## OWNER:

McHENRY COUNTY COLLEGE 8900 U.S. HIGHWAY 14 CRYSTAL LAKE, IL 60012 PHONE: (815) 455-8564 MR. TODD WHEELAND - DIRECTOR OF FACILITY CONTRACTS AND PROJECTS

### **ENGINEER / SURVEYOR:**

HR GREEN, INC. 420 NORTH FRONT STREET, SUITE 100 MCHENRY, IL 60050 PHONE: (815) 385-1778 JOSEPH F. VÁVRINA, P.E. – PROJECT MANAGER DOUG STALKER - PROJECT SURVEYOR

#### LANDSCAPE ARCHITECT:

HR GREEN, INC. 420 NORTH FRONT STREET MCHENRY, IL 60050 PHONE: (815) 385-1778 NATHAN SEHMER, PLA

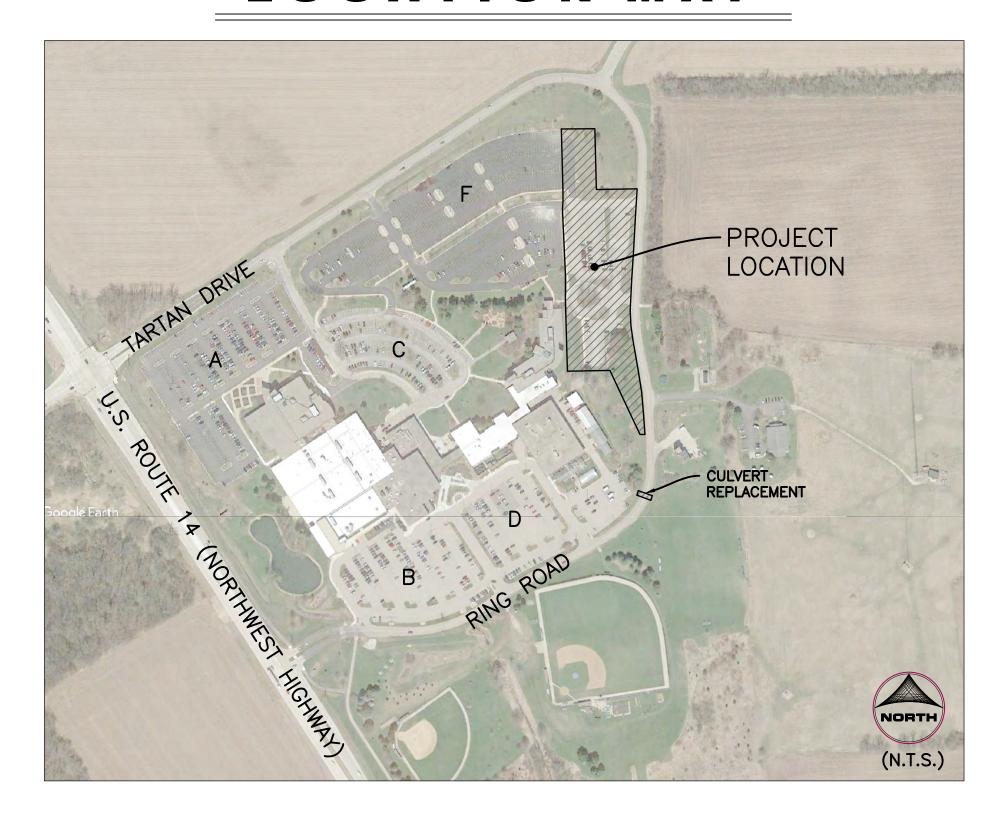
#### **LIGHTING CONSULTANT:**

1100 WARRENVILLE ROAD, SUITE 400W NAPERVILLE, IL 60563 PHONE: (630) 753-8535

# MCHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS 8900 US Hwy 14



# LOCATION MAP



**UTILITY CONFLICTS:** UTILITY SERVICE CITY OF CRYSTAL LAKE, ENGINEERING DIVISION

TELEPHONE #

(815) 356-3614

(815) 356-3614

(815) 356-3605

(847) 608-2382

(815) 394-7270

(815) 261-9406

(847) 705-4143

CRYSTAL LAKE, IL 60014 MR. MICHAEL MAGNUSON

100 WEST WOODSTOCK STREET

SANITARY SERVICE: CITY OF CRYSTAL LAKE, ENGINEERING DIVISION

> 100 WEST WOODSTOCK STREET CRYSTAL LAKE, IL 60014 MR. MICHAEL MAGNUSON

CITY OF CRYSTAL LAKE, ENGINEERING DIVISION

100 WEST WOODSTOCK STREET CRYSTAL LAKE, IL 60014 MRS. ABIGAIL WILGREEN

ELECTRIC SERVICE: COMMONWFALTH FDISON

ELGIN, IL 60123 MR. JAYVEE ROLDAN

TELEPHONE SERVICE: AT&T ILLINOIS

Dial 811 or 1-800-892-0123

Know what's below.

Call before you dig.

222 WEST JACKSON STREET WOODSTOCK, IL 60098 MR. STEVEN JONES

NICOR

GAS SERVICE:

300 WEST TERRA COTTA AVENUE CRYSTAL LAKE, IL 60014 MS. LORA WIELAND

ILLINOIS DEPARTMENT OF TRANSPORTATION ROADWAY AUTHORITY:

> 201 WEST CENTER COURT SCHAUMBURG, IL 60196 MR. TOMAS GALLENBACH

# NOTE:

- HR GREEN, INC. IS TO BE NOTIFIED 3 DAYS PRIOR TO CONSTRUCTION START.
- HR GREEN, INC. SHALL BE INCLUDED IN ALL PRE-CONSTRUCTION MEETINGS.
- PLANS WERE PREPARED WITH THE INTENT THAT HR GREEN, INC. WILL DO ALL CONSTRUCTION STAKING.
- ANY DISCREPANCIES ON THIS PLAN SET MUST BE NOTED AND HR GREEN, INC. NOTIFIED PRIOR TO ACTUAL CONSTRUCTION.



420 N. FRONT STREET, SUITE 100 | McHENRY, IL 60050

Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com

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WITH THE FOLLOWING:

48 hours before you dig

(Excluding Sat., Sun. & Holidays)

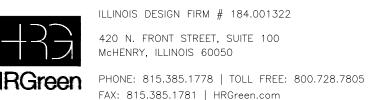
CITY-TOWNSHIP <u>Crystal Lake - Dorr</u>

COUNTY <u>McHenry</u>

CALL JULIE 1-800-892-0123

SEC. & 1/4 SEC. NO.# <u>SW 1/4 OF SEC-25-T-44N-7E</u>

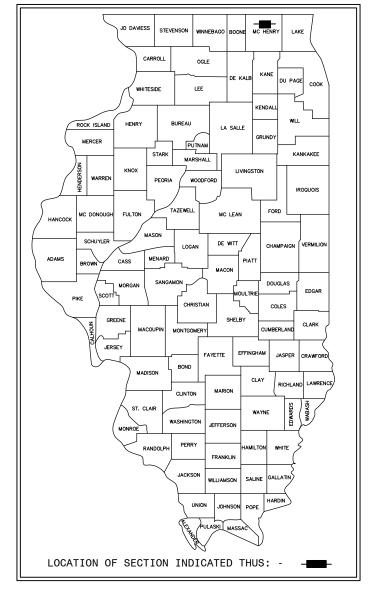
NO.	DATE	BY	REVISION DESCRIPTION
1	11/09/18	ECH	FOR PERMIT/BID
2	12/19/18	ECH	ADDENDUM #1
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McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK COVER SHEET



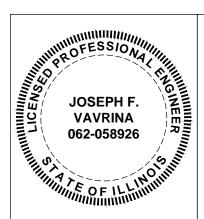
# SHEET INDEX

CIVIL/SITEWORK COVER SHEET GENERAL NOTES, SPECIFICATIONS & LEGEND DEMOLITION PLAN SITE PLAN C - 04GRADING & EROSION CONTROL PLAN GRADING & EROSION CONTROL PLAN C-06 GRADING DETAILS EROSION CONTROL NOTES & DETAILS C-08 EROSION CONTROL DETAILS STANDARD CONSTRUCTION DETAILS C - 09C - 10STANDARD CONSTRUCTION DETAILS STANDARD CONSTRUCTION DETAILS LANDSCAPE L-01 TREE PRESERVATION PLAN

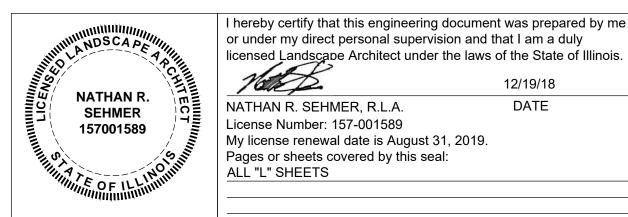
L-02 LANDSCAPE PLAN LANDSCAPE DETAILS LANDSCAPE DETAILS & NOTES

EΟ ELECTRICAL COVER SHEET SITE PLAN - ELECTRICAL DEMOLITION SITE PLAN - ELECTRICAL PARTIAL FIRST FLOOR PLAN - ELECTRICAL

SITE PLAN - PHOTOMETRIC ELECTRICAL DETAILS AND SCHEDULES



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Illinois. 12/19/18 JOSEPH F. VAVRINA, P.E. DATE License Number: 062-058926 My license renewal date is November 30, 2019. Pages or sheets covered by this seal: ALL "C" SHEETS



or under my direct personal supervision and that I am a duly licensed Landscape Architect under the laws of the State of Illinois. 12/19/18 NATHAN R. SEHMER, R.L.A. License Number: 157-001589 My license renewal date is August 31, 2019. Pages or sheets covered by this seal: ALL "L" SHEETS

FOR PERMIT/BID

#### SPECIFICATIONS & GENERAL NOTES

- All items of this project shall be governed by specifications included in the documents listed below:
- A. "Standard Specifications for Road and Bridge Construction" prepared by the Department of Transportation of the State of Illinois and adopted by said department (latest revision).
- B. "Supplemental Specifications and Recurring Special Provisions" adopted by the Illinois Department of Transportation (latest revision date).
- C. "Standards and Specifications for Soil Erosion and Sediment Control" (latest revision).
- D. "Standard Specifications for Water and Sewer Main Construction in Illinois" (latest revision). In addition the following special provisions supplement the said specifications, and in case of conflict with any part or parts of said specifications, these special provisions shall take precedence and shall
- 1. SCOPE OF WORK. The proposed improvement consists of supplying all the necessary labor, material and equipment to satisfactorily construct and install all improvements according to the plans designated as "McHENRY COUNTY COLLEGE PARKING LO E & F IMPROVEMENTS."
- 2. CONSTRUCTION OF UNDERGROUND UTILITIES
  - A. Excavation: Where working conditions and right-of-way permit, pipe line trenches with sloping sides mav be used.

The slopes shall not extend below the top of the pipe, and trench excavations below this point shall be made with vertical sides with widths not exceeding those specified herein for

Open-cut trenches shall be sheeted and braced as required by the governing State and Federal laws and municipal ordinances, and as may be necessary to protect life, property, or

Where firm foundation is not encountered at the grade established due to unsuitable soil, all such unsuitable material shall be removed and replaced with approved compacted granular

- B. Width of trench: See trench detail.
- Removal of water: Contractors shall, at all times durina construction, provide and maintain ample means and devices with which to remove and properly dispose of all water enterina the excavations. No sanitary sewer shall be used for disposal of trench water, unless specifically approved by the Engineer and then only if the trench water does not ultimately arrive at existing pumping or sewage treatment facilities.
- D. Bedding of pipe: All pipe shall be installed on a bed of approved, compacted granular material unless otherwise approved by the City Engineer. The bedding and backfilling of excavated materials shall be cleared with City first and be installed as per typical trench
- E. Special backfill: Whenever the excavation is in existing or proposed street, parking areas, driveways, or other paved areas, the trench shall be backfilled with approved selected granular material, compacted in place. The top 12" of the backfill shall be filled with road gravel or crushed stone and maintained as a temporary surface for the normal use of the area. Special backfill shall meet the requirements of the detail UG-03 found on Sheet C-16. Note: Excavated materials may be used if approved by the City Engineer.
- Restoration of drainage: As soon as possible after backfilling the trench, all ditching, grading and shaping necessary to restore the original drainage in the area of work shall be performed. Culverts removed during the course of the work shall be replaced as soon as practicable.
- Adequate temporary drainage facilities shall be provided during construction.
- G. Utilities: The Contractor shall notify all utilities prior to the installation of any pipe lines. Where conflict exists between underground utilities and the proposed underground piping requiring a revision to the plans, such construction shall not be undertaken until such changes are approved by the City Engineer in writing.
- The subgrade shall be free of unsuitable material and shall be prepared in accordance with the recommendations noted in the geotechnical report prepared by Midland Standard Engineering and Testing, INC. dated October 23, 2013 for this project. Testing for compaction shall be the responsibility of the contractor. The City of Crystal Lake will require a proof—roll test if warranted by final soil compaction. This also applies to the parking lot and aisle subgrade and also upon gravel placement. All topsoil and any organic materials <u>must</u> be removed.
- 4. Easements for the existing utilities, both public and private, and utilities within public rights-of-way are shown on the plans according to available records. The Contractor shall be responsible for determining the exact location in the field of these utility lines and their protection from damage due to construction operations. If existing utility lines of any nature are encountered which conflict in location with new construction, the Contractor shall notify the Engineer so that the conflict may be resolved.
- 5. Contractor shall be responsible for securing all Permits including municipal permits.
- INSPECTION. All improvements shall be subject to inspection by a duly authorized and aualified City inspector both during the course of construction and after construction is complete. The Inspector shall have authority over materials of construction, methods of construction and workmanship to insure compliance with working drawings and specifications. The Contractor shall provide for reasonable tests and proof of quality of materials as requested by the Inspector. Inspector shall have forty-eight (48) hours notice prior to constru
- 7. Wherever a sewer crosses under a water main, the minimum vertical distance from the top of the sewer to the bottom of the water main shall be 18". Furthermore, a minimum horizontal distance of 10' between sanitary sewers and water mains shall be maintained. If either the vertical or horizontal distances described above cannot be maintained, or the sewer crosses above the water main, the sewer pipe shall be pipe of water main type quality and water main quality joints, or the water main shall be encased in a steel sleeve for a perpendicular distance of 10' on each side of
- 8. STORM SEWER MATERIAL

Storm sewers shall be of reinforced concrete pipe conforming to ASTM C76 minimum Class III with O-rings conforming to ASTM C443. All inlet connections shall be concrete sewer pipe. ASTM C14 for extra strength pipe. All Storm Sewers denoted as PVC Storm Sewer shall conform to ASTM D 3034, type PSM for sizes 10"-15" and ASTM F-679-89 for sizes 18"-36" Minimum acceptable SDR shall be 35. The pipe shall be made of PVC plastic having a minimum cell classification of 12454-C, and shall be have a minimum pipe stiffness of forty-six (46) lbs. per inch per inch (317 kpa). Joints for PVC pipe should be the Integral Bell Gasket type with elastomeric gaskets complying with ASTM F-477 and ASTM D-3212. All inlet connections shall be concrete sewer pipe, ASTM C14 for extra strength pipe.

- 9. Storm Sewer Manholes and Catch Basins
- Manholes and catch basins shall have precast reinforced concrete barrel sections conforming to ASTM C478 with preformed bituminous joints and with integral precast—in—place bottoms. Precast slab bottoms may be used for manholes to be built in existing storm sewerage
- B. No more than two precast concrete adjusting rings shall be allowed for a maximum height adjustment of eight inches. all structures shall be wrapped with fabric around the frame, adjusting rings, and down six inches onto the structure.
- C. Each manhole shall have a poured Class SI concrete bench carefully shaped to drain to the
- - A. Inlets shall be constructed of precast reinforced concrete conforming to ASTM C478 with "O—ring or preformed bituminous joints and with precast—in—place bottom. Inlets shall have a wall thickness of no less than four inches.
  - B. No more than two precast concrete adjusting rings shall be allowed for a maximum heiaht adjustment of eight inches. All structures shall be wrapped with fabric around the frame, adjusting rings, and down six inches onto the structure.

C. A Class SI concrete bench shall be poured in the bottom of each inlet and shaped to drain

- to the outlet pipe. The fall across the inlet shall be no less than four inches
- 15. STORM SEWER FRAMES AND LIDS. All frames not falling in the flow line of the curb and gutter shall be Neenah 2504 or as noted on the plans with a 1" pickhole and the word "Storm" cast in the lid. All curb inlets, and catch basins in gutter lines shall be Neenah R—3281 Frame and Grate, or as noted on plans, with ENVIRO logo where Type B-6.12 curb and gutter is specified. All storm sewer grates shall have the ENVIRO Logo on them. All bituminous joining compound for manholes and catch basins shall be RAM-NEK or E-Z STICK.
- 16. PROTECTION OF WATER MAIN AND WATER SERVICE LINES. Water mains and water service lines shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service
- A. Water Service Lines

- 1. Horizontal Separation
  - a. Water mains shall be laid at least 10' horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection. b. Water mains may be laid closer than 10' to a sewer line when:
    - (1) Local conditions present a lateral separation of 10';

vertical separation of 18".

(2) The water main invert is at least 18" above the crown of

- (3) The water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer with a minimum
- c. Both the water main and drain or sewer shall be constructed of slip-on or nechanical joint cast or ductile iron pipe, or PVC pipe meeting the requirements of Section 653.111 when it is impossible to meet (a) or (b) above. The drain or sewer shall be pressure tested to the maximum expected surcharge head before
- 2. Vertical Separation.
  - a. A water main shall be laid so that its invert is 18" above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within 10' horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with ioints equidistant from the sewer or drain.
  - b. Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, or PVC pipe meeting requirements of Section
  - (1) It is impossible to obtain the proper vertical separation as described in (a)
  - (2) The water main passes under a sewer or drain.
  - c. A vertical separation of 18" between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main
  - d. Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least 10'.
- B. Special Conditions. Alternate solutions shall be presented to the Agency when extreme topographical, geological or existing structural conditions make strict compliance with (A) and (B) above technically and economically impractical. Alternate solutions will be approved provided water-tight construction structurally equivalent to approved water main material is
- 17. The Contractor may not remove any material from the site except as directed by the Owner or Engineer in the case of excess material.
- 18. EROSION CONTROL.

It shall be the Contractor's responsibility to properly control erosion on the jobsite. Any siltation of conduits, structures, or ditches shall be cleaned and maintained by the Contractor until the seeding has taken hold. All washouts, gullies, etc. will be regraded and reseeded by the Contractor. The Contractor's responsibility for erosion control shall extend throughout the construction process. The Contractor shall be responsible for clean-up of paved surfaces within and adjacent to the project on a timely basis and/or at the direction of the City Engineer.

- 19. TOPSOIL PLACEMENT.
- Contractor shall place stockpiled topsoil or imported material on all disturbed areas with 6" topsoil raked smooth to be ready for landscaping (seeding, sod, etc.).
- 20. BITUMINOUS CONCRETE. Refer to pavement sections on this sheets C-16 AND C-19 for type and
- 21. The Engineer and City of Crystal Lake Engineering Department shall be notified if, during construction, any buried field tiles are exposed or disturbed. The Contractor shall reconnect said field tiles if deemed necessary.
- 22. Contractor shall provide insurance coverage as per Article 107.27 of the Standard Specifications. The "Department" shall be taken to mean HR Green Inc. The policy of insurance shall include HR Green, Inc., the City of Crystal Lake and it's Agents as an additional insured or provide separate coverage with an Owner's Protective Policy, as per the amounts stated in the Standard Specifications. No work shall begin until the certificate of insurance is on file with the Engineer.
- 23. All handicapped parking signs must have a \$250.00 fine sign attached.

All costs for insurance shall be considered incidental to the contract.

- 24. Lighting shall be constructed as per the electrical plan, done under separate contract by Electrical Consultant. All conduit shall be placed outside of any municipal easements except for authorized 90° crossinas.
- 25. The Contractor shall be responsible for the installation and maintenance of adequate signs, traffic control devices, and warning devices to inform and protect the public during all phases of construction. See City Standard Traffic Control detail for lane closures of public roads.
- 26. The Engineer shall be responsible for the following:
  - A. To visit the construction site in order to better carry out the duties and responsibilities assigned by the Owner and undertaken by the Engineer; and
  - B. The Engineer shall not, during such visits or as a result of such observations of the Contractor's work in progress, supervise, direct, have control over the Contractor's work, nor shall the Engineer have the authority over the responsibility for the means, methods, techniques, sequences, or procedures of construction selected by the Contractor, for safety precautions and programs incidental to the work of the Contractor, or for any failure of the Contractor to comply with laws, rules, regulations, ordinances, codes or orders applicable to the Contractor furnishing and performing his work. Accordingly, the Engineer can neither quarantee the performance of the construction contracts by the Contractor nor assume responsibility for the Contractor's failure to furnish and perform his work in accordance with the Contract Documents.
- 27. No construction plans shall be used for construction unless specifically marked "For Construction." Prior to commencement of construction, the Contractor shall verify all dimensions and conditions affecting their work with the actual conditions at the job site. In addition, the Contractor must verify the Engineer's line and grade stakes. If there are any discrepancies from what is shown on the construction plans, he must immediately report same to the Engineer before doing any work, otherwise the Contractor assumes full responsibility. In the event of disagreement between the construction plans, standard specifications and/or special details, the Contractor shall secure written instructions from the Engineer prior to proceeding with any part of the work affected by omissions or discrepancies. Failing to secure such instructions, the Contractor will be considered to have proceeded at his own risk and expense.
  - In the event of any doubt or question arising with respect to the true meaning of the construction plans or specifications, the decision of the Engineer shall be final and conclusive.
- 28. The Contractor shall indemnify and hold harmless the City ,City's Engineers their agents and it's employees, HR Green, Inc. and Chick-fil-A, Inc. from and against all claims, damages, losses and expenses, including attorney's fees arising out of or resulting from the performance of the Contractor's work. In any and all claims against the City or its employees, by any employee of the Contractor, or anyone directly or indirectly employed by the Contractor, or anyone for whose acts the Contractor may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of damages, waiver of subrogation compensation or benefits payable by or for the Contractor under Workmen's Compensation acts, disability benefit acts or other employee
- 29. Sawing of removal items as noted on the plans, specified in Section 440 of the Standard Specifications, or as required by the engineer, shall be considered incidental to the cost of the item being removed, and no extra compensation will be allowed, unless otherwise specified.
- 30. SIGN PANEL TYPE 1, METAL POST TYPE B. This work shall consist of furnishing and installing Type 1 sign panels on U-channel, and break away sign supports as indicated on the plans. Sign assemblies shall meet the requirements of Standard Specifications for Traffic Control Items.

Installation of sign assemblies shall be as specified on the plans, in accordance with the Illinois

Manual on Uniform Traffic Control Devices and as directed by the Engineer. Furnishing, fabricating and installing sign assemblies will be paid for at the contract unit price per square foot for Sign Panel — Type 1 which price will be payment in full for all labor and material

necessary to fabricate and install each sign assembly specified on the plans. The posts, including

- the break away assembly, shall be paid for at the unit price per foot for Metal Post Type B.
- 31. PROTECTIVE COAT. This work shall be in accordance with Section 420 of the Standard Specifications insofar as applicable with the following revision.
- The protective coat shall be applied to all exposed surfaces of Combination Concrete Curb and Gutter, Concrete Median and Concrete Corrugated Median.
- This work will be paid for at the contract unit price per square yard for Protective Coat. 32. COMBINATION CONCRETE CURB AND GUTTER. Concrete curb, concrete gutter and combination concrete curb and gutter shall be constructed, measured and paid for in accordance with Section 606 of the Standard Specifications except as follows:
  - Revise the last sentence of the second paragraph of Article 606.07 to read as follows: "The traverse joints shall be contraction joints spaced on 12-foot
- Any City requirements regarding expansion & contraction joints shall govern construction.
- 33. A performance augrantee shall be required (letter of credit) for all public utilities. Also, a two year maintenance bond shall be established upon completion of work.
- 34. All pavement markings on main access drives, approaches and parking lot shall be painted with two (2) coats of WHITE SHERWIN WILLIAMS "PROMAR TRAFFIC MARKING." Pavement Striping: All proposed pavement striping to be paint.
- All Handicap striping shall be yellow. 35. All curb & gutter crossings over trench locations shall be reinforced with 2-#4 rebar extended 2'
- 36. Where storm sewer is located above the water main, the reinforced concrete pipe shall have
- O-rings to provide a water tight seal and to create a water quality pipe. All sidewalks shall be installed to accommodate the handicapped. A Type "A" Ramp shall be
- installed in accordance with I.D.O.T. Standard Detail 424001-001, or the detail shown on the plan. Color of truncated domes shall be contrasting with the adjacent surface. Contractor to coordinate color with owner prior to ordering truncated dome panels. 38. CONCRETE PAVEMENT. The contractor will need to provide a grid spacing layout for approval by
- the engineer. The curing requirements should follow Section 1022.01, (b) with fugitive dye as noted in the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Edition. Sealers should follow Section 1026 of the Illinois Department of Transportation Standard
- Joint sealing shall follow Section 1058 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Latest Editio

Specifications for Road and Bridge Construction, Latest Edition

- The concrete curb shall be tied to the concrete pavement. Use No. 6, 30" long bar at 48" O.C. Alternatively the curb can be poured monolithically with the concrete pavement.
- 39. SIDEWALKS. Unless otherwise shown on the plans, the proposed sidewalks in front of the site shall be constructed when the site work is substantially complete.
- ALL PUBLIC AND PRIVATE SIDEWALKS SHALL BE CONSTRUCTED WITH A MAXIMUM RUNNING SLOPE OF NO GREATER THAN 1:20 (FT/FT) - 5% GRADIENT

All materials shall meet the requirements of the "Standard Specifications for Road and Bridge Construction" of the Illinois Department of Transportation. Concrete shall be at least a six (6) bag mix, 4% to 6% air entrained, and shall have a slump of no less than two (2") inches nor more than four (4") inches. Fiberglass reinforced additives shall be used on all sidewalks extending through driveways. Sidewalks shall be placed on a minimum of four (4") inches of CA-6 crushed stone or Grade 9 compactable crushed stone. Driveway crossings for sidewalks shall be 6" P.C.C. with (4") inches of CA-6 crushed stone or Grade 9 compactable crushed stone.

Pre-molded bituminous expansion joints one-half (1/2") inch thick shall be placed every 50 feet minimum and one—half (1/2") inch thick between the sidewalk and all structures, which extend through the sidewalk. Control joints shall be on five (5') foot centers.

The side edges of the sidewalk shall have rounded edges and the surface shall be "broom" finished. Protection and Curing: All exposed surfaces of concrete shall be protected against rain. The concrete shall be cured for a minimum period of three days after placing by one of the following

Impervious paper Membrane curina compound

When the temperature of the air is expected to drop below 40 degrees F. within 24 hours placing the concrete shall be protected with nine inches of loose, dry straw and a layer of burlap other acceptable material, for a period of at least five days.

- 40. The concrete sealer, in addition to conforming with the referenced Standard Specification section, shall be selected from the current IDOT approved product list for Plural Component Concrete Sealers, or equal. The concrete sealer must dry to a clear finish. All exterior concrete surfaces as well as the segmental block retaining wall shall be sealed. The contractor shall provide documentation from the sealant provider, segmental block wall supplier and concrete pavement supplier noting the sealer is compatible with all exterior concrete surfaces that it is to be applied Contractor to also provide cut sheets of the desired sealer to the engineer for approval prior
- 41. All surplus soil that will need to be hauled and disposed of offsite will need to be certified that it is not contaminated as defined under 415 ILCS 5/3.160 and any fees, taxes, surcharges charged by or through the operator(s) of clean construction or demolition debris (CCDD) or uncontaminated soil fill operations for the acceptance of uncontaminated soil shall be paid for by the contractor and those fees included in their bid price.
- 42. It is the intent to recycle the bituminous grindings and existing parking lot aggregate base for re-use as structural fill and/or aggregate base course. Contractor to coordinate with on-site geo-technical engineer to verify usability of re-use material as aggregate base course.

SYMBOL LEGEND **EXISTING PROPOSED** SANITARY MANHOLE STORM MANHOLE STORM CATCH BASIN/INLET FLARED END SECTION DRY WELL VALVE VAULT FIRE HYDRANT LIGHT POLE STREET SIGN REGULATORY SIGN UTILITY POLE UTILITY BOX GAS CE IBT TO MAILBOX STORM SEWER  $\longrightarrow$ SANITARY SEWER —— **>**—— <del>\_\_\_</del> CULVERT WATER MAIN \_\_\_\_ w\_\_\_ \_\_\_\_w\_\_ WATER MAIN ENCASEMENT <del>- ///</del>///<del>///</del>-SANITARY FORCE MAIN STORM UNDERDRAIN ——UE—— ELECTRIC LINE —— E —— \_\_\_\_UT\_\_\_ TELEPHONE LINE —— G —— GAS LINE —— G —— \_\_\_\_c\_\_ ——CTV—— CABLE TV LINE  $\infty$ TREE LINE €3 **\*** TREE **CONTOURS** *FENCE* \_\_\_\_ x \_\_\_\_ STONE RIP RAP EROSION CONTROL FENCE ----(QUANTITY SPECIFIED PER PLANS) DRAINAGE DIRECTION ARROW 10-100 YEAR OVERFLOW DIRECTION ARROW

THE SPECIFICATIONS ON THIS SHEET ARE IN CONJUNCTION WITH THE SPECIFICATIONS OUTLINED IN THE PROJECT MANUAL. THE INTENT IS FOR THE SPECIFICATIONS TO WORK TOGETHER AND IF AN DISCREPANCIES ARISE BETWEEN SPECIFICATION THE CONTRACTOR SHALL BRING IT TO THE ATTENTION OF THE ENGINEER. FINAL DETERMINATION AS TO WHICH SPECIFICATION WILL PREVAIL WILL BE DETERMINED BY THE ENGINEER.

FOR PERMIT/BID

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NO. | DATE | REVISION DESCRIPTION 1 | 11/09/18 | ECH | FOR PERMIT/BID 2 |12/19/18| ECH |ADDENDUM #1



FAX: 815.385.1781 | HRGreen.com

ILLINOIS DESIGN FIRM # 184.001322 420 N. FRONT STREET, SUITE 100 McHenry' McHENRY, ILLINOIS 60050 PHONE: 815.385.1778 | TOLL FREE: 800.728.7805

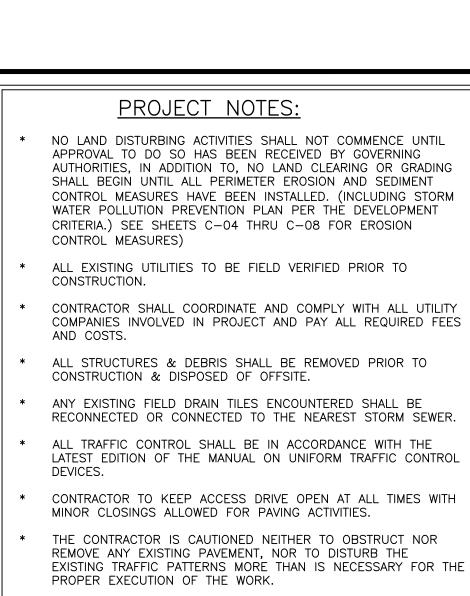


McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

GENERAL NOTES, SPECIFICATIONS & LEGEND

SHEET NO.



\* ALL ASPHALT TO BE MILLED AND STOCKPILED AT LOCATION TO BE DETERMINED BY CONTRACTOR AND COLLEGE.

\* ALL AGGREGATE TO BE SCRAPED AND STOCKPILED AT LOCATION TO BE DETERMINED BY CONTRACTOR AND COLLEGE.

\* ALL TREE, BRUSH AND LANDSCAPE REMOVALS ARE SPECIFIED IN THE LANDSCAPE SHEETS.

\* ALL UNDERGROUND ELECTRIC DEMOLITION AND INSTALLATION IS SPECIFIED IN THE ELECTRIC SHEETS.

#### **STAGING NOTE:**

(STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF OPERATION)

EROSION CONTROL MEASURES AND STOCKPILE STAGING CONSTRUCTION ENTRANCES

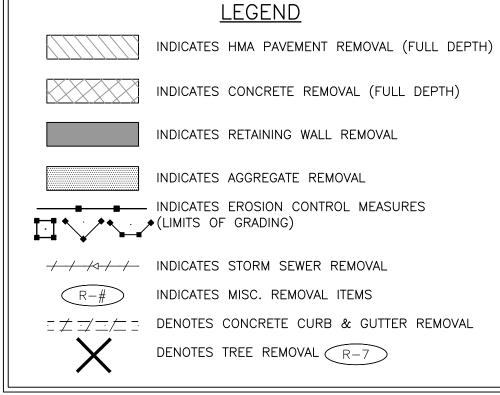
- .. CONSTRUCTION ENTRANCES .. PLAN REMOVALS
- 4. PROPOSED UNDERGROUND5. GRADING
- 6. PAVING7. TOPSOIL RESPREAD/SEED

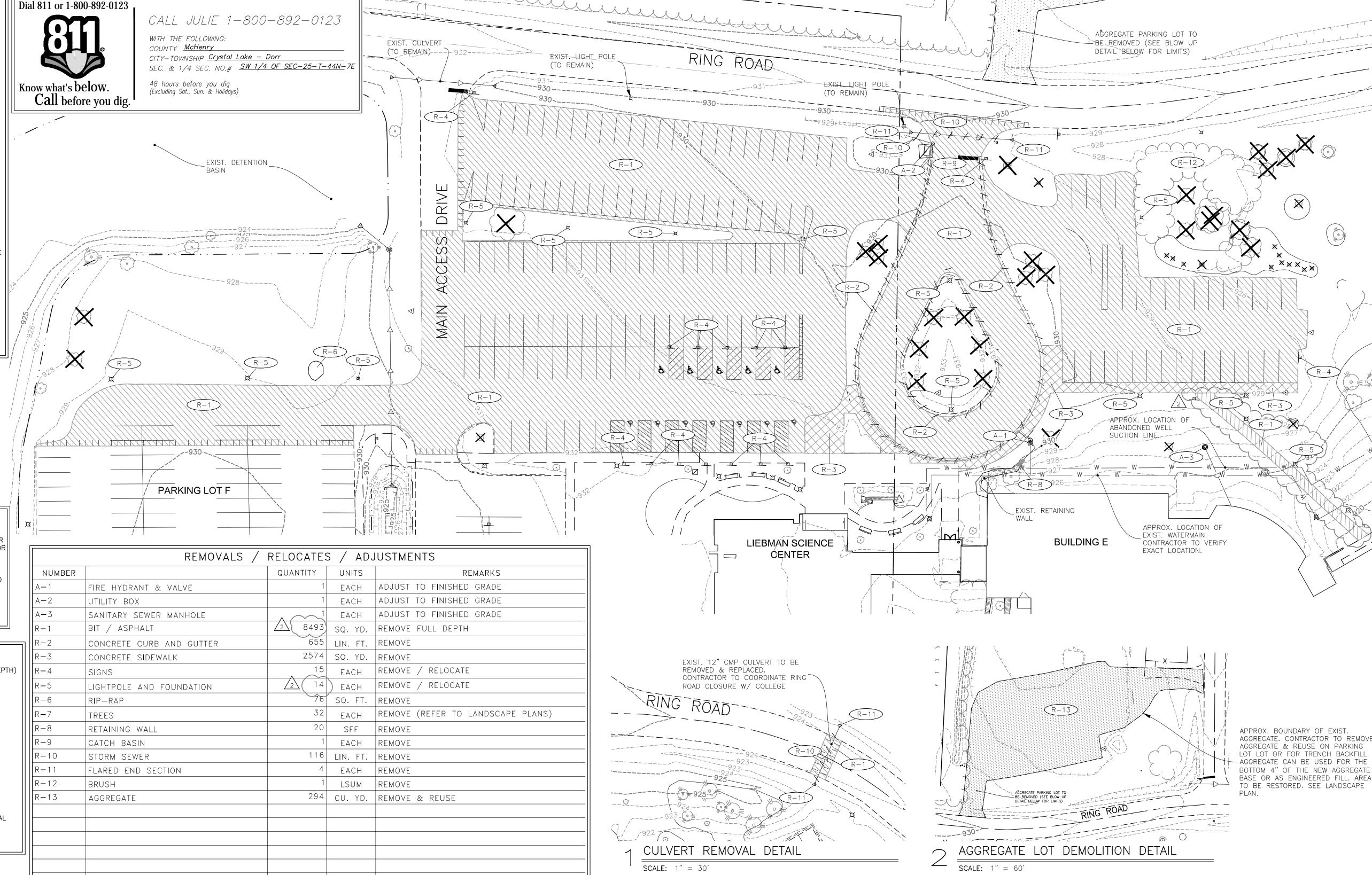
#### NOTES

MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC.

ALL AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND HYDRO SEEDING, SEE LANDSCAPE PLANS FOR DETAILS

• TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL)





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APPROVED: JFV JOB NUMBER: 180186

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McHENRY COUNTY COLLEGE

PARKING LOT E & F IMPROVEMENTS

CRYSTAL LAKE, ILLINOIS

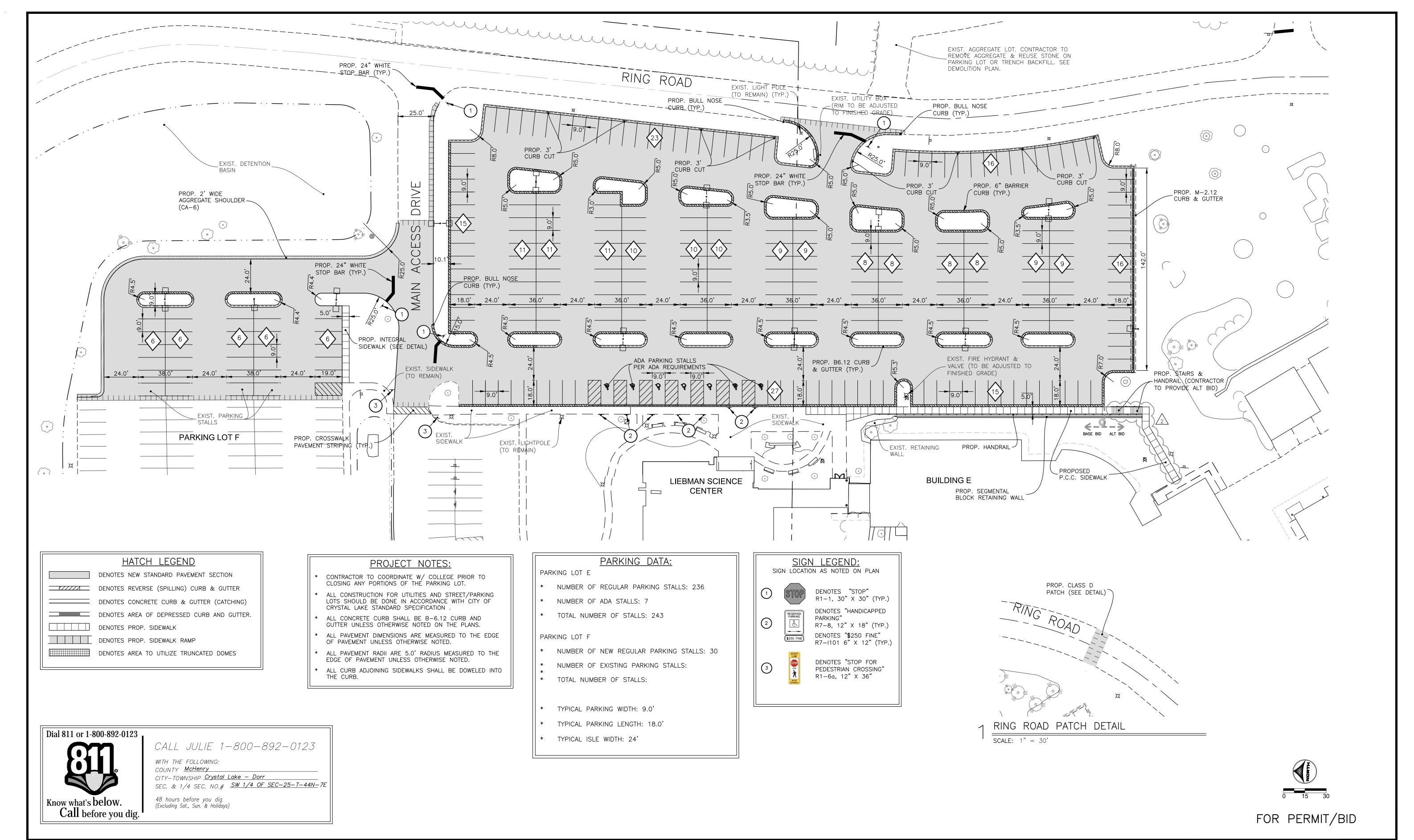
CIVIL SITEWORK

DEMOLITION PLAN

C-02

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HRGreen

ILLINOIS DESIGN FIRM # 184.001322

420 N. FRONT STREET, SUITE 100
McHENRY, ILLINOIS 60050

PHONE: 815.385.1778 | TOLL FREE: 800.728.7805

FAX: 815.385.1781 | HRGreen.com



McHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

SITE PLAN

## **GRADING NOTES:**

- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL DESIGN FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS/DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE UTILITY SERVICE SIZES ARE TO BE DETERMINED BY THE ARCHITECT. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES/SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND ENSURE PROPER DEPTHS ARE ACHIEVED. THE JURISDICTION UTILITY REQUIREMENTS SHALL ALSO BE MET, AS WELL AS COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME.
- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED AS OUTLINED IN THE GEOTECHNICAL REPORT. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL BE SUBMITTED IN COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT.
- ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION SHALL BE AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND SHALL BE COORDINATED WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS.
- THE CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST OSHA STANDARDS AND REGULATIONS, OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE "MEANS AND METHODS" REQUIRED TO MEET THE INTENT AND PERFORMANCE CRITERIA OF OSHA, AS WELL AS ANY OTHER ENTITY THAT HAS JURISDICTION FOR EXCAVATION AND/OR TRENCHING PROCEDURES.
- PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT TOPS SHALL BE ADJUSTED, IF REQUIRED, TO MATCH PROPOSED GRADES IN ACCORDANCE WITH ALL APPLICABLE STANDARDS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE 0.75% MINIMUM SLOPE ALONG ALL ISLANDS, GUTTERS, AND CURBS; 1.0% ON ALL CONCRETE SURFACES; AND 1.5% MINIMUM ON ASPHALT, TO PREVENT PONDING. ANY DISCREPANCIES THAT MAY AFFECT THE PUBLIC SAFETY OR PROJECT COST MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY. PROCEEDING WITH CONSTRUCTION WITHOUT NOTIFICATION IS DONE SO AT THE CONTRACTOR'S
- PROPOSED TOP OF CURB ELEVATIONS ARE GENERALLY 6" ABOVE EXISTING LOCAL ASPHALT GRADE UNLESS OTHERWISE NOTED. FIELD ADJUST TO CREATE A MINIMUM OF 0.75% LONGITUDINAL GUTTER GRADE ALONG CURB FACE. ENGINEER TO APPROVE FINAL CURBING CUT SHEETS PRIOR TO INSTALLATION.
- IN CASE OF DISCREPANCIES BETWEEN PLANS OR RELATIVE TO OTHER PLANS, THE SITE PLAN WILL TAKE PRECEDENCE. IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICTS.
- IO. SITE GRADING SHALL NOT PROCEED UNTIL EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
- 11. SEE EROSION CONTROL PLAN FOR EROSION CONTROL MEASURES AND NOTES.
- 12. ALL EXISTING STRUCTURES, UNLESS OTHERWISE NOTED TO REMAIN, FENCING, TREES, & ETC., WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE. NO ON SITE BURNING WILL BE ALLOWED
- 13. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST.
- 14. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
- 15. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
- 16. NO PART OF THE PROPOSED PROJECT IS LOCATED WITHIN A FLOOD HAZARD
- 17. SPOT ELEVATIONS SHOWN ARE @ EDGE OF PAVEMENT UNLESS OTHERWISE NOTED ON PLAN.
- 18. SEE PLANS FOR EXACT LOCATION OF CONCRETE CURB & GUTTER SHALL BE TYPE B-6.12 CURB UNLESS OTHERWISE NOTED ON THE PLANS.
- 19. ALL STORM SEWER JOINTS SHALL HAVE O-RING GASKETS.
- 20. ALL STORM SEWER PIPE CONNECTIONS TO MANHOLES OR OTHER STRUCTURES SHALL BE CONNECTED THROUGH THE USE OF RUBBER BOOTS.
- 21. MATCH EXISTING GRADES AT PROPERTY LINES AND/OR CONSTRUCTION LIMITS.
- 22. BACKFILL TO THE TOP OF CURBS.
- 23. SITE SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDINGS
- 24. ALL SIDEWALK CROSS SLOPES SHALL BE A MAXIMUM OF 2%. CROSS SLOPE
- 25. DESIGNATED HANDICAP PARKING AREAS SHALL BE GRADED TO A MAXIMUM OF 2%
- 26. SLOPES IN PAVEMENT SHALL BE UNIFORM TO AVOID PONDING OF PAVEMENT. 27. THE CONTRACTOR SHALL CONFINE HIS GRADING OPERATIONS TO WITHIN CONSTRUCTION LIMITS AND EASEMENTS SHOWN ON THE PLANS. ANY DAMAGE TO PROPERTIES OUTSIDE

THE SITE BOUNDARY SHALL BE AT THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

- 28. THE CONTRACTOR SHALL APPLY NECESSARY MOISTURE CONTROL TO THE CONSTRUCTION AREA AND HAUL ROADS TO PREVENT THE SPREAD OF DUST.
- 29. ALL FIELD TILES ENCOUNTERED SHALL BE REPLACED AND/OR CONNECTED TO THE STORM SEWER SYSTEM AND LOCATED AND IDENTIFIED ON THE RECORD PLANS BY THE CONTRACTOR.

# PARKING LOT F MCHENRY COUNTY COLLEGE (MCC) SHALL BE NOTIFIED OF ALL NON IDENTIFIED UNDERGROUND UTILITIES OR CONDUITS DISCOVERED DURING CONSTRUCTION. IF ANY OF THE UTILITY OR CONDUITS NEED TO BE REPAIRED, PLUGGED, REROUTED AND OR ABANDONED IN PLACE, IT SHALL TAKE PLACE PER THE DIRECTION OF THE MCC. ALL AREAS SHALL BE RESTORED WITH 4" TOPSOIL AND HYDROSEEDED (SEE LANDSCAPE PLANS FOR DETAILS) TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL) 30. ALL STORM DRAINAGE CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF CRYSTAL LAKE. 31. ELEVATIONS AND CONTOURS ARE TO STATE PLANE COORDINATES PER NAVD DATUM. 32. ACCESSIBLE PARKING, RAMPS, AND SIGNAGE SHALL COMPLY WITH ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES. 33. 1 WEEK PRIOR TO CONSTRUCTION WITHIN CITY ROW OR ANY CONNECTION TO PUBLIC SEWERS, CONTRACTOR SHALL NOTIFY THE APPROPRIATE CITY ENGINEERING DIVISIONS. 34. THE CONTRACTOR SHALL NOT DISTURB DESIRABLE GRASS AREAS AND DESIRABLE TREES OUTSIDE THE CONSTRUCTION UNITS. THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK OR SERVICE VEHICLES AND EQUIPMENT OR USE THESE AREAS FOR STORAGE OR MATERIALS. STORAGE, PARKING AND SERVICE AREAS WILL BE SUBJECT TO THE APPROVAL OF THE OWNER. 35. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY AREAS OF PAVEMENT OR SIDEWALK NOT TO BE REMOVED THAT IS DAMAGED DUE TO OPERATING EQUIPMENT ON THE PAVEMENT OR SIDEWALK. 36. THE CONTRACTOR MAY BE REQUIRED TO PLACE TEMPORARY WARNING DEVICES AND SAFETY FENCE AT CERTAIN LOCATIONS WHERE REPLACEMENT FEATURES ARE NOT INSTALLED THE SAME DAY, AS DIRECTED BY THE ENGINEER OR THE MCHENRY COUNTY COLLEGE.

EXIST. DETENTION

BASIN

PROP. SILT FENCE

(SEE DETAIL)

RIVE

Z

PROP. INLET

(SEE DETAIL)

EXIST. 15" CMP CULVERT (TO REMAIN)

- 7 STM SWR CB 4' DIA., R-2504 TY D RIM = 928.25

@ 0.40%

- RIM = 929.20INV = 925.45 S 15" RCP
- RIM = 929.55INV = 926.05 S 12" RCPINV = 926.05 N 12" RCP
- 12 119 LIN FT SS RCP, 12"
- 37. ALL CONSTRUCTION WITHIN PUBLIC ROW/EASEMENTS AND/OR ANY CONNECTION TO PUBLIC SEWERS AND STREETS, SHALL COMPLY WITH THE CITY CONSTRUCTION SPECIFICATIONS FOR SUBDIVISIONS AND LATEST EDITION OF IDOT DESIGN STANDARDS
- 38. ALL EXISTING UTILITY TRENCHES THAT ARE PROPOSED TO BE WITHIN PAVEMENT AREAS SHALL BE EXPOSED AND BACKFILLED WITH CA-6 CRUSHED AGGREGATE.
- 39. ALL SUBGRADE, SUBBASE AND BINDER COURSE SHALL BE PROOFROLLED PER THE CITY OF CRYSTAL LAKE DEVELOPMENT ORDINANCES ENGINEERING

NO. | DATE |

1 | 11/09/18 | ECH | FOR PERMIT/BID

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### STORM SEWER TAGS 158 LIN FT SS RCP, 15"

PROP.-INLET PROTECTION

(SEE DETAIL)

INV = 925.00 SE 15" RCP

INV = 925.00 N 15" RCP

- 8 116 LIN FT SS RCP, 15" @ 0.39%
- STM SWR CB 4' DIA., R-2504 TY D INV = 925.45 N 12" RCP
- 10 118 LIN FT SS RCP, 12" @ 0.51%
- 11 STM SWR CB 2' DIA., R-2504 TY D
- @ 0.38%
- 13 STM SWR CB 2' DIA., R-2504 TY D RIM = 929.60INV = 926.50 S 12" RCP
- 14 FES RCP, 15" INV = 928.25
- 15 60 LIN FT SS RCP, 15" @ 0.50%
- 16 FES RCP, 15" INV = 927.95



TEMPORARY

--CONSTRUCTIO<del>N ENTRANCE ---</del>

(SEE DETAIL)

PROTECTION -

(SEE DÈTAIL)

(TO REMAIN)

**BUILDING E** 

INDICATES EROSION CONTROL MEASURES (LIMITS OF GRADING)

(STAGING SUBJECT TO CHANGES PER SITE

CONSTRUCTION ENTRANCES

PROPOSED UNDERGROUND

TOPSOIL RESPREAD/SEED

PLAN REMOVALS

GRADING

PAVING

CONTRACTORS SCHEDULE AND METHODS OF

EROSION CONTROL MEASURES AND STOCKPILE

PROTECTION

WASHOUT

(SEE DETAIL

INDICATES PROPOSED RIPRAP AREA (SEE DETAILS)

(QUANTITY AS INDICATED) DENOTES EXISTING AND OR PROPOSED

DENOTES AREA OF TRENCH BACK FILL

STAGING NOTE:

OPERATION)

LIEBMAN SCIENCE

CENTER

SPOT ELEVATIONS.

----- DENOTES RIDGE LINES DENOTES PROPOSED DRAINAGE DIRECTION  $\sim$ ARROW.

DENOTES OVERLAND OVERFLOW ROUTE

- C-07 THRU C-08 FOR EROSION CONTROL MEASURES) ALL EXISTING UTILITIES TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANIES INVOLVED IN PROJECT AND PAY ALL REQUIRED FEES AND COSTS.

PROJECT NOTES

CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND

POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.) SEE SHEET

NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO

SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND

SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER

ALL STRUCTURES & DEBRIS SHALL BE REMOVED PRIOR TO CONSTRUCTION & DISPOSED OF OFFSITE. ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR

CONNECTED TO THE NEAREST STORM SEWER.

- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY
- EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.



PROTECTION

PROP. SILT FENCE (SEE DETAIL)

(SEE DETAIL)

FOR PERMIT/BID

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	DESCRIPTION	REVISION
		BID
1 4		

LLINOIS DESIGN FIRM # 184.001322 420 N. FRONT STREET, SUITE 100 ICHENRY, ILLINOIS 60050

HRGreen PHONE: 815.385.1778 | TOLL FREE: 800.728.7805 FAX: 815.385.1781 | HRGreen.com



EXIST. SIDEWALK

(TO REMAIN)

McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

GRADING & EROSION CONTROL PLAN

## NOTES:

This plan has been prepared to comply with the provisions of the NPDES Permit Number issued by the Illinois Environmental Protection Agency for Stormwater Discharges from Construction Site Activities.

#### 1. Site Description.

The following is a description of the construction activity which is the subject of this plan: MCHENRY COUNTY COLLEGE - PARKING LOT E & F IMPROVEMENTS, 8900 US ROUTE 14, CRYSTAL LAKE, IL 60012

The proposed development consists of the reconstruction of Parking Lot E and a parking addition to Parking Lot F as well as the installation of utilities. The construction activities for site improvements will include: site clearing, demolition, grubbing, mass grading, pavement construction, installation of utilities including storm sewers, soil erosion and sedimentation control measures, as a minimum.

a. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site such as grubbing, excavation, and grading:

The sequence of the construction activities may be as follows: 1) Install silt filter fence, inlet protection, and stabilized construction entrance; 2) Site clearing, demolition and grubbing; 3) Mass grading; 4) Underground utilities installation; 5) Fine grading in pavement area; and 6) Pavement construction. The soil erosion and sedimentation control items will be constructed as needed during the above construction activities.

b. The total area of the construction site is estimated to be 3.20 acres.

The total area of the site that is estimated to be disturbed by excavation, grading, or other activities, is 3.20 acres.

c. The estimated runoff coefficients of the various areas of the site after construction activities are completed area contained in the project drainage study, titled FINAL ENGINEERING DRAINAGE REPORT for MCC PARKING LOT E & F IMPROVEMENTS, with (latest revision date) prepared by HR GREEN, INC. which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained in the Geotechnical Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.

#### 2. Controls.

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b above. For each measure discussed, the contractors will be responsible for its implementation as indicated. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan.

#### a. Erosion and Sediment Controls.

- (i) STABILIZATION PRACTICES. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Except as provided in 2.a. (i) (A) and 2.b. stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portions of the site where construction activity will not occur for a period of 21 or more calendar days.
  - (A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following interim and permanent stabilization practices, as a minimum will be implemented to stabilize the disturbed area of the site:

- Permanent Seeding/Sodding
- Inlet Protection
- Silt Filter Fence 4. Stabilized Construction Entrance
- (ii) STRUCTURAL PRACTICES. Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. The installation of these devices may be subject to Section 404 of the Clean Water Act.
  - Storm Sewer System
  - Silt Filter Fence Permanent Seeding/Sodding

# b. Stormwater Management.

(i) Provided below is a description of measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The practices selected for implantation were determined on the basis of the technical guidance contained in the IEPA's Standard Specifications for Soil Erosion and Sedimentation Control and other ordinances listed in the Specifications.

- The stormwater pollutant control measures shall include: Silt Filter Fence
- Inlet Protection Filter
- 3. Storm Sewers

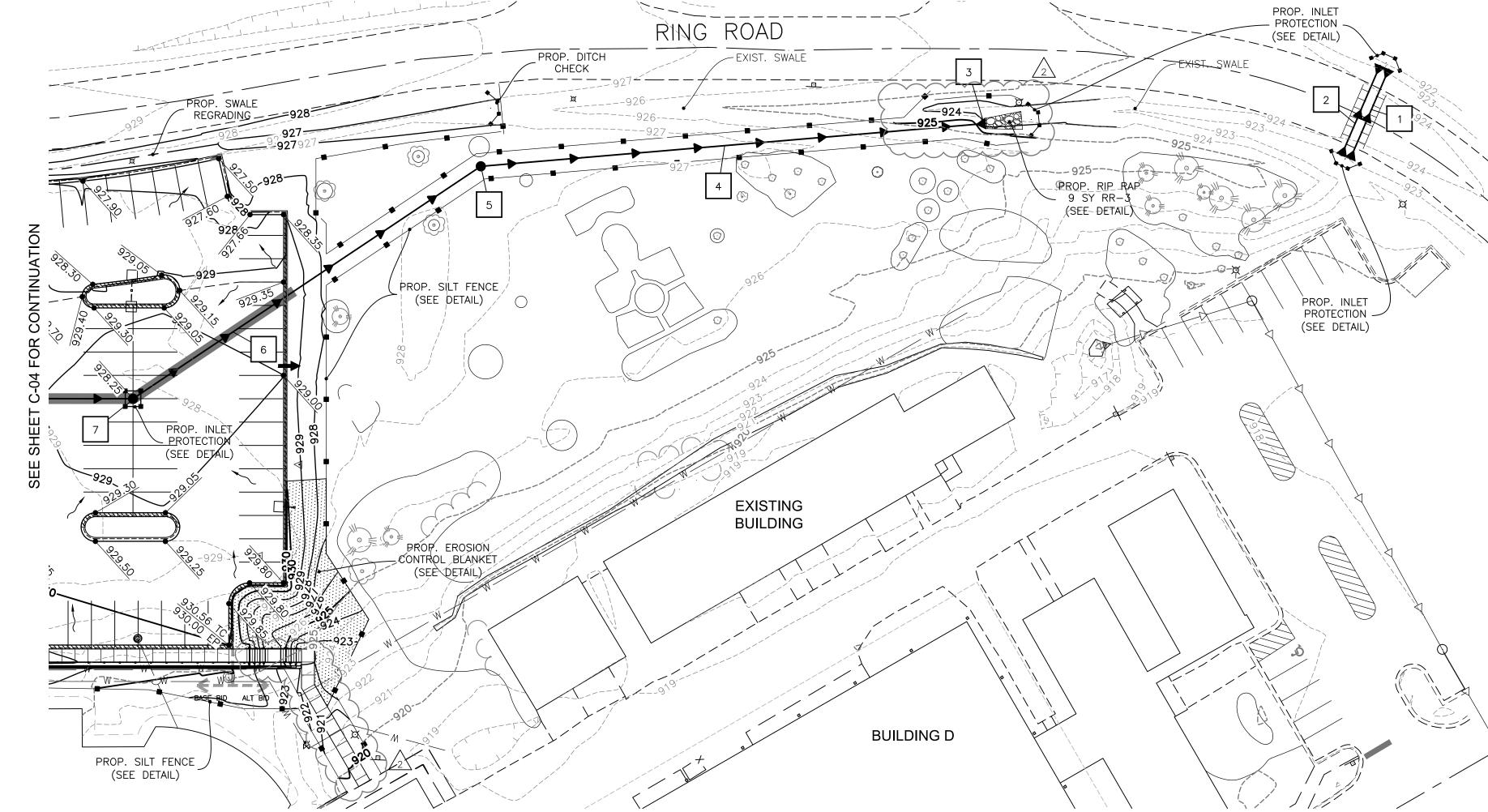
#### 2. Other Controls.

- (i) Waste Disposal. The solid waste materials including trash, construction debris, excess construction materials, machinery, tools and other items will be collected and disposed off-site by the contractor. The contractor is responsible to acquire any permit required for such disposal. Burning on the site will not be permitted. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

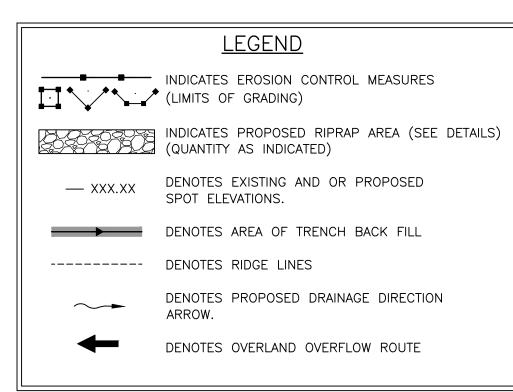
## **EROSION CONTROL NOTES:**

ALL SEDIMENTATION AND EROSION CONTROL REGULATIONS SHALL BE ADHERED TO PER THE CITY OF CRYSTAL LAKE AND ILLINOIS ENVIRONMENTAL PROTECTION AGENCY REQUIREMENTS.

- NO LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES, IN ADDITION TO, NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED. (INCLUDING STORM WATER POLLUTION PREVENTION PLAN PER THE DEVELOPMENT CRITERIA.)
- 3. UTILIZE NRCS BLANKET OR SOD ON ALL SLOPES OF 5:1 OR GREATER.
- 4. ALL STREETS AND DRIVEWAYS MUST BE KEPT CLEAN AT ALL
- 5. IF ANY ADDITIONAL SOIL EROSION MEASURES ARE DEEMED NECESSARY BY THE CITY ENGINEER OR HIS REPRESENTATIVE. THESE MEASURES MUST BE IMMEDIATELY IMPLEMENTED BY THE
- REMOVE ALL DEBRIS TRANSFERRED INTO THE ROW OR ADJOINING PROPERTY AT THE END OF EACH WORK DAY.
- INSTALL AND MAINTAIN INLET FILTER BASKET ASSEMBLIES AT ALL EXISTING AND PROPOSED STORM INLETS AND CATCH
- PER THE NPDES CONSTRUCTION STORM WATER PERMIT. THE DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS MUST BE DOCUMENTED. RAINFALL AMOUNTS MUST BE OBTAINED FROM A PROPERLY MAINTAINED RAIN GAUGE INSTALLED ONSITE, A WEATHER STATION WITHIN 1 MILE OF THE SITE, OR A WEATHER REPORTING SYSTEM THAT PROVIDES SITE SPECIFIC RAINFALL DATA FROM RADAR SUMMARIES.
- CONTRACTOR SHALL PROVIDE WEEKLY EROSION CONTROL INSPECTION REPORTS TO THE CITY IN AN ELECTRONIC FORMAT.



# # STORM SEWER TAGS 38 LIN FT SS CMP, 15" W/ FES @ 0.53% UPSTREAM INV = 922.10DOWNSTREAM INV = 921.90 2 38 LIN FT SS CMP, 15" W/ FES @ 0.53% UPSTREAM INV = 922.10DOWNSTREAM INV = 921.90 3 FES RCP, 15" INV = 923.50(194 UN FT SS RCP, 15" (@ 0.44% **)/** 5 STM SWR MH 4' DIA., R-1713 CL RIM = 927.75INV = 924.36 SE 15" RCP INV = 924.36 NW 15" RCP6 158 LIN FT SS RCP, 15" @ 0.40% 7 STM SWR CB 4' DIA., R-2504 TY D RIM = 928.25INV = 925.00 SE 15" RCPINV = 925.00 N 15" RCP



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- ANY EXISTING FIELD DRAIN TILES ENCOUNTERED SHALL BE RECONNECTED OR CONNECTED TO THE NEAREST STORM SEWER.
- ALL TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- CONTRACTOR TO KEEP ACCESS DRIVE OPEN AT ALL TIMES WITH MINOR CLOSINGS ALLOWED FOR PAVING ACTIVITIES.
- THE CONTRACTOR IS CAUTIONED NEITHER TO OBSTRUCT NOR REMOVE ANY EXISTING PAVEMENT, NOR TO DISTURB THE EXISTING TRAFFIC PATTERNS MORE THAN IS NECESSARY FOR THE PROPER EXECUTION OF THE WORK.

# NOTES:

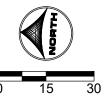
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- TEMPORARY STOCKPILE AREA LOCATION AND SIZE SHALL BE COORDINATED BY SITE CONTRACTOR AND MCHENRY COUNTY COLLEGE (SEE SHEET C-08 FOR DETAIL)

#### **STAGING NOTE:** STAGING SUBJECT TO CHANGES PER SITE CONTRACTORS SCHEDULE AND METHODS OF

- EROSION CONTROL MEASURES AND STOCKPILE
- STAGING
- CONSTRUCTION ENTRANCES PLAN REMOVALS
- PROPOSED UNDERGROUND GRADING

OPERATION)

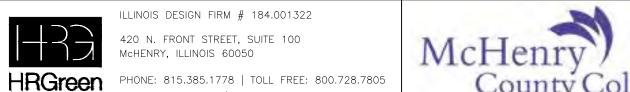
PAVING TOPSOIL RESPREAD/SEED



FOR PERMIT/BID

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DATE	BY	REVISION DESCRIPTION
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/19/18	ECH	ADDENDUM #1
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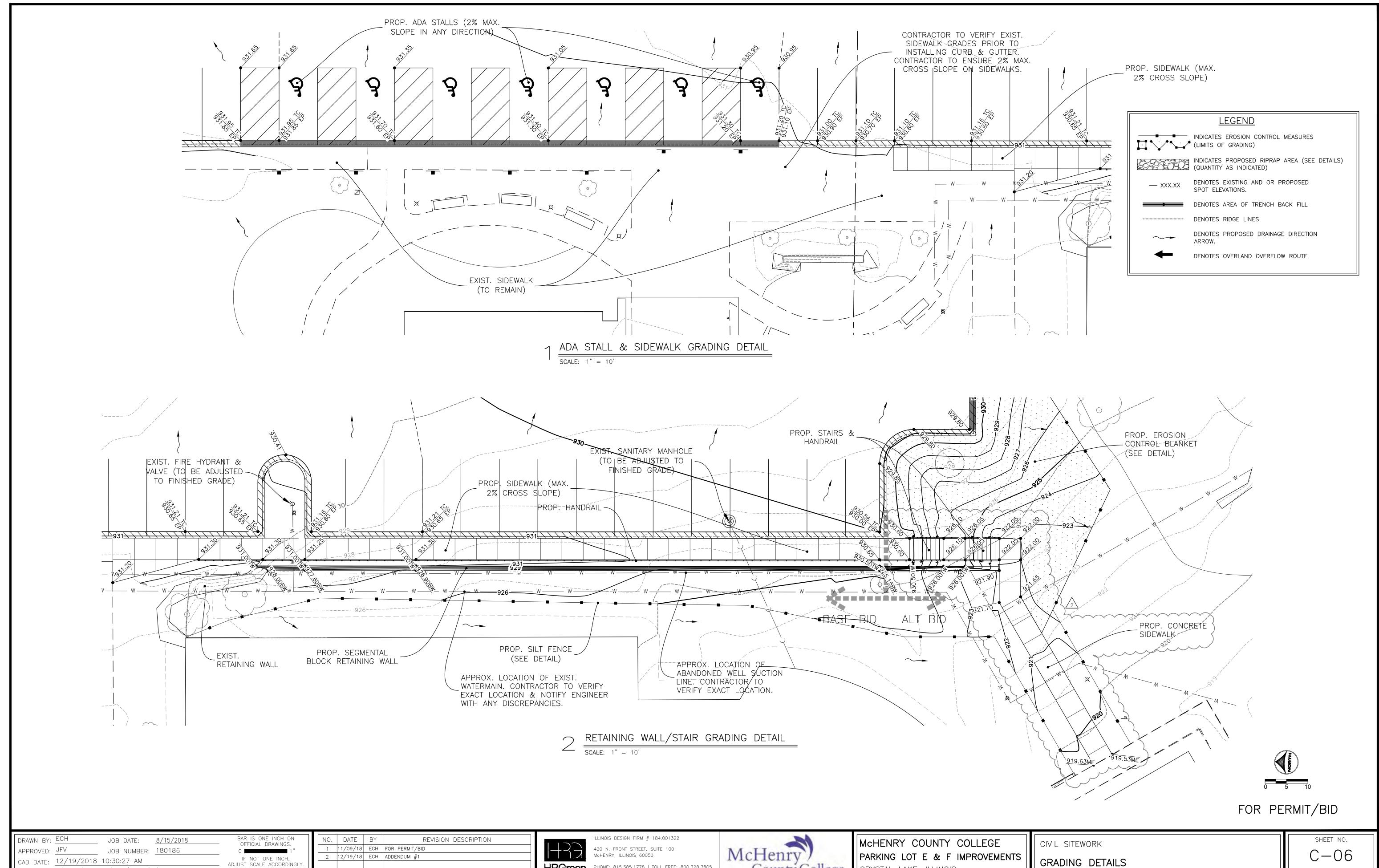
McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

GRADING & EROSION CONTROL PLAN

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SHEET NO.



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McHenry County College

CRYSTAL LAKE, ILLINOIS

# **EROSION CONTROL NOTES**

- All sedimentation and erosion control regulations shall be adhered to per City of Crystal Lake requirements
- \* All erosion control measures shall be installed prior to the start of construction.
- No land disturbing activities shall not commence until approval to do so has been received by governing authorities, in addition to, no land clearing or grading shall begin until all perimeter erosion and sediment control measures have been installed. (Including storm water pollution prevention plan per the development criteria.)
- If any additional soil erosion measures are deemed necessary by the City Engineer or his representative. These measures must be immediately implemented by the contractor.
- The general contractor shall strictly adhere to the storm water pollution prevention plan (swppp) during construction operations.
- \* All exposed areas shall be seeded as specified within 14 days of final grading.
- \* Should construction stop for longer than 14 days, the site shall be seeded as
- \* Sediment and erosion control measures shall be inspected at least once every seven (7) days and within 24 hours of a rainfall exceeding 0.5 inches during a 24—hour period or more frequently if required by governing NPDES general permit. All maintenance required by inspection shall commence within 24 hours and be completed within 48 hours and be completed.
- \* This plan shall not be considered all inclusive as the general contractor shall take all necessary precautions to prevent soil sediment from leaving the site.
- \* General contractor shall comply with all state and local ordinances that apply.
- Additional erosion and sediment control measures will be installed if deemed necessary by on site inspection.
- \* General contractor shall be responsible to take whatever means necessary to establish permanent soil stabilization.
- \* All erosion and sediment control practices shall be maintained and repaired as needed to ensure effective performance of the required erosion control measures.
- \* All erosion and sediment control work shall conform to the I.D.O.T. Manual for,
- \* All construction will adhere to the requirements set forth in the IEPA's new construction site activities national pollutant discharge elimination system (NPDES)
- \* Contractor to remove all debris spilled into the R.O.W. at the end of each work day. Contractor shall also maintain and sweep debris off all access drives, roadways, bike paths, and other disturbed areas at the end of each construction day.
- \* All disturbed areas shall be stabilized within 7 days of active disturbance.
- \* All erosion control measures shall be disposed of within 30 days of final stabilization of the site
- \* Ground cover for 5:1 slopes or greater shall be established as soon as possible.
- \* All disturbed areas to to restored w/ 4" topsoil respread & hydroseeded unless
- Utilize hydroseeded on all slopes of 5:1 or greater.
   \*Mulch/hydroseed per I.D.O.T. Manual, section 251, standard specifications for road and bridge construction, (latest edition)
   \*Mulch/hydroseed method 4
- \* No dimensions shall be assumed by scaling.

standards and procedures for erosion control.

storm water permit.

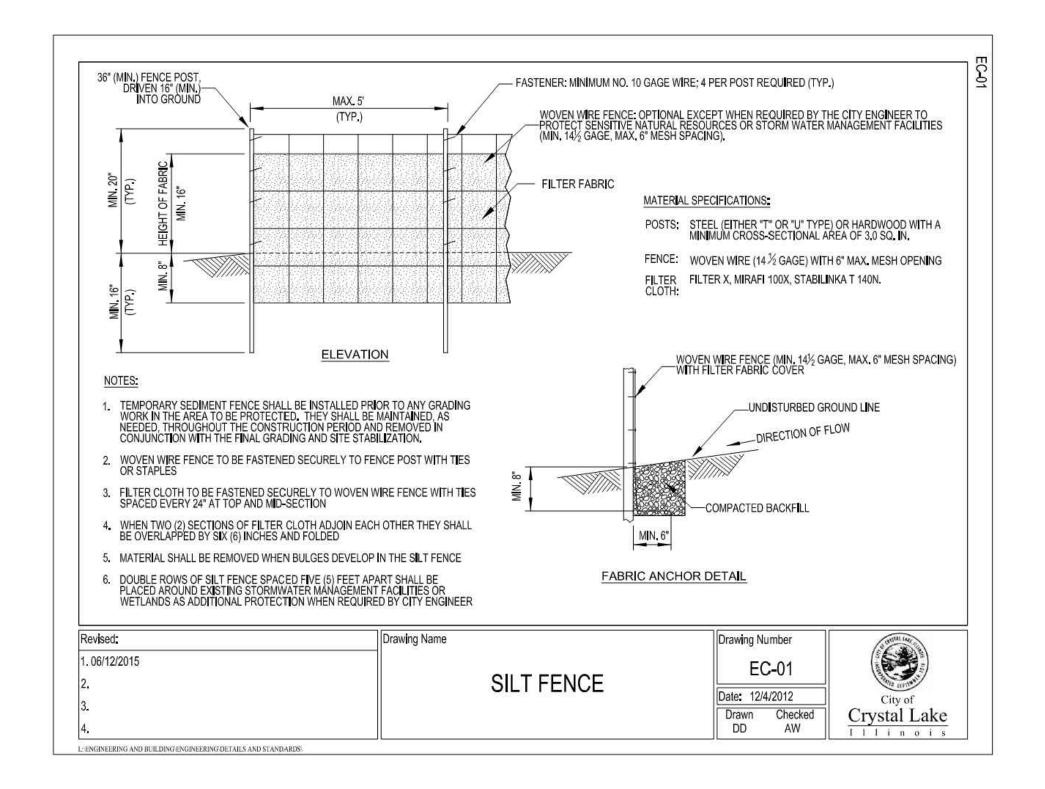
- \* No known drain tiles are present on the proposed development, if tiles are encountered during construction please notify the engineer immediately.
- \* No part of the proposed project is located within a flood hazard 10-100yr area a
- General contractor shall notify all utility companies having underground utilities on site or in right—of—way prior to excavation. Contractor shall contact utility locating company and locate all utilities prior to grading start.

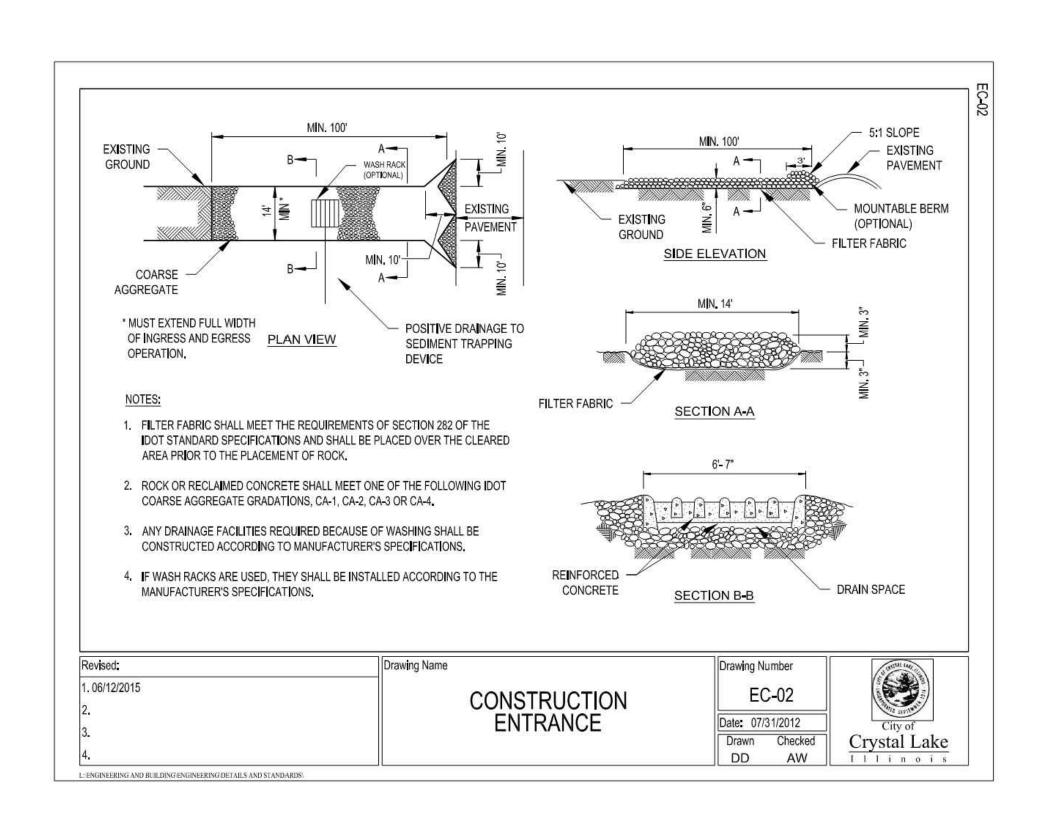
# **CONSTRUCTION SEQUENCE**

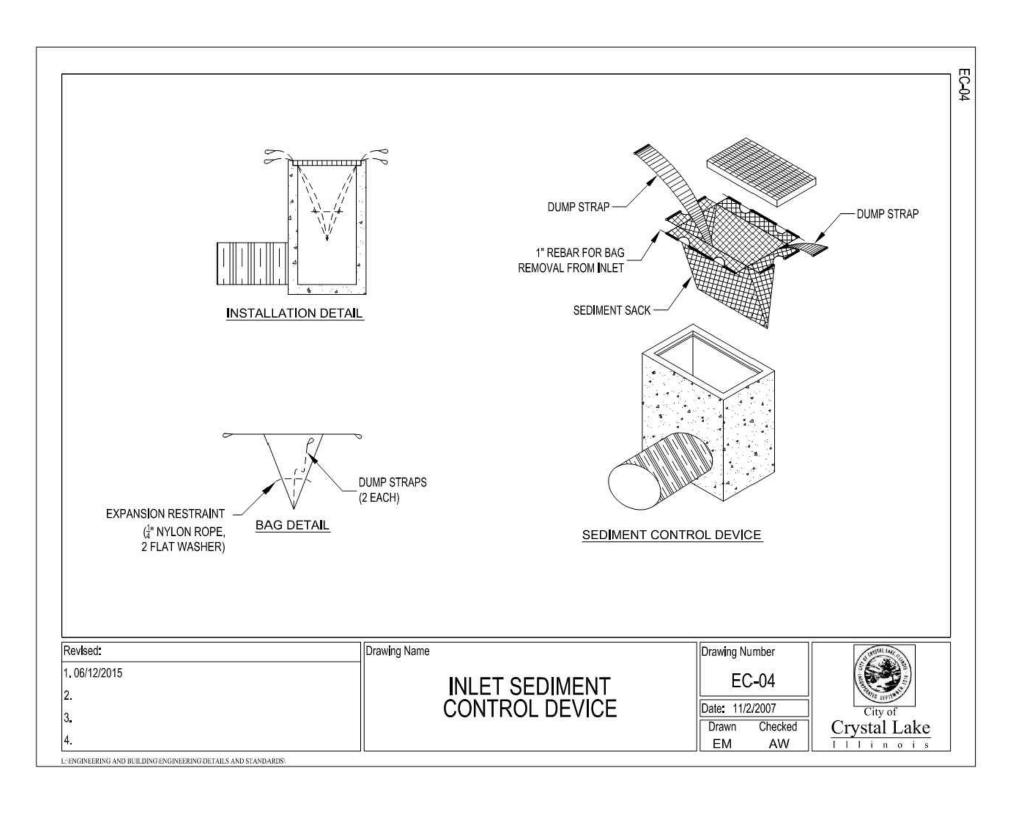
- 1. Install temporary erosion control silt fence & inlet protection in the specified locations.
- 3. Clearing & grubbing if applicable.
- 4. Install underground utilities.5. City inspection and signoff.
- 6. Add additional soil erosion and sediment control as needed. In particular the CLSO requirement for stabilization within 14 days of temporary or permanent cessation of
- 7. Disk disturbed pervious areas to restore infiltration prior to topsoil placement and

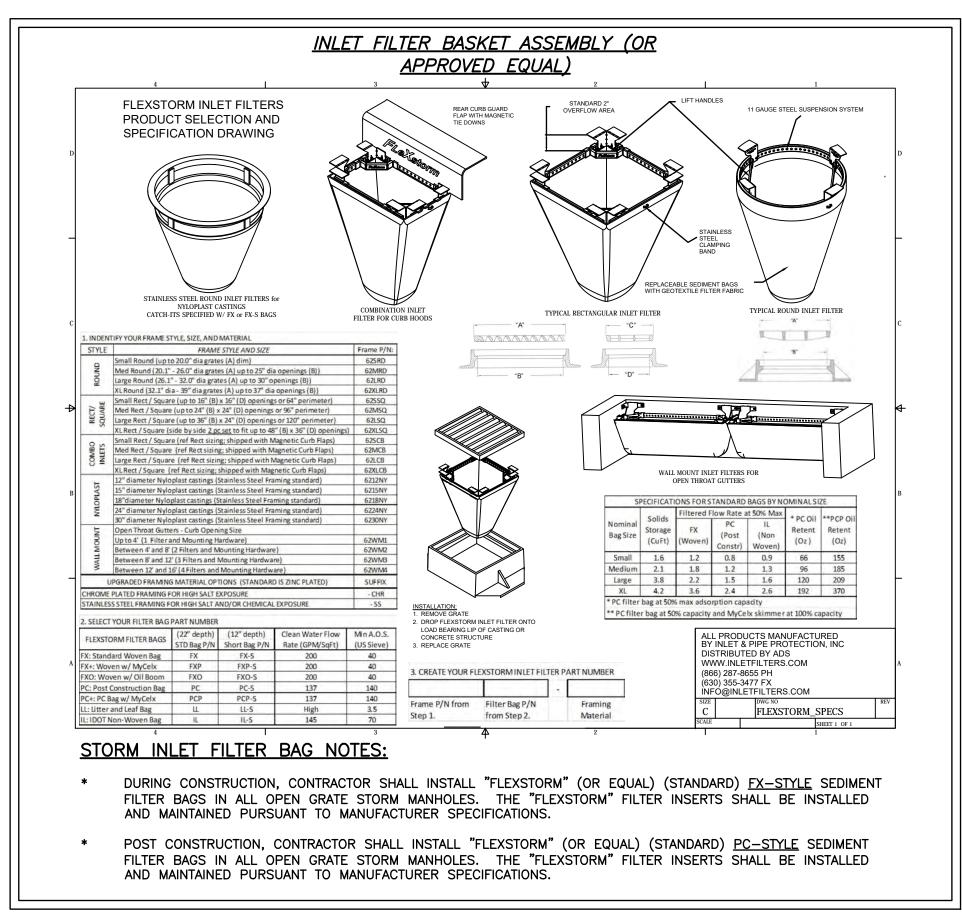
grading must be met and will be vigorously enforced by the City.

- 8. Permanent site stabilization.
- 8. Permanent site st 9. City inspection.









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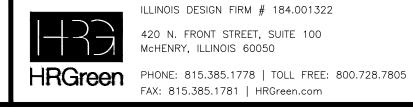
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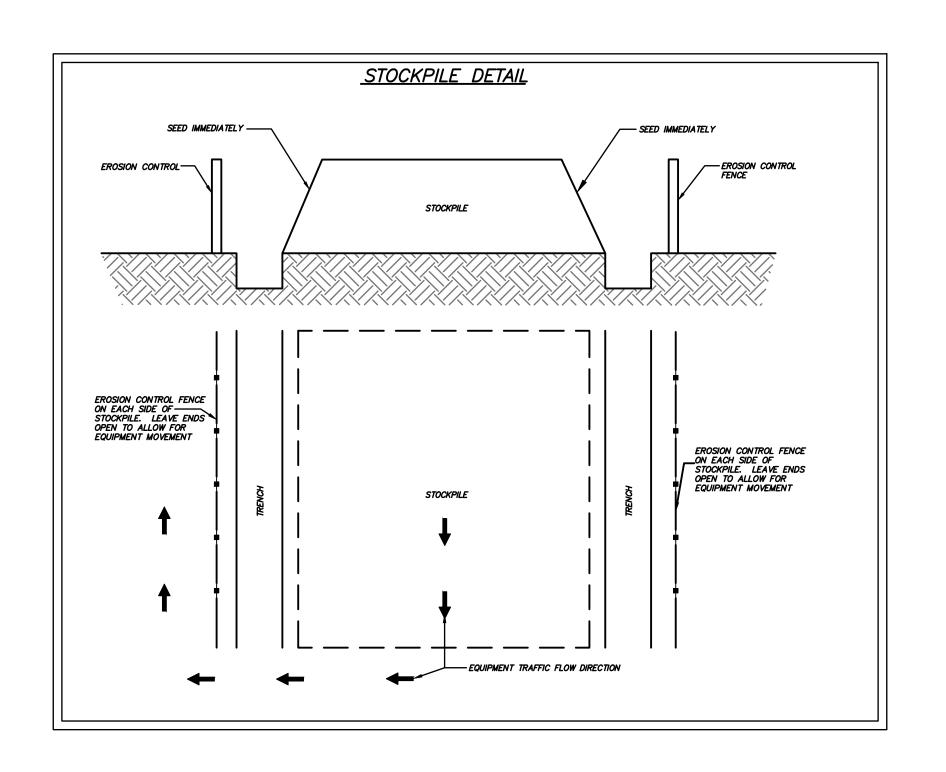
McHENRY COUNTY COLLEGE
PARKING LOT E & F IMPROVEMENTS
CRYSTAL LAKE, ILLINOIS

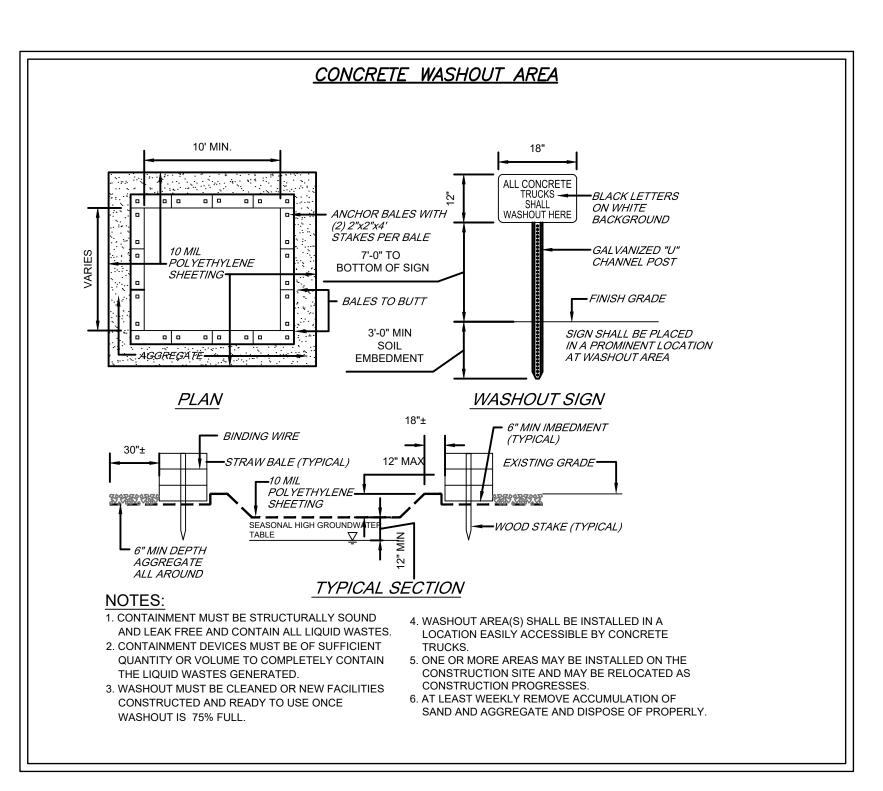
CIVIL SITEWORK

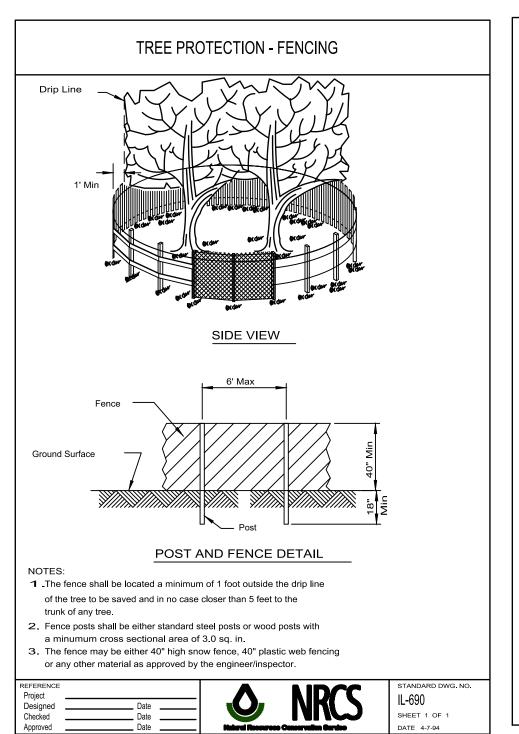
EROSION CONTROL NOTES & DETAILS

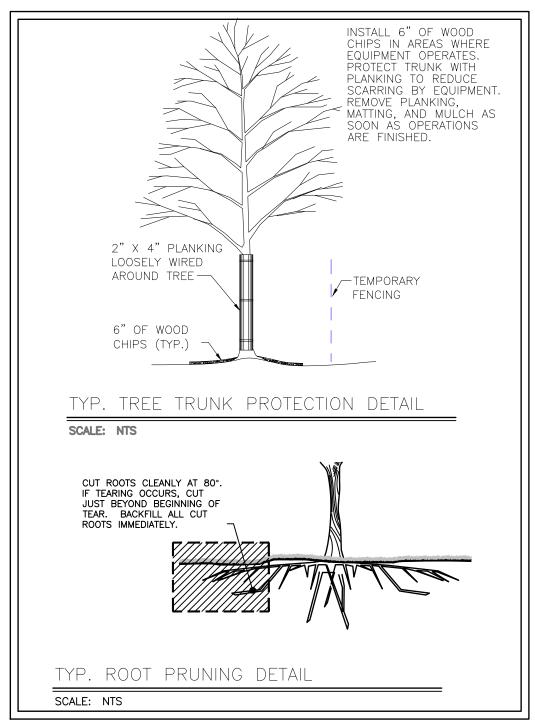
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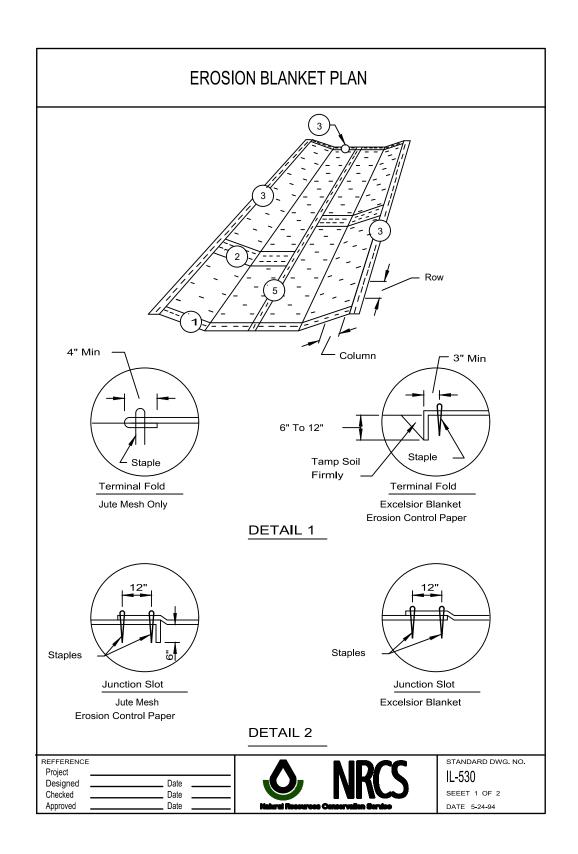
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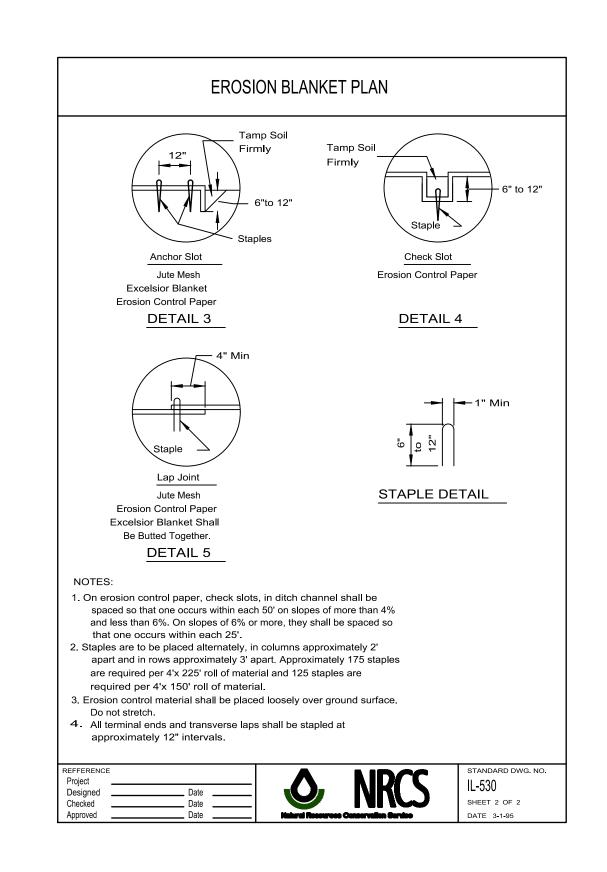












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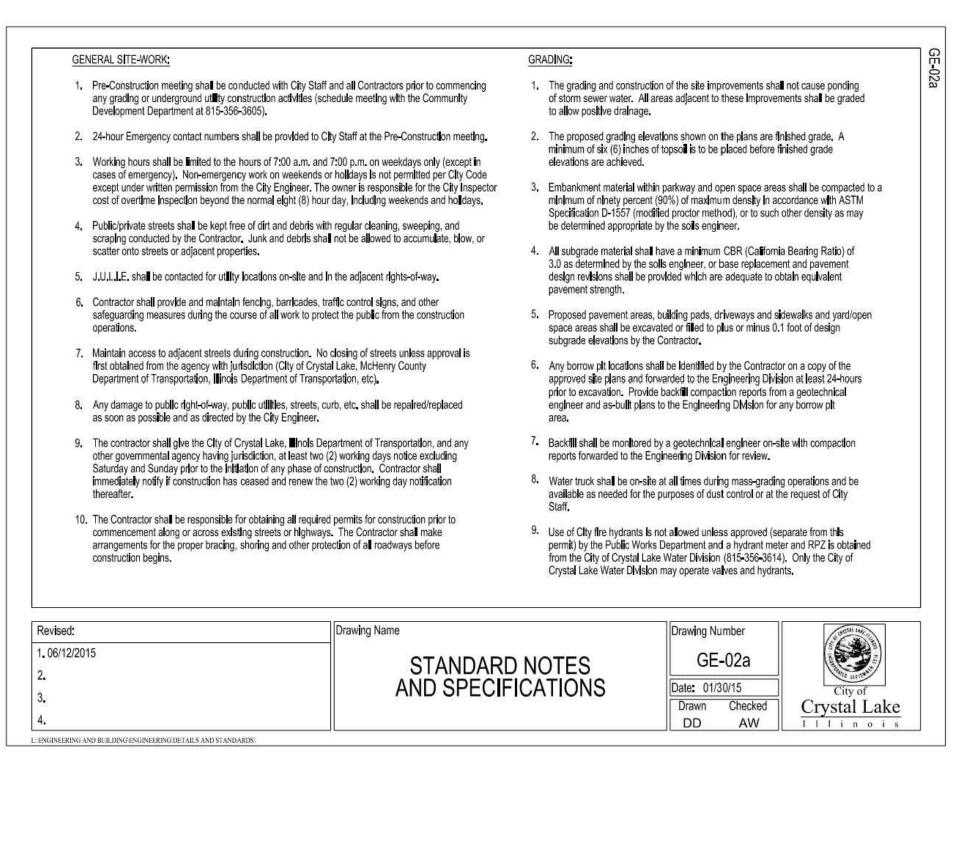
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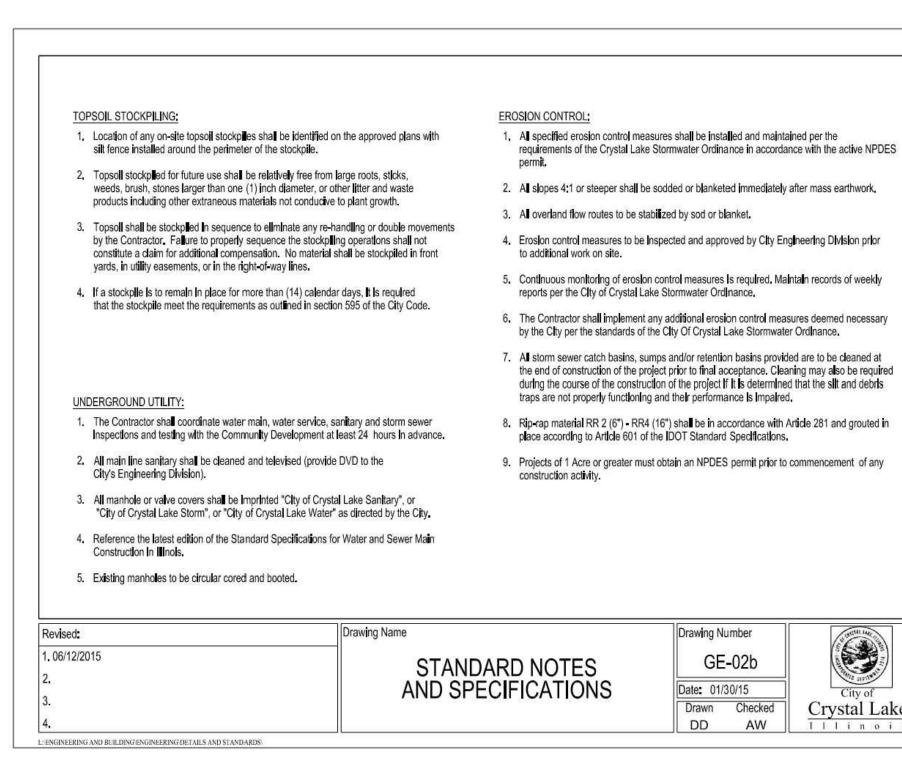


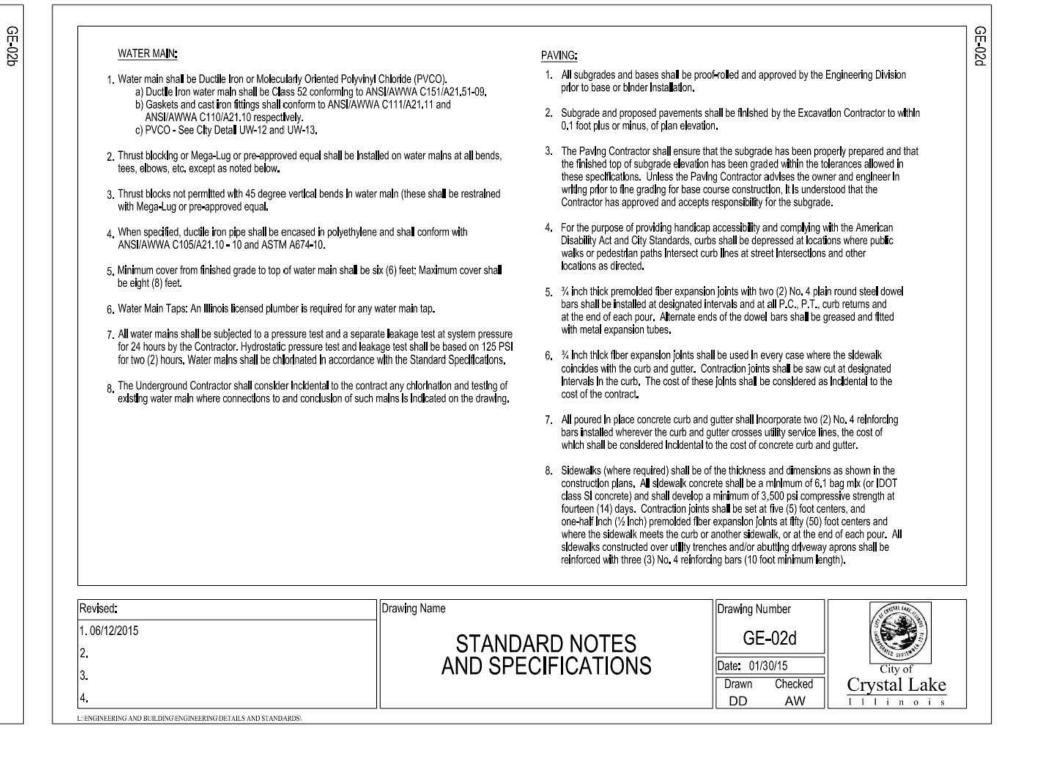


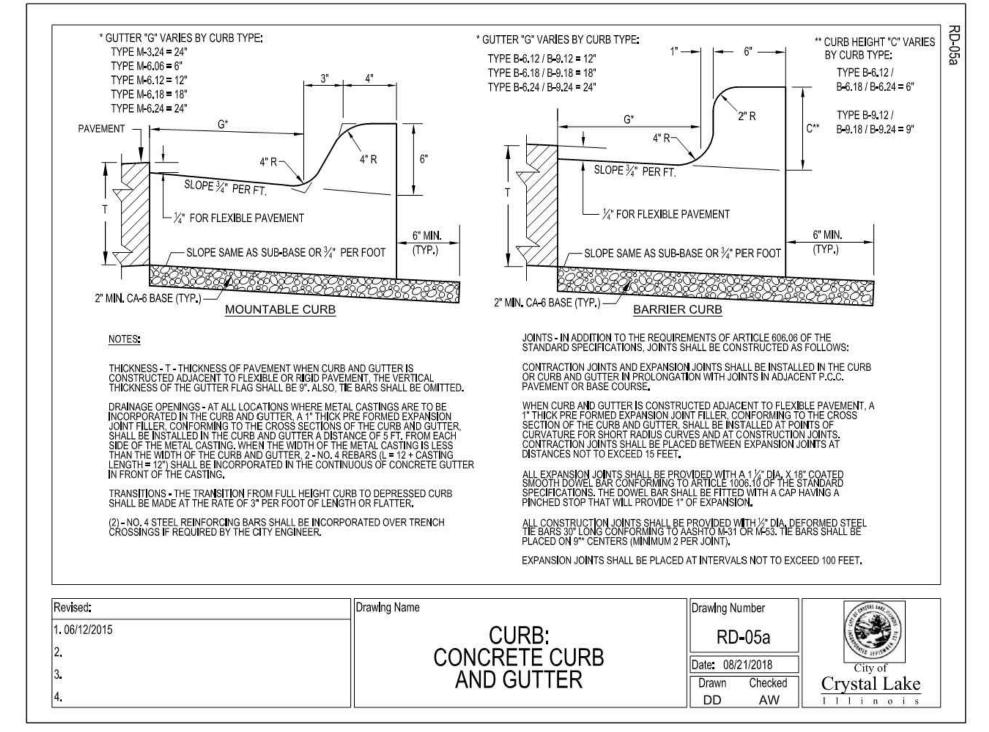
McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

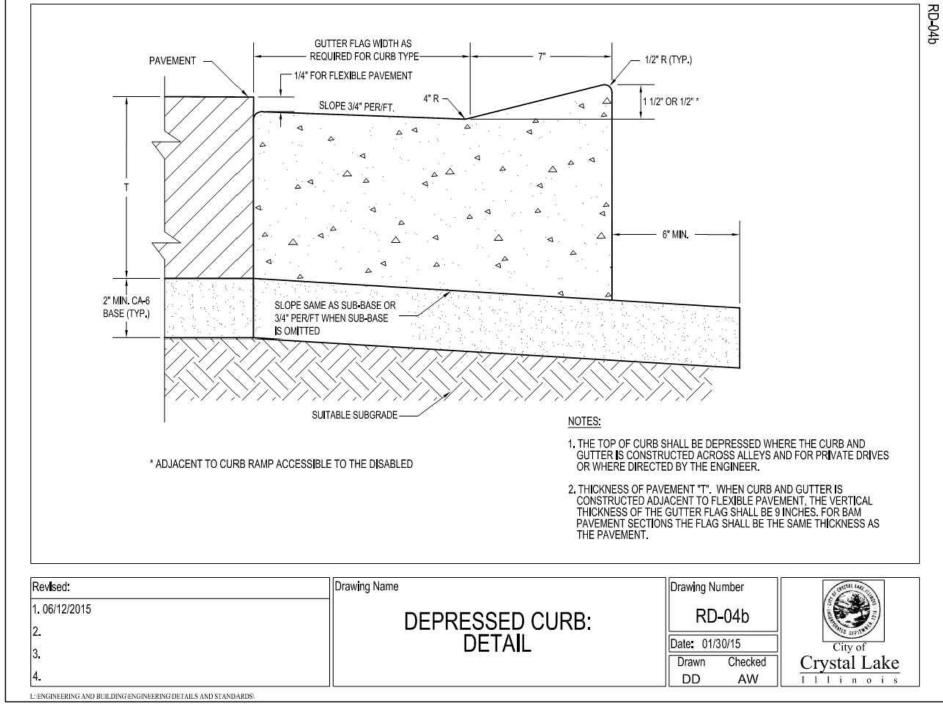
CIVIL SITEWORK EROSION CONTROL DETAILS

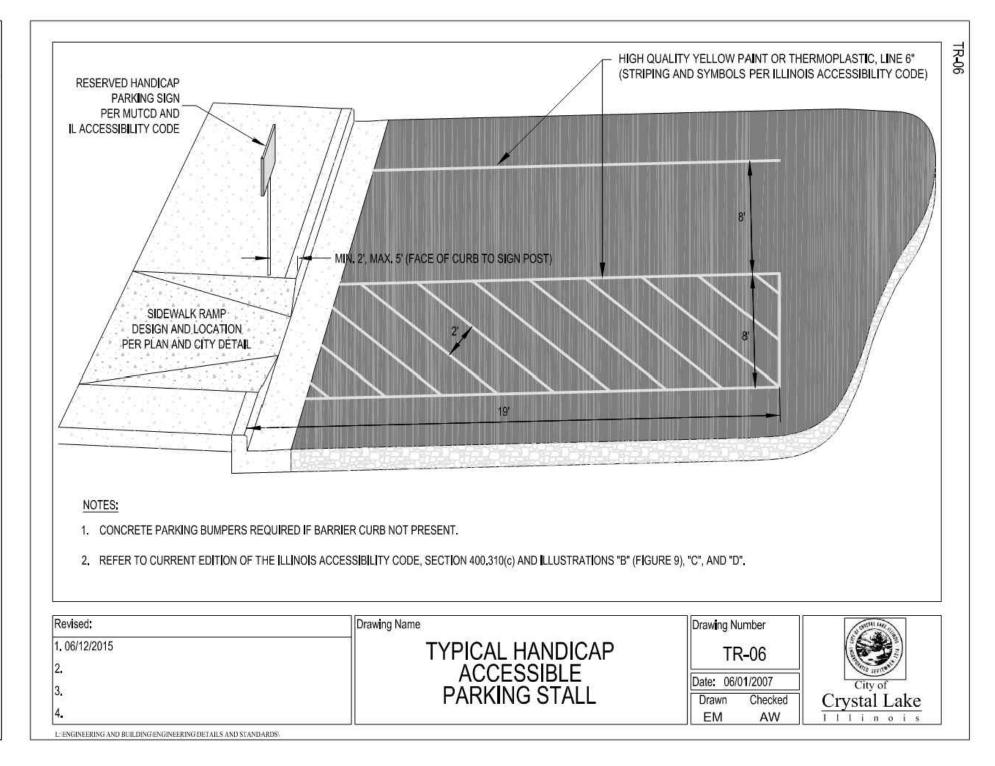












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Crystal Lake

McHENRY COUNTY COLLEGE PARKING LOT E & F IMPROVEMENTS CRYSTAL LAKE, ILLINOIS

CIVIL SITEWORK

STANDARD CONSTRUCTION DETAILS