with the grievance-arbitration provisions set forth in this Article.

C. Any question or dispute arising out of and during the term of this Project Agreement (other than grievances not covered by a local Collective Bargaining Agreement or trade jurisdictional disputes) shall be considered a grievance and subject to resolution under the following procedures:

Step 1. (a) When any employee subject to the provisions of this Agreement feels he or she is aggrieved by a violation of this Agreement, he or she, through his or her local union business representative or job steward, shall, within five (5) working days after the occurrence of the violation, give notice to the work-site representative of the involved Contractor stating the provision(s) alleged to have been violated. The business representative of the local union or the job steward and the work-site representative of the involved Contractor and the Project Contractor shall meet and endeavor to adjust the matter within three (3) working days after timely notice has been given. The representative of the Contractor shall keep the meeting minutes and shall respond to the Union representative in writing (copying the Project Contractor) at the conclusion of the meeting but not later than twenty-four (24) hours thereafter. If they fail to resolve the matter within the prescribed period, the grieving party may, within forty-eight (48) hours thereafter, pursue Step 2 of the Grievance Procedure, provided the grievance is reduced to writing, setting forth the relevant information concerning the alleged grievance, including a short description thereof, the date on which the grievance occurred, and the provision(s) of the Agreement alleged to have been violated.

(b) Should the Local Union(s) or the Project Contractor or any Contractor have a dispute with the other party and , if after conferring, a settlement is not reached within three (3) working days, the dispute may be reduced to writing and proceed to Step 2 in the same manner as outlined herein for the adjustment of an employee complaint.

Step 2. The International Union Representative and the involved Contractor shall meet within seven (7) working days of the referral of a dispute to this second step to arrive at a satisfactory settlement thereof. Meeting minutes shall be kept by the Contractor. If the parties fail to reach an agreement, the dispute may be appealed in writing in accordance with the provisions of Step 3 within seven (7) calendar days thereafter.

Step 3. (a) If the grievance has been submitted but not adjusted under Step 2, either party may request in writing, within seven (7) calendar days thereafter, that the grievance be submitted to an Arbitrator mutually agreed upon by them. The Contractor and the involved Union shall attempt mutually to select an arbitrator, but if they are unable to do so, they shall request the American Arbitration Association to provide them with a list of arbitrators from which the Arbitrator shall be selected. The rules of the American Arbitration Association shall govern the conduct of the arbitration hearing. The decision of the Arbitrator shall be final and binding on all parties. The fee and expenses of such Arbitration shall be borne equally be the Contractor and the involved Local Union(s).

(b) Failure of the grieving party to adhere to the time limits established herein shall render the grievance null and void. The time limits established herein may be extended only by written consent of the parties involved at the particular step where the extension is agreed upon. The Arbitrator shall have the authority to make decisions only on issues presented to him or her, and he or she shall not have authority to change, amend, add to or detract from any of the provisions of this Agreement.

D. The Project Contractor and Owner shall be notified of all actions at Steps 2 and 3 and shall, upon their request, be permitted to participate in all proceedings at these steps.

IX. Jurisdictional Disputes

A. The assignment of work will be solely the responsibility of the Contractor performing the work involved; and such work assignments will be in accordance with the Plan for the Settlement of Jurisdictional Disputes in the Construction Industry (the "Plan") or any successor Plan.

B. All jurisdictional disputes on this Project, between or among Building and Construction Trades Unions and employers, parties to this Agreement, shall be settled and adjusted according to the present Plan established by the Building and Construction Trades Department or any other plan or method of procedure that may be

adopted in the future by the Building and Construction Trades Department. Decisions rendered shall be final, binding and conclusive on the Contractors and Unions parties to this Agreement.

C. All jurisdictional disputes shall be resolved without the occurrence of any strike, work stoppage, or slow-down of any nature, and the Contractor's assignment shall be adhered to until the dispute is resolved. Individuals violating this section shall be subject to immediate discharge.

D. Each Contractor will conduct a pre-job conference with the appropriate Building and Construction Trades Council prior to commencing work. The Project Contractor and the Owner will be advised in advance of all such conferences and may participate if they wish.

X. Joint Commitment (Contractor/Union)

A. Utilization of Union apprentices will be maximized consistent with the best interest of the job in compliance with Local Union Agreements. The high level of union apprenticeship training will be maintained to provide the Industry with productive and knowledgeable craftsmen for the long term.

