



#2014-58 Crystal Lake South High School Project Review for Planning and Zoning Commission

Meeting Date: April 15, 2015

Requests:

1. Special Use Permit (Section 4-600D) for accessory structures (modified bleachers) over 900 square feet.
2. Variations for:
 - a) Section 3-200 A/B from the maximum height requirement of 15 feet for an accessory structure to permit 38' 1" for the proposed west bleachers and 31' 7" for the proposed east bleachers
 - b) Section 4-200D4 from the required parking standard of 1,318 parking spaces to allow the existing 733 parking spaces.

Location: 1200 S. McHenry Avenue

Acreage: 59 acres

Existing Zoning: R-2 Single Family

Surrounding Properties:

North:	R-2, R-3B, B-2: single and multi-family residential, inline retail center
South:	R-2, R-3B: single and multi-family residential
East:	RE: treatment plant
West:	R-2: single family residential

Staff Contact: Michelle Rentzsch (815.356.3605)

Background:

- **Previous Approvals:** The South High School property was annexed in 1977 without the granting of a special use permit, as none was required at that time. As such, the property was considered legally non-conforming, prior to the installation of the replacement bleachers in 2013 (the "***Replacement Bleachers***").
- **Existing Use:** The site is utilized for South High School, the ancillary athletic fields, and associated parking areas.
- **Request:** Special Use Permit for proposed accessory structures (modified bleachers) over 900 square feet and variations for accessory structure height and required number of parking spaces.

Development Analysis:

- **General:** The football field that is located along the western property line of the South High School property included bleacher structures on the east and west side of the field (the “*Former Bleachers*”). In 2013, the Former Bleachers were removed and the Replacement Bleachers were constructed on the west and east sides of the football field. The Replacement Bleachers were built without any City approvals and in violation of the City’s UDO requirements for accessory structures. The proposal is to modify the Replacement Bleachers to bring them closer in conformity with the UDO, subject to the granting of the requested variations.
- **Land Use:** The Comprehensive Land Use map shows the area as Public – Semi Public given the public high school land use.
- **Zoning:** The site is zoned R-2 Single Family which permits new secondary schools (high schools) via a special use permit review. The existing high school (exclusive of the Replacement Bleachers) is a legal nonconforming use.

Bleachers

- The plans submitted as part of this petition indicate that the press box incorporated into the Replacement Bleachers would be relocated to the east side bleachers.
- The height of the west side bleachers, after the relocation of the press box, would be 38 feet 1 inch.
- The height of the east side bleachers, after the addition of the press box, would be 31 feet 7 inches.
- There were approximately 2,000 bleacher seats with the Former Bleachers. The Replacement Bleachers increased the capacity to 3,995 bleacher seats.
- The Former Bleachers on the west side were 56 feet wide with 14 rows. The Replacement Bleachers are 192 feet wide with 26 rows (more than three times in width and almost double the rows).
- The Former Bleachers on the east side were 126 feet wide with 20 rows. The east side Replacement Bleachers are 114 feet wide with 14 rows (12 feet less wide with 6 fewer rows; however, with the proposed relocation of the press box the height would be 31’7”).

Landscape Buffer

- The submitted landscape plan shows proposed landscaping to provide a 25-foot buffer area between the west side bleachers and the single family residential.
- Given the intensity of the west side bleachers (both the Replacement Bleachers and with the proposed modifications) and their proximity to the existing single family homes, a more solid landscape screen is recommended.

Parking

- There are 703 standard, 16 handicapped, and 14 temporary parking spaces noted on the plat of survey. In addition, 102 bus stalls are listed.
- Based on the UDO requirements for high schools and the total number of bleachers seats of 3,955, a total of 1,318 parking spaces are required. 719 full-time parking spaces have been provided. 14 temporary parking spaces are provided for large events. For particularly large

events, the busses can be relocated to another property and the 102 bus stalls utilized for attendee parking.

Stormwater

- The engineering submittals relating to the Replacement Bleachers and proposed modifications have been revised to obtain compliance with the City’s stormwater requirements..

Findings of fact:

SPECIAL USE PERMIT

Special Uses require a separate review because of their potential to impact surrounding properties and the orderly development of the City. Any structures greater than 900 square feet in area are required to obtain a special use permit. Section 2-400 of the Unified Development Ordinance establishes standard for all Special Uses in Crystal Lake. The criteria are as follows:

1. That the proposed use is necessary or desirable, at the location involved, to provide a service or facility which will further the public convenience and contribute to the general welfare of the neighborhood or community.
 Meets *Does not meet*
2. That the proposed use will not be detrimental to the value of other properties or improvements in the vicinity.
 Meets *Does not meet*
3. That the proposed use will comply with the regulations of the zoning district in which it is located and this Ordinance generally, including, but not limited to, all applicable yard and bulk regulations, parking and loading regulations, sign control regulations, watershed, wetlands, and flood plain regulations, ~~Building and Fire Codes~~ and all other applicable City Ordinances. [NOTE: South High School is not subject to City building and fire codes.]
 Meets *Does not meet*
4. That the proposed use will not negatively impact the existing off-site traffic circulation; will adequately address on-site traffic circulation; will provide adequate on-site parking facilities; and, if required, will contribute financially, in proportion to its impact, to upgrading roadway and parking systems.
 Meets *Does not meet*
5. That the proposed use will not negatively impact existing public utilities and municipal service delivery systems and, if required, will contribute financially, in proportion to its impact, to the upgrading of public utility systems and municipal service delivery systems.
 Meets *Does not meet*

6. That the proposed use will not impact negatively on the environment by creating air, noise, or water pollution; ground contamination; or unsightly views.
 Meets *Does not meet*

7. That the proposed use will maintain, where possible, existing mature vegetation; provide adequate screening to residential properties; provide landscaping in forms of ground covers, trees and shrubs; and provide architecture, which is aesthetically appealing, compatible or complementary to surrounding properties and acceptable by community standards, as further detailed in Article 4, Development and Design Standards.
 Meets *Does not meet*

8. That the proposed use will meet standards and requirements established by jurisdictions other than the City such as Federal, State or County statutes requiring licensing procedures or health/safety inspections, and submit written evidence thereof.
 Meets *Does not meet*

9. That the proposed use shall conform to any stipulations or conditions approved as part of a Special Use Permit issued for such use.
 Meets *Does not meet*

10. That the proposed use shall conform to the standards established for specific special uses as provided in this section.
 Meets *Does not meet*

ZONING VARIATIONS

The petitioner is requesting two variations from Section 3-200 A/B from the maximum height requirement of 15 feet for an accessory structure to permit 38’ 1” for the proposed modifications to the west bleachers and 31’ 7” for the proposed modifications to the east bleachers and Section 4-200D4 from the required parking standard of 1,318 parking spaces to allow the existing 733 parking spaces (719 full time parking spaces + 14 temporary spaces).

The Unified Development Ordinance lists specific standards for the review and approval of a variation. The granting of a variation rests upon the applicant proving practical difficulty or hardship caused by the Ordinance requirements as they relate to the property. To be considered a zoning hardship, the specific zoning requirements; setbacks, lot width and lot area must create a unique situation on this property. It is the responsibility of the petitioner to prove hardship at the Planning and Zoning Commission public hearing.

Standards

When evidence in a specific case shows conclusively that literal enforcement of any provision of this Ordinance would result in a practical difficulty or particular hardship because:

- a. The plight of the property owner is due to unique circumstances, such as, unusual surroundings or conditions of the property involved, or by reason of exceptional

narrowness, shallowness or shape of a zoning lot, or because of unique topography, or underground conditions.

Meets *Does not meet*

b. Also, that the variation, if granted, will not alter the essential character of the locality.

Meets *Does not meet*

For the purposes of supplementing the above standards, the Commission may take into consideration the extent to which the following facts favorable to the application have been established by the evidence presented at the public hearing:

a. That the conditions upon which the application for variation is based would not be applicable generally to other property within the same zoning classification;

Meets *Does not meet*

b. That the alleged difficulty or hardship has not been created by any person presently having interest in the property;

Meets *Does not meet*

c. That the granting of the variation will not be detrimental to the public welfare or injurious to other property or improvements in the neighborhood in which the property is located; or

Meets *Does not meet*

d. That the proposed variation will not impair an adequate supply of light or air to adjacent property, will not unreasonably diminish or impair the property values of adjacent property, will not unreasonably increase congestion in the public streets, substantially increase the danger of fire or otherwise endanger public safety.

Meets *Does not meet*

Where the evidence is not found to justify such conditions, that fact shall be reported to the City Council with a recommendation that the variations be denied.

2030 Comprehensive Land Use Plan Review:

The Comprehensive Plan designates the subject property as Public and Semi Public. Public and Semi-Public uses are located throughout the city and are meant to serve the community in numerous ways. Public facilities are described as schools, libraries, park district facilities, as well as municipal services, such as fire rescue, police and administration. These uses are managed by separate public entities, each of which are funded separately through tax dollars and other revenues.

Goal: Provide area for high quality public and semi-public facilities, such as schools, libraries, municipal facilities and private service providers, throughout the city to support the diverse and evolving needs of people in the city.

Supporting Action: The City shall support the school districts, library, park district, neighboring municipalities, private service providers and other public and semi-public agencies.

Success Indicators:

- The biennial evaluation of impact fees for schools, parks, libraries and municipal services, to ensure that fees keep pace with relative costs.
- The number of zoning approvals for public/semi public projects.

Recommended Conditions:

If a motion to recommend approval of the petitioner’s request is made, the following conditions are recommended:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
 - A. Application (Community High School District 155, date signed 12/4/14, as amended 1/19/15)
 - B. Plat of Survey (Marchese and Sons, dated 11/7/2014)
 - C. Architectural Site Plan (FGM Architects, dated 12/04/14)
 - D. Bleacher Elevations (FGM Architects, dated 12/12/14)
 - E. Landscape Plan (FGM Architects, dated 12/12/14, revised 2/2/15)
 - F. Site Improvement Plans (Spaceco, dated 12/19/14, revised 3/9/15)
2. Site Plan
 - A) The plat of survey at the northwest corner of the site indicates Concord Drive traverses the School District’s property. This right-of-way was dedicated with Four Colonies Unit 11 and should be corrected on the survey.
3. Bleacher Plan

The speaker system for the football field must be maintained in a position so that the speakers are mounted in an easterly direction. The decibel level at events must not exceed the lower of 90 db or the applicable State standard as measured at 5 feet from the westerly property line.
4. Parking Plan
 - A) For events where more than 2,000 attendees are expected, bus relocation must be provided to allow for additional on-site parking for event attendees.
5. Landscape Plan
 - A) Eliminate the proposed deciduous shrubs and ornamental trees and provide a solid evergreen screen between the west side bleachers and the single family residential. Provide an earthen berm as tall as possible while still allowing for maintainable slopes that provides enough area for stormwater conveyance. Towards the top of the berm, provide six to eight

foot tall arborvitae or other acceptable substitution, planted nine feet on center in a double staggered row, to meet the screening requirements of the UDO, must be planted as early in Spring as practical and maintained as long as the bleachers are present. Planting locations should reflect the comments from the City's stormwater consultant, CBBL.

6. The following variations are being requested:
 - a) Section 3-200 A/B from the maximum height requirement of 15 feet for an accessory structure to permit 38' 1" for the west bleachers and 31' 7" for the east bleachers, and
 - b) Section 4-200D4 from the required parking standard of 1,318 parking spaces to allow the existing 733 parking spaces.
7. Future Accessory Structures:
 - A) No additional accessory structures shall be constructed or installed within the westernmost 100 feet of the zoning lot without the petitioner having first applied for and obtained approval of an amendment to the special use permit.
8. The petitioner shall address all of the review comments and requirements of the Fire Rescue, Police, Public Works and Community Development Departments and the City's stormwater consultant, CBBL.

AMENDED CITY OF CRYSTAL LAKE DEVELOPMENT APPLICATION

Office Use Only
File # _____

Project Title: Community High School District 155 Special Use Permit for Bleachers

Action Requested:

Annexation	Preliminary PUD
Comprehensive Plan Amendment	Preliminary Plat of Subdivision
Conceptual PUD Review	Rezoning
Final PUD	X Special Use Permits
Final PUD Amendment	X Variation
Final Plat of Subdivision	Other:

Petitioner Information

Name: Community HS District 155 and the
Board of Ed of Comm HS Dist 155

Address: One South Virginia Road
Crystal Lake, IL 60014

Phone: 815-455-8500

Fax: 815-459-5022

E-mail: jthomas@d155.org

Owner Information (if different)

Name:

Address:

Phone:

Fax:

E-mail:

Property Information:

Project Description: See Exhibit A attached.

Project Address/Location: Approximately 15 acres located on the westerly boundary of the property having a common address of 1200 South McHenry Avenue, Crystal Lake, Illinois and known as the Crystal Lake South Highschool football/athletic field.

PIN Number(s): Part of 19-18-200-005 and 19-18-200-008

Development Team

Please include address, phone, fax, and e-mail

Developer:

Architect: FGM Architects, 1211 West 22nd Street, Suite 705, Oak Brook, Illinois 60523-2019;
phone: 630-574-8300; fax: 630-574-9292; joshc@fgmarchitects.com

Attorney: Lisa M. Waggoner, 4 N. Walkup Ave., Crystal Lake, Illinois 60014;
phone: 815-477-0830; fax: 815-477-0834; lwaggoner@waggonerlawfirm.com

Engineer:

Landscape Architect: FGM Architects, 1211 West 22nd Street, Suite 705, Oak Brook, Illinois
60523-2019; phone: 630-574-8300; fax: 630-574-9292; joshc@fgmarchitects.com

Planner:

Surveyor: Marchese and Sons, Inc., 10 Monaco Drive, Roselle, Illinois 60172;
phone 630-894-5680; fax 630-894-8869

Other:

Signatures:

The undersigned, on behalf of Community High School District 155 and the Board of Education of Community High School District 155, herewith submits this application, as required by an Order entered on September 5, 2014 in case No. 13 CH 1319, before the Twenty Second Judicial Circuit, McHenry County, Illinois.

By:



PETITIONER: Dr. Johnnie Thomas, Superintendent

December 4, 2014

Date

As owner of the property in question, I hereby authorize the seeking of the above requested action.

OWNER:

Date

NOTE: If the subject property is held in trust, the trust officer must sign this petition as owner. In addition, the trust officer must provide a letter which names all beneficiaries of the trust.

Exhibit A

The Petitioner herewith submits its Application for a Special Use Permit and Variations, in accordance with that certain Court Order entered in Case Number 13-CH1319 in the Twenty-Second Judicial Circuit, McHenry County, Woodstock, Illinois on September 5, 2014 for a Special Use Permit and Variations to allow the placement and approval of bleacher structures located at the football/athletic field at 1200 S. McHenry Avenue, Crystal Lake, Illinois, at the campus of Crystal Lake South High School.

Specifically, the Petitioner requests a Special Use Permit be issued, as required under Section 4-600 D. of the Crystal Lake Unified Development Ordinance, to approve and allow the continuing placement of the west side and east side bleachers, as depicted on the FGM Architectural Site Plan dated December 4, 2014, which Site Plan more specifically sets forth the location of said bleachers, their lineal dimensions, vertical dimensions, as well as the distance from the adjacent residential property to the west. Additionally, the Petitioner requests the Special Use Permit to be issued to approve the bleachers, as proposed in the FGM Elevations Plan dated December 12, 2014 and the proposed landscaping, as depicted in the FGM Landscape Plan dated December 12, 2014. As set forth in the Elevations Plan, the existing west side bleachers are proposed to be modified by the removal of the press box from the west side bleachers and the relocation of said press box to the east side bleachers, resulting in the maximum height at the top of guard rail at the western edge of the west side bleachers to be 38 feet, 1 inch and a maximum height of 31 feet, 7 inches for the east side bleachers.

The Petitioner also requests a height variation from the required 15 feet for an accessory structure to allow a maximum height of 38 feet, 1 inch for the west side bleachers and a height of 31 feet, 7 inches for the east side bleachers and a variation from the required parking standard of 1,318 parking spaces, to allow the existing 733 parking spaces, pursuant to Sections 3-200 A/B, and 4-200 D4, respectively, of the Crystal Lake Unified Development Ordinance.

Petitioner herewith respectfully requests the approval of its Application for a Special Use Permit and Variations for the improvements at 1200 S. McHenry Avenue as depicted on the Plans included with this Application.

PUBLIC NOTICE

BEFORE THE PLANNING AND ZONING COMMISSION OF THE CITY OF CRYSTAL LAKE, MCHENRY COUNTY, ILLINOIS

IN THE MATTER OF THE APPLICATION OF McHenry County Board of School Trustees, as Owner, and Community High School District 155 and the Board of Education of Community High School District 155, as Petitioner

LEGAL NOTICE

Notice is hereby given in compliance with the Unified Development Ordinance (UDO) of the City of Crystal Lake, Illinois, that a public hearing will be held before the Planning and Zoning Commission upon the application of McHenry County Board of School Trustees, as Owner, and Community High School District 155 and the Board of Education of Community High School District 155, as Petitioner, relating to the property containing an athletic/football field located at the western portion of the property having permanent index numbers 19-18-200-005 and 19-18-200-008 and commonly known as South High School, 1200 McHenry Avenue, Crystal Lake, Illinois 60014.

This application is filed for the purpose of requesting a Special Use Permit for non-residential accessory structures over 900 square feet, a height variation from the required 15 feet for an accessory structure to allow a height of 38' 1" for the west side bleachers and a height of 31' 7" for the east side bleachers, a variation from the required parking standard of 1,318 parking spaces to allow the existing 733 parking spaces, pursuant to Sections 4-600D, 3-200A/B, and 4-200D4, respectively, of the Crystal Lake Unified Development Ordinance and any other variations that may be required for the bleacher project as indicated on the submitted plans.

A public hearing before the Planning and Zoning Commission on the request will be held at 7:30 p.m. on Wednesday, February 4, 2015, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person desiring to be heard may be

present.

Tom Hayden, Chair
Planning and Zoning Commission
City of Crystal Lake

(Published in the Northwest Herald
January 20, 2015. #5841)



WINDSOR DRIVE

CONCORD DRIVE

EBRIDGE LANE

WINDSLOW CIRCLE

AMBERWOOD DRIVE

REGENT DRIVE

WESTPORT RIDGE

FERNLEAF DRIVE

MONARCH DRIVE

GRIMSON DRIVE

SUTHERLAND

SILVER ASPEN CIRCLE

CHERRY AVENUE

COVENTRY LANE

DARTMOOR DRIVE

NOTTINGHAM

JAMES RRAKOW ROAD

INDIAN ROAD

207.41

310.62

184.03

464.87

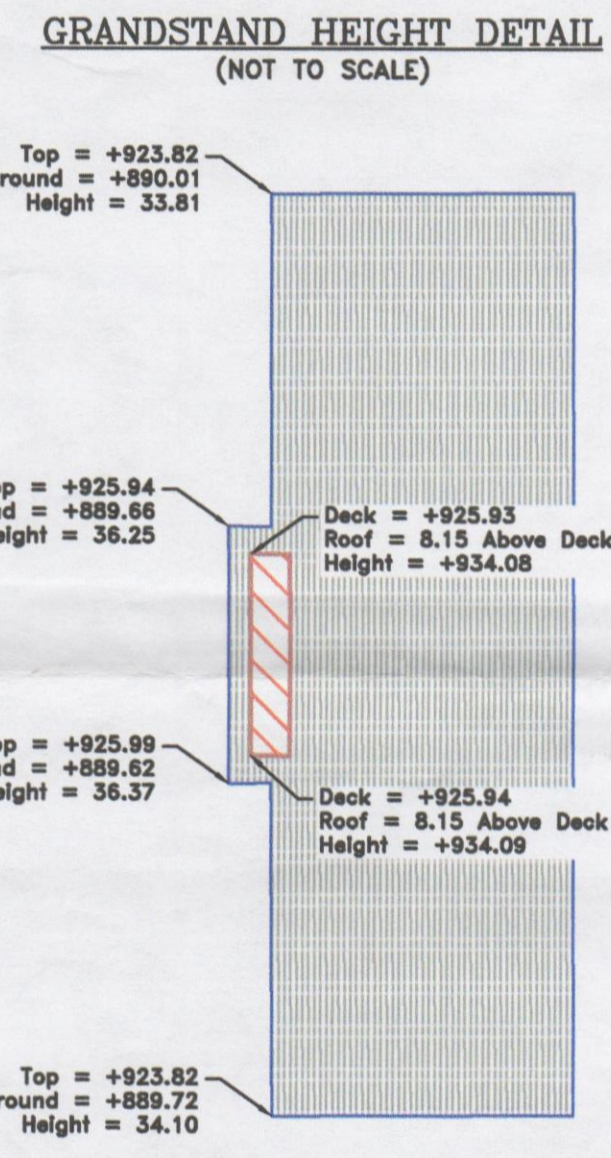
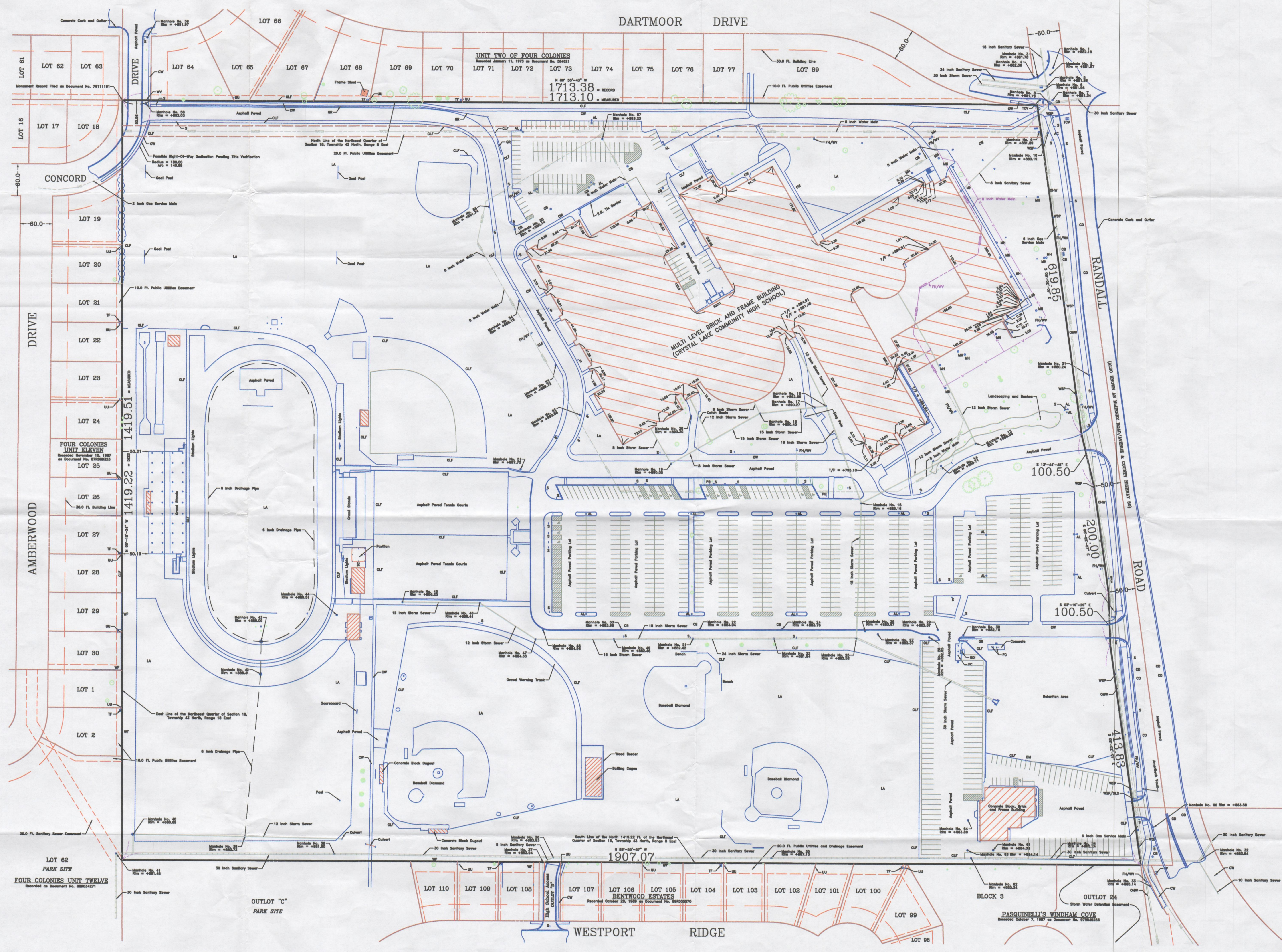
163.37

99.3

447.4

PROPERTY DESCRIPTION

THE NORTH 1419.22 FEET OF THE NORTHEAST QUARTER OF SECTION EIGHTEEN, TOWNSHIP FORTY-THREE NORTH, RANGE EIGHT, EAST OF THE THIRD PRINCIPAL MERIDIAN, LYING WEST OF THE WESTERLY RIGHT-OF-WAY OF RANDALL ROAD (ALSO KNOWN AS MCHENRY AVENUE), IN MCHENRY COUNTY, ILLINOIS.
 CONTAINING 257272 SQUARE FEET OR 59.051 ACRES, MORE OR LESS

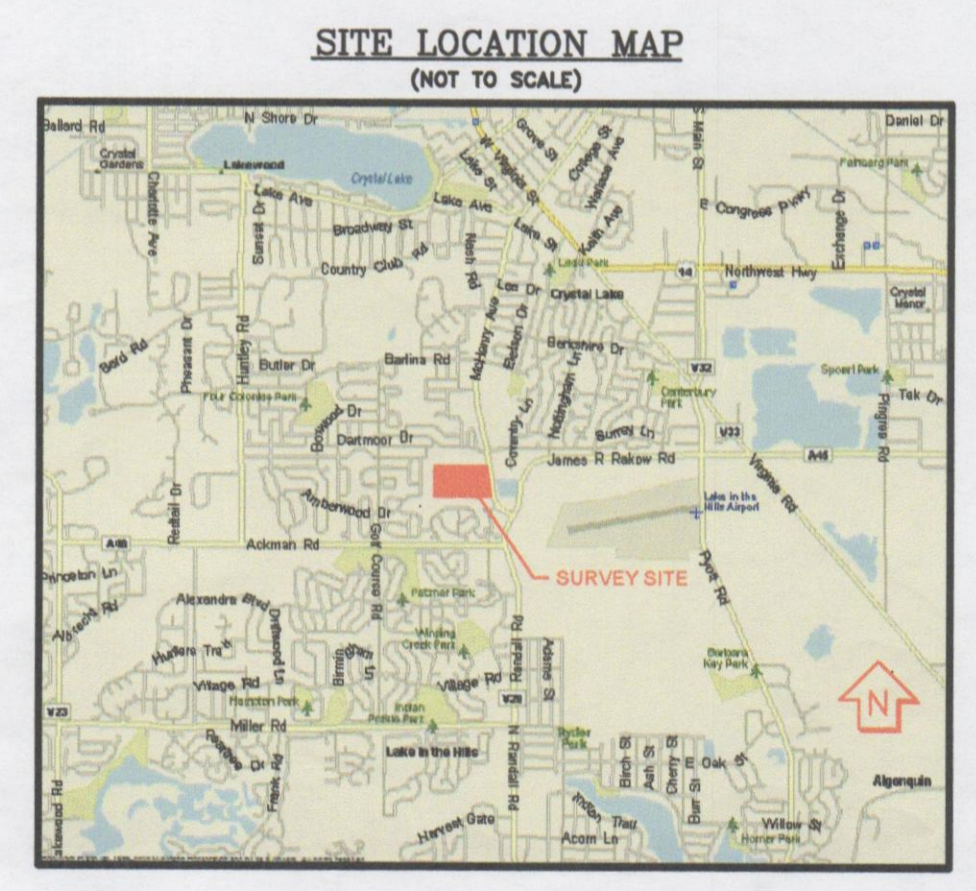


LEGEND

- AL = AREA LIGHT (AL)
- CB = CATCH BASIN (CB)
- CPB = CONCRETE PARKING BUMPER
- CD = CURB DRAIN (CD)
- FH = FIRE HYDRANT (FH)
- GM = GAS METER (GM)
- HPS = HANDICAPPED PARKING SPACE
- MC = MANHOLE COVER (MH)
- MW = MONITOR WELL (MW)
- OWH = OVERHEAD WIRES (OWH)
- PS = PIPE BOLLARD (PB)
- S = SIGN (S)
- SLS = STREET LIGHT STANDARD (SLS)
- TCL = TRAFFIC CONTROL LIGHT (TCL)
- WSP = WOOD SERVICE POLE (WSP)
- T = TREE
- ET = EVERGREEN TREE
- = PROPERTY BOUNDARY
- = PARCEL LINES
- = EASEMENTS

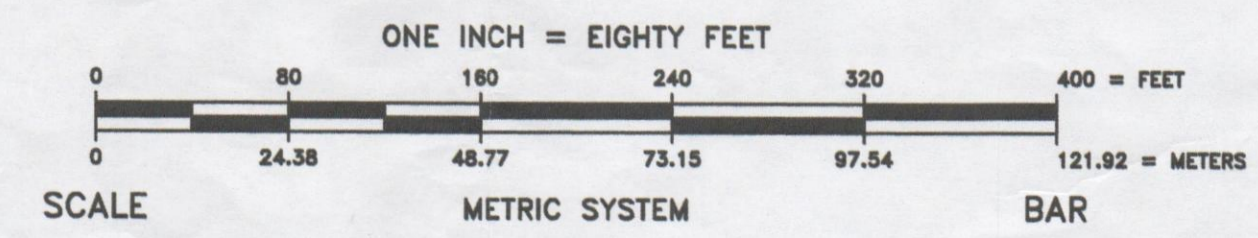
PARKING STALL SUMMARY

STANDARD STALLS	703
HANDICAPPED STALLS	16
TEMPORARY STALLS	14
BUS STALLS	102
TOTAL	835



LEGEND

- AC = ANCHOR CABLE
- AIR = AIR DISPENSER UNIT
- AL = AREA LIGHT
- AS = ADVERTISEMENT SIGN
- CB = CATCH BASIN
- CD = CURB DRAIN
- CL = CHAIN LINK FENCE
- CW = CONCRETE WALK
- EM = ELECTRIC METER
- FC = FLEX COVER
- FH = FIRE HYDRANT
- GM = GAS METER
- GR = GAS VALVE
- GR = METAL GUARD RAIL
- GV = GAS VALVE
- LA = LAWN AREA
- TU = TELEPHONE UTILITY UNIT
- MC = MANHOLE COVER
- MW = MONITOR WELL COVER
- OWH = OVERHEAD WIRES
- PS = PIPE BOLLARD
- PT = PUBLIC TELEPHONE
- S = SIGN
- SC = SUPPORT COLUMN
- SLS = STREET LIGHT STANDARD
- TCL = TRAFFIC CONTROL LIGHT
- TO = TRAFFIC CONTROL SIGNAL LIGHT
- TV = TRANSFORMER
- UN = UNDERGROUND WIRES
- UV = UTILITY UNIT
- VP = VENTILATION PIPES
- WSP = WOOD SERVICE POLE
- WV = WATER VALVE



NOTE: UNDERGROUND UTILITIES SHOWN HEREON, HAVE BEEN PLOTTED WITH THE AID OF AVAILABLE RECORDS. FOR LOCATIONS OF UNDERGROUND UTILITY MAINS, PLEASE CONTACT J.U.L.I.E. BY CALLING 811 OR 1-800-892-0123.

SHEET: 1 OF 2

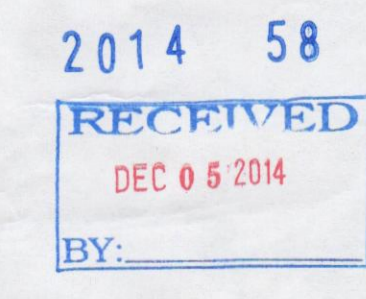
PIN NO.: 19-18-200-008
 ADDRESS: 1200 S. MCHENRY AVENUE
 CRYSTAL LAKE, IL
 CRYSTAL LAKE SOUTH HIGH SCHOOL
 SCALE: ONE INCH = EIGHTY FEET
 ORDER NO.: 01-14235
 ORDERED BY: MR. JEFF DAURER
 FOR SCHOOL DISTRICT NO. 155

COMPARE ALL POINT BEFORE BUILDING BY SAME AND AT ONCE REPORT ANY DIFFERENCE FOR BUILDING LINE AND OTHER RESTRICTIONS NOT SHOWN HEREON REFER TO YOUR CONTRACT, DEED, TITLE INSURANCE POLICY AND ZONING ORDINANCE. BASIS OF BEARINGS SHOWN HEREON HAVE BEEN ASSUMED. MONUMENTS OR WITNESS POINTS WERE NOT SET AT THE CLIENT'S REQUEST.

"THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY."

STATE OF ILLINOIS S.S.
 COUNTY OF DuPAGE

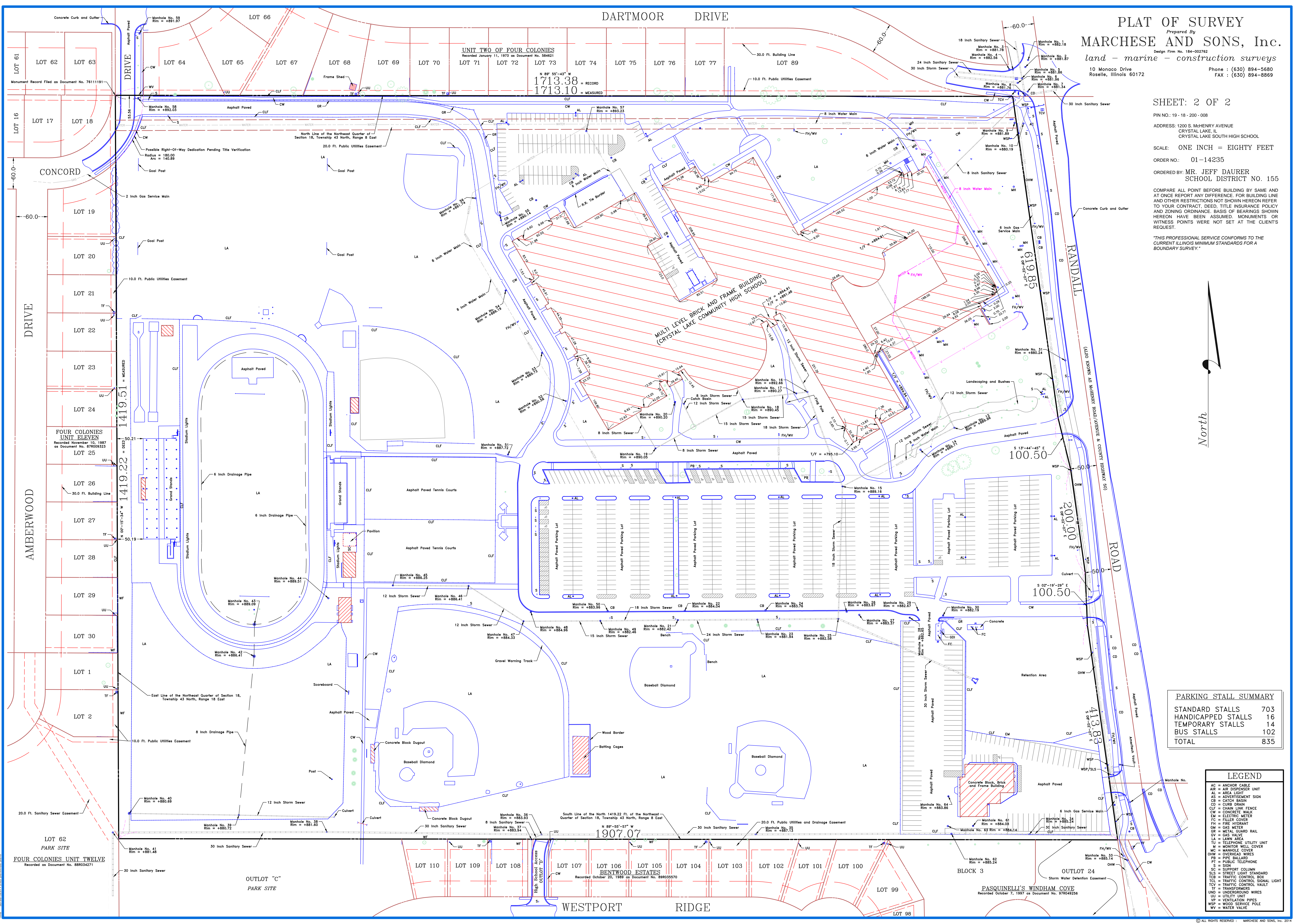
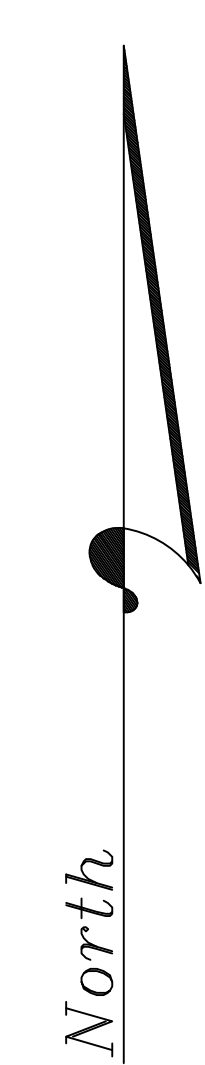
I, PAUL N. MARCHESE, HEREBY CERTIFY THAT I HAVE SURVEYED THE ABOVE DESCRIBED PROPERTY AND THAT THE PLAT HEREON DRAWN IS A CORRECT REPRESENTATION OF SAID SURVEY.
 DATED AT ROSELLE, NOVEMBER 7, 2014



SHEET: 2 OF 2
 PIN NO.: 19-18-200-008
 ADDRESS: 1200 S. McHENRY AVENUE
 CRYSTAL LAKE, IL
 CRYSTAL LAKE SOUTH HIGH SCHOOL
 SCALE: ONE INCH = EIGHTY FEET
 ORDER NO.: 01-14235
 ORDERED BY: MR. JEFF DAURER
 SCHOOL DISTRICT NO. 155

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"THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY."



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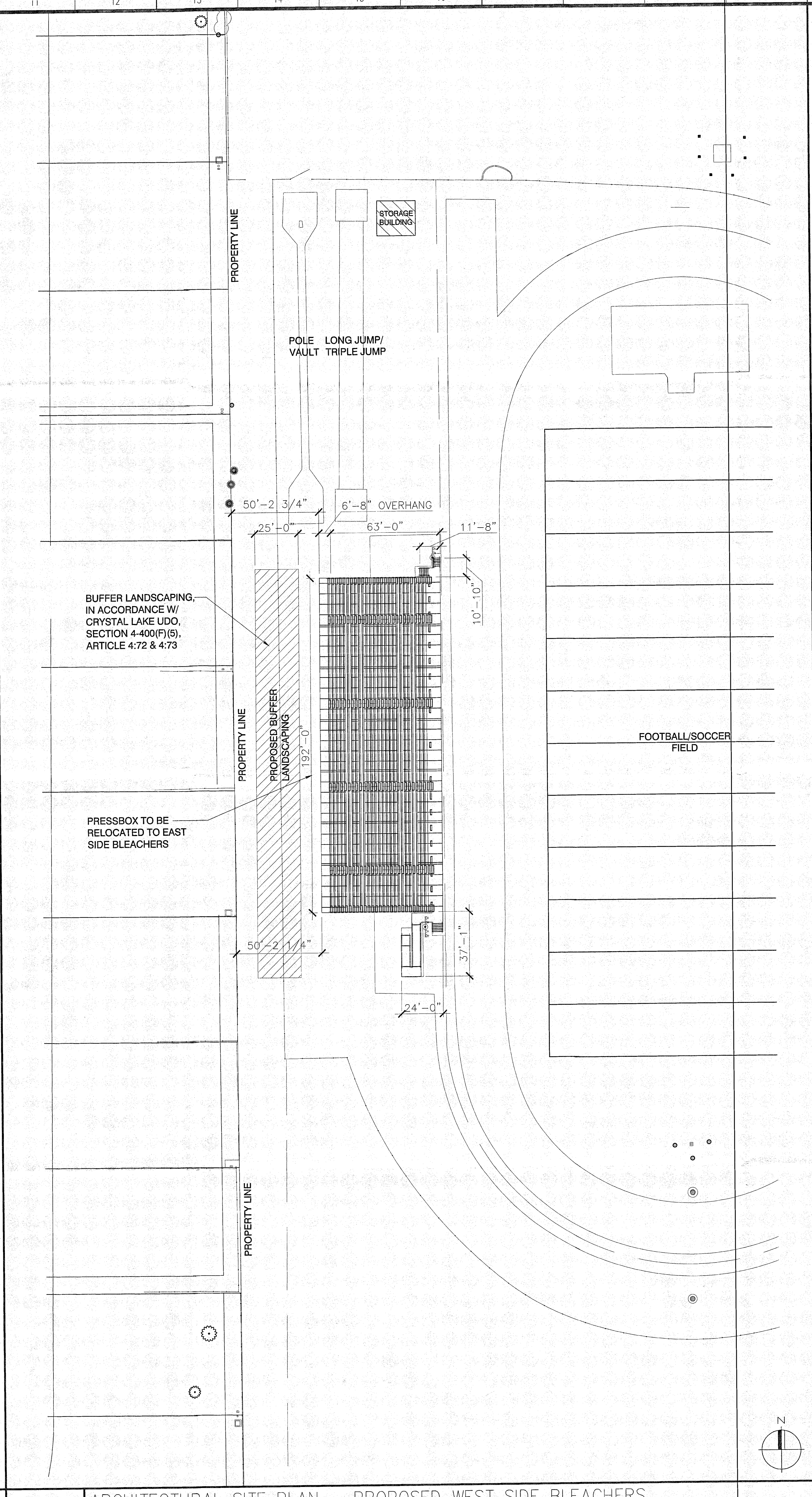