B. Every reasonable and practicable measure, consistent with the protection of human dignity,will be taken to assure a work place free of alcohol and drugs. The use of liquor, drugs or any other illegal activities at the Project site, including parking lots, is strictly prohibited.

C. Employees will take their breaks only in their immediate work areas.

D. Acknowledging the safety concerns of today's construction Owner and its risk management professionals, we assure the Owner that the parties are committed to safe working practices on the project. The parties, drawing upon the comprehensive safety programs and resources developed by the Union construction community, will comply with federal, state, and local safety regulations. Both contractors and union craftsmen are well trained in safety practices and commit themselves to applying such practices on this job.

E. The Contractors and Unions agree that there will be no lockouts or work stoppages.

(1) The Contractors and Subcontractors shall not cause, incite, encourage or participate in any lockout of employees on the project during the term of this Agreement.

(2) The Union and its members, agents, representatives, and employees shall not allow, incite, encourage, condone or participate in any strike, walkout, slowdown, picketing, sympathy strike or other work stoppage of any nature whatsoever, whether jurisdictional or otherwise, or observe any picket of any nature during the term of this Agreement. Any such action by the Union or its members, agents, representatives or employees shall constitute a violation of this Agreement.

(3) All employees shall continue to work and to perform all their obligations on the project despite the expiration of any local or other collective bargaining agreement. Any future wage or fringe benefit increase, decrease or modification legally negotiated and established by appropriate local collective bargaining agreements of the Local Unions which are signatories to this Agreement shall be paid retroactively to the expiration of the preceding local Agreement.

(4) Should any unauthorized strike, slowdown, stoppage of work or interference with construction occur, the Union shall take all necessary steps to bring such activity to a prompt resolution.

XI. Helmets To Hardhats

A. The Employers and the Unions recognize a desire to facilitate the entry into the building and construction trades of veterans who are interested in careers in the building and construction industry. The Employers and Unions agree to utilize the Center for Military Recruitment, Assessment and Veterans Employment (hereinafter "Center") and the Center's "Helmets to Hardhats" program to serve as a resource for preliminary orientation, assessment of construction aptitude, referral to apprenticeship programs or hiring halls, counseling and mentoring, support network, employment opportunities and other needs as identified by the parties.

B. The Unions and Employers agree to coordinate with the Center to create and maintain an integrated database of veterans interested in working on this Project and of apprenticeship and employment opportunities for this Project. To the extent permitted by law, the Unions will give credit to such veterans for bona fide, provable past experience.

XII. Term of Agreement

A. This Agreement shall become effective on April 15, 2009, and shall remain in full force and effect as long as signatory contractors are working on this project.

B. Either party shall have the right to terminate this Agreement by notifying all other parties, in writing, within at least thirty (30) calendar days from the proposed termination date.

FOR THE OWNER:

JOLIET JUNIOR COLLEGE

TITLE: President

DATE: 4-15-09

FOR THE PROJECT CONTRACTOR:

GILBANE

TITLE: Vice President

DATE: 4/15/09

FOR THE ALLIANCE:

THREE RIVERS CONSTRUCTION

TITLE: Co-Chair TRCA

DATE: 4/15/09

FOR THE BUILDING TRADES:

WILL & GRUNDY BUILDING TRADES

TITLE: Pres.

DATE: 4-13-09

Will County Prevailing Wage for April 2015

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
ASBESTOS ABT-GEN		ALL		38.200	38.700	1.5	1.5	2.0	13.78	10.12	0.000	0.500
ASBESTOS ABT-MEC		BLD		35.100	37.600	1.5	1.5	2.0	11.17	10.76	0.000	0.720
BOILERMAKER		BLD		45.650	49.760	2.0	2.0	2.0	6.970	17.81	0.000	0.400
BRICK MASON		BLD		42.580	46.840	1.5	1.5	2.0	9.850	13.60	0.000	1.030
CARPENTER		ALL		43.350	47.690	2.0	2.0	2.0	11.85	17.47	0.000	0.630
CEMENT MASON		ALL		41.000	43.000	2.0	1.5	2.0	9.900	18.34	0.000	0.500
CERAMIC TILE FNSHER		BLD		35.810	0.000	1.5	1.5	2.0	10.55	8.440	0.000	0.710
COMMUNICATION TECH		BLD		32.250	33.750	1.5	1.5	2.0	13.42	11.32	0.000	0.720
ELECTRIC PWR EQMT OP		ALL		46.100	51.100	1.5	1.5	2.0	10.76	14.87	0.000	0.460
ELECTRIC PWR GRNDMAN		ALL		35.960	51.100	1.5	1.5	2.0	8.390	11.60	0.000	0.360
ELECTRIC PWR LINEMAN		ALL		46.100	51.100	1.5	1.5	2.0	10.76	14.87	0.000	0.460
ELECTRICIAN		BLD		40.000	4.600	1.5	1.5	2.0	14.27	16.39	0.000	1.200
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600
GLAZIER		BLD		40.000	41.500	1.5	2.0	2.0	12.49	15.99	0.000	0.940
HT/FROST INSULATOR		BLD		48.450	50.950	1.5	1.5	2.0	11.47	12.16	0.000	0.720
IRON WORKER		ALL		41.000	42.000	2.0	2.0	2.0	10.04	21.41	0.000	0.780
LABORER		ALL		38.000	38.750	1.5	1.5	2.0	13.78	10.12	0.000	0.500
LATHER		ALL		43.350	47.690	2.0	2.0	2.0	11.85	17.47	0.000	0.630
MACHINIST		BLD		44.350	46.850	1.5	1.5	2.0	6.760	8.950	1.850	0.000
MARBLE FINISHERS		ALL		31.400	32.970	1.5	1.5	2.0	9.850	13.10	0.000	0.600
MARBLE MASON		BLD		41.780	45.960	1.5	1.5	2.0	9.850	13.42	0.000	0.760
MATERIAL TESTER I		ALL		28.000	0.000	1.5	1.5	2.0	13.78	10.12	0.000	0.500
MATERIALS TESTER II		ALL		33.000	0.000	1.5	1.5	2.0	13.78	10.12	0.000	0.500

MILLWRIGHT	ALL	43.350	47.690	2.0	2.0	2.0	11.85	17.47	0.000	0.630
OPERATING ENGINEER	BLD 1	47.100	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 2	45.800	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 3	43.250	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 4	41.500	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 5	50.850	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 6	48.100	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	BLD 7	50.100	51.100	2.0	2.0	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	FLT 1	52.450	52.450	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	FLT 2	50.950	52.450	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	FLT 3	45.350	52.450	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	FLT 4	37.700	52.450	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	FLT 5	53.950	52.450	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	FLT 6	35.000	35.000	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER	HWY 1	45.300	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 2	44.750	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 3	42.700	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 4	41.300	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 5	40.100	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 6	48.300	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER	HWY 7	46.300	49.300	1.5	1.5	2.0	17.10	11.80	1.900	1.250
PAINTER	ALL	40.750	45.500	1.5	1.5	1.5	10.75	11.10	0.000	0.770
PAINTER SIGNS	BLD	33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000
PILEDRIVER	ALL	43.350	47.690	2.0	2.0	2.0	11.85	17.47	0.000	0.630
PIPEFITTER	BLD	46.000	49.000	1.5	1.5	2.0	9.000	15.85	0.000	1.780
PLASTERER	BLD	42.250	44.790	1.5	1.5	2.0	11.40	12.19	0.000	0.650
PLUMBER	BLD	46.650	48.650	1.5	1.5	2.0	13.18	11.46	0.000	0.880

ROOFER	BLD	40.100	43.100	1.5	1.5	2.0	8.280	10.54	0.000	0.530
SHEETMETAL WORKER	BLD	44.000	46.000	1.5	1.5	2.0	10.65	13.06	0.000	0.820
SPRINKLER FITTER	BLD	49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550
STONE MASON	BLD	42.580	46.840	1.5	1.5	2.0	9.850	13.60	0.000	1.030
SURVEY WORKER -> NOT IN EFFECT	ALL	37.000	37.750	1.5	1.5	2.0	12.97	9.930	0.000	0.500
TERRAZZO FINISHER	BLD	37.040	0.000	1.5	1.5	2.0	10.55	10.32	0.000	0.620
TERRAZZO MASON	BLD	40.880	43.880	1.5	1.5	2.0	10.55	11.63	0.000	0.820
TILE MASON	BLD	42.840	46.840	1.5	1.5	2.0	10.55	10.42	0.000	0.920
TRAFFIC SAFETY WRKR	HWY	32.750	34.350	1.5	1.5	2.0	6.550	6.450	0.000	0.500
TRUCK DRIVER	ALL 1	35.650	36.200	1.5	1.5	2.0	7.250	6.319	0.000	0.250
TRUCK DRIVER	ALL 2	35.800	36.200	1.5	1.5	2.0	7.250	6.319	0.000	0.250
TRUCK DRIVER	ALL 3	36.000	36.200	1.5	1.5	2.0	7.250	6.319	0.000	0.250
TRUCK DRIVER	ALL 4	36.200	36.200	1.5	1.5	2.0	7.250	6.319	0.000	0.250
TUCKPOINTER	BLD	42.800	43.800	1.5	1.5	2.0	8.180	12.66	0.000	0.650

Legend: RG (Region)
TYP (Trade Type - All,Highway,Building,Floating,Oil & Chip,Rivers)
C (Class)
Base (Base Wage Rate)
FRMAN (Foreman Rate)
M-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.
OSA (Overtime (OT) is required for every hour worked on Saturday)
OSH (Overtime is required for every hour worked on Sunday and Holidays)
H/W (Health & Welfare Insurance)
Pensn (Pension)
Vac (Vacation)
Trng (Training)

Explanations

WILL COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please

check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS TECHNICIAN

Installation, operation, inspection, maintenance, repair and service of radio, television, recording, voice, sound and vision production and reproduction, telephone and telephone interconnect, facsimile, equipment and appliances used for domestic, commercial, educational and entertainment purposes, pulling of wire through conduit but not the installation of conduit.

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under: Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder;

Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines: ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types: Creter Crane: Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine;

Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEER - FLOATING

Class 1. Craft Foreman; Master Mechanic; Diver/Wet Tender; Engineer; Engineer (Hydraulic Dredge).

Class 2. Crane/Backhoe Operator; Boat Operator with towing

endorsement; Mechanic/Welder; Assistant Engineer (Hydraulic Dredge); Leverman (Hydraulic Dredge); Diver Tender.

Class 3. Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs. or more); Tug/Launch Operator; Loader/Dozer and like equipment on Barge, Breakwater Wall, Slip/Dock, or Scow, Deck Machinery, etc.

Class 4. Deck Equipment Operator, Machineryman/Fireman (4 Equipment Units or More); Off Road Trucks; Deck Hand, Tug Engineer, Crane Maintenance (50 Ton Capacity and Under) or Backhoe Weighing (115,000 pounds or less); Assistant Tug Operator.

Class 5. Friction or Lattice Boom Cranes.

SURVEY WORKER - Operated survey equipment including data collectors, G.P.S. and robotic instruments, as well as conventional levels and transits.

TRAFFIC SAFETY - work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yeards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted

crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".

CERTIFICATION OF CONTRACT/BIDDER

The below signed contractor/bidder hereby certifies that it is not barred from bidding on this or any other contract due to any violation of either Section 33E-3 or 33E-4 of Article 33E, Public Contracts, of the Illinois Criminal Code of 1961, as amended. This certification is required by Public Act 85-1295. This Act relates to interference with public contracting, bid rigging and rotating, kickbacks and bribery.

_____
SIGNATURE OF CONTRACTOR/BIDDER

_____
TITLE

_____
DATE

THIS FORM **MUST** BE RETURNED WITH YOUR BID TO:

Joliet Junior College District #525
Office of Facility Services
Main Campus L Building, L1005
1215 Houbolt Road
Joliet, IL 60431-8938

CERTIFICATE OF COMPLIANCE WITH ILLINOIS DRUG-FREE WORKPLACE ACT

_____, does hereby certify pursuant to the *Illinois Drug-Free Workplace Act* (30 ILCS 580/) that [he, she, it] shall provide a drug-free workplace for all employees engaged in the performance of work under the contract by complying with the requirements of the *Illinois Drug-Free Workplace Act* and, further certifies, that [he, she, it] is not ineligible for award of this contract by reason of debarment for a violation of the *Illinois Drug-Free Workplace Act.*

_____
By Authorized Agent

_____
Date

SUBSCRIBED AND SWORN TO before me
This _____ day of _____, 20__.

_____
NOTARY PUBLIC

EXECUTE AND ATTACH TO PROPOSAL FORM

JOLIET JUNIOR COLLEGE – REQUEST FOR BID

DRAWINGS ARE AVAILABLE ON THE FOLLOWING WEBSITE:
WWW.JJC.EDU/INFO/PURCHASING

BID FORM

To: Joliet Junior College
1215 Houbolt Road
Joliet, IL 60431-8938

Project: _____

Date: _____

Submitted by:

_____
(Full Name)

_____
(Address)

_____
(City, State, Zip)

_____
(Phone) (Fax) (Email)

PART 1 OFFER

Having examined the site and having familiarized itself with the conditions affecting the cost of the work associated with the _____, and with the bidding documents, Bidder herby proposes to perform everything required and to furnish all labor, materials, necessary tools, expendable equipment and transportation services necessary to complete in a workmanlike manner the subdivision of work stated above in accordance with the bidding documents for the following sums:

Base Bid:

_____

Dollars($_____)

Alternate Bid - Provide and install one (1) additional fire hydrant:

_____

Dollars($_____)
Write amounts in both alpha and numeric, in case of discrepancy the lesser amount shown will govern.

We have included herewith, the Security Deposit as required by the Instructions to Bidders.

UNIT PRICES

Unit Prices shall be used, where applicable, to make adjustments to the cost of the Work due to changes. ALL Unit Prices submitted shall be complete in-place prices and include all costs for overhead, profit, bond costs, labor, materials, equipment, engineering, shop drawings and any other incidentals related to the completion of the Work, and shall remain firm for the period of the contract.

	Unit Prices (furnished and installed unless noted otherwise): **Description**	**Cost**
1	Silt Fence (installation and Removal) per LF based on 100 LF	$ / LF
2	Excavation & Haul off / CY – non-contaminated based on 100 CY	$ / CY
3	Asphalt saw cut & demolition Remove Off Site – 6" depth / SY	$ / SY
4	Concrete saw cut & demolition Remove Off Site– 6" depth / SY	$ / SY
5	Additional Compacted Clean Fill (Brown Clay) – in place based on 100 CY Import From Off Site	$ / CY
6	Additional Topsoil/Black dirt in place (rough graded) based on 100 CY Import From Off Site	$ / CY
7	Additional orange snow fence installed: per linear foot.	$ / LF
8	Rock excavation- Remove and haul	$ / CY
9	Hydroseeding Provide and Install	$ /SY

COST AND QUANTITY BREAKDOWN

In order to properly evaluate the Proposal, provide the following information. The Scope of Work to be awarded will not be influenced by the cost and quantity information requested here. Do NOT include the cost of any alternates in base bid or in the following information. Cost and quantity breakdown shall include all related work to the subject category.

Cost Breakdown:

Erosion and Sed. Control Measures	$
General Conditions	$
Cleanup of Own Debris	$
Allowances described above	$15,000.00
Total Performance & Payment Bond cost	$
Mobilization	$
Shop Drawings & Submittals	$
Miscellaneous not included above (define below)	$
Site Demolition & Removal	$
Excavation- General and Top Soil	$
Water Main Work	$
Site Concrete and Asphalt Work	$
Total Bid (Total of all items above including the Allowances) (not including the alternates)	$
Estimated total of On-Site Man-hours (required)	_____ (Man-hours)

Quantity Breakdown:

	Item Description	Unit	Quantity	Unit Price	Total Price
1.	Silt Fence	LF	1,572		
2.	Inlet Protection	EA	3		
3.	Construction Fence	LF	300		
4.	Saw Cut	LF	56		
5.	Remove and Replace Concrete Curb and Gutter	LF	10		
6.	Remove and Replace PCC Sidewalk	SF	40		
7.	Remove and Replace Bituminous Pavement	SF	100		
8.	Remove and Replace Sign	EA	1		
9.	Remove Existing Water Main	LF	300		
10.	Protect Trees	EA	1		
11.	Rock Excavation (Trench)	CY	100		
12.	6" Valve in Vault	EA	1		
13.	10" Valve in Vault	EA	1		
14.	12" Valve in Vault	EA	2		
15.	6" DIP Water Main	LF	20		
16.	10" DIP Water Main	LF	20		
17.	12" DIP Water Main	LF	1556		
18.	Fire Hydrants w/Aux Valve	EA	3		
19.	Trench Backfill	CY	38		
20.	Restoration	SY	4,000		
				Total Improvements	

PART 2 ACCEPTANCE

This offer shall be open to acceptance and is irrevocable for thirty (30) days from the Bid closing date.

If the bid is accepted by the Owner within the time period stated above, we will:

A. Execute the Agreement within ten (10) days of receipt of Notice of Award.

B. Furnish the required bonds within ten (10) days of receipt of Notice of Award in the form described in the Instruction to Bidders.

C. Furnish the required Certificate of Insurance within ten (10) days of receipt of Notice of Award in the form and amounts described in the Instruction to Bidders.

D. Commence work as established by the written Notice to Proceed.

If this Bid is accepted within the time stated, and we fail to commence the Work or we fail to provide the required Bonds(s), the Security Deposit shall be forfeited as damages to the Owner by reason of our failures.

In the event our Bid is not accepted within the time stated above, the required security deposit shall be returned to the undersigned, in accordance with the provisions of the Instructions to Bidders; unless a mutually satisfactory arrangement is made for its retention and validity for an extended period of time.

PART 3 CONTRACT TIME

If the Bid is accepted, we will:

A. Complete the work in manner consistent to meet the requirements of the schedule (_____) consecutive calendar days from the date established as the Date of Commencement in the Notice to Proceed.

B. Contractor has examined the Schedule included in these documents and takes no exception, or records the following exceptions:

_____

_____

_____

PART 4 CONTRACTOR'S FEES FOR CHANGES IN THE WORK

Lump Sum of Time and Materials Changes: We the undersigned bidder agree that the following percentages for overhead and profit shall be added to job costs for the net amount of work added to or deleted from the contract by written lump sum or time and material change orders recommended by the Engineer and approved by the Owner:

Add to net extra for job costs for additional work performed by:

Our own forces 12%
Our subcontractor 5% (including assigned subcontractors)

Note: Insurance, bond, and taxes are considered as job cost items and are not included in the percentages listed above.

PART 5 ADDENDA

The following Addenda have been received. The modifications to the Bid Documents noted therein have been considered and all costs thereto are included in the Bid Sum.

Addendum # _____ Dated _____

Addendum # _____ Dated _____

Addendum # _____ Dated _____

PART 6 SUBCONTRACTORS

A. The following work will be performed (or provided) by the Subcontractors we have indicated below:

	Name of Subcontractor	Work Performed
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

B. We understand, and hereby agree, that we are obligated to use the indicated subcontractors, unless prior written permission to change has been obtained from the Owner.

PART 7 RELATED WORK EXPERIENCE

List a minimum of three jobs of similar type and scope performed in the last five years:

1. Client:_____

   Building:_____

   Phone:_____

   Contact Name:_____

   Dollar Amount:_____

2. Client:_____

   Building:_____

   Phone:_____

   Contact Name:_____

   Dollar Amount:_____

3. Client:_____

   Building:_____

   Phone:_____

   Contact Name:_____

   Dollar Amount:_____

PART 8 BID FORM ADDITION

Apprenticeship and Training Certification

In accordance with the Illinois Procurement Code, the Bidder certifies that the work to be performed by it and/or its subcontractors shall, at the time of such bid opening and at the time of the performance of work pursuant to the terms of this Contract, shall have participated in the approved apprenticeship and training programs as provided for above. The bidder shall list, in the space below, the official name of the program sponsor holding the certificate of registration or all types of work or crafts in which the bidder is a participant and that will be performed by the bidder and its sub-contractor's employees. Work that will be sub-contracted shall be indicated to be subcontracted work as provided for herein. **Failure to list required information may result in disqualification of bid.**

_____

_____

_____

_____

_____

_____

_____

_____

PART 9 CONTRACTOR EVALUATION

Upon completion of the project, a Construction Contractor Performance Evaluation form will be completed by the A/E and the JJC Project Coordinator. The contractor will be evaluated in the following categories:

- Professionally Administered and Supervised Work
- Business Practices
- Overall Performance
- Workmanship
- Timeliness
- Project Management

PART 10 BID FORM SIGNATURES(S)

The Corporate Seal of:

_____

(Bidder – please print the full name of your Proprietorship, Partnership, or Corporation)

Was hereunto affixed in the presence of:

_____	_____
(Authorized signing officer)	(Title)

(Seal)

_____	_____
(Authorized signing officer)	(Title)

If the bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

END OF SECTION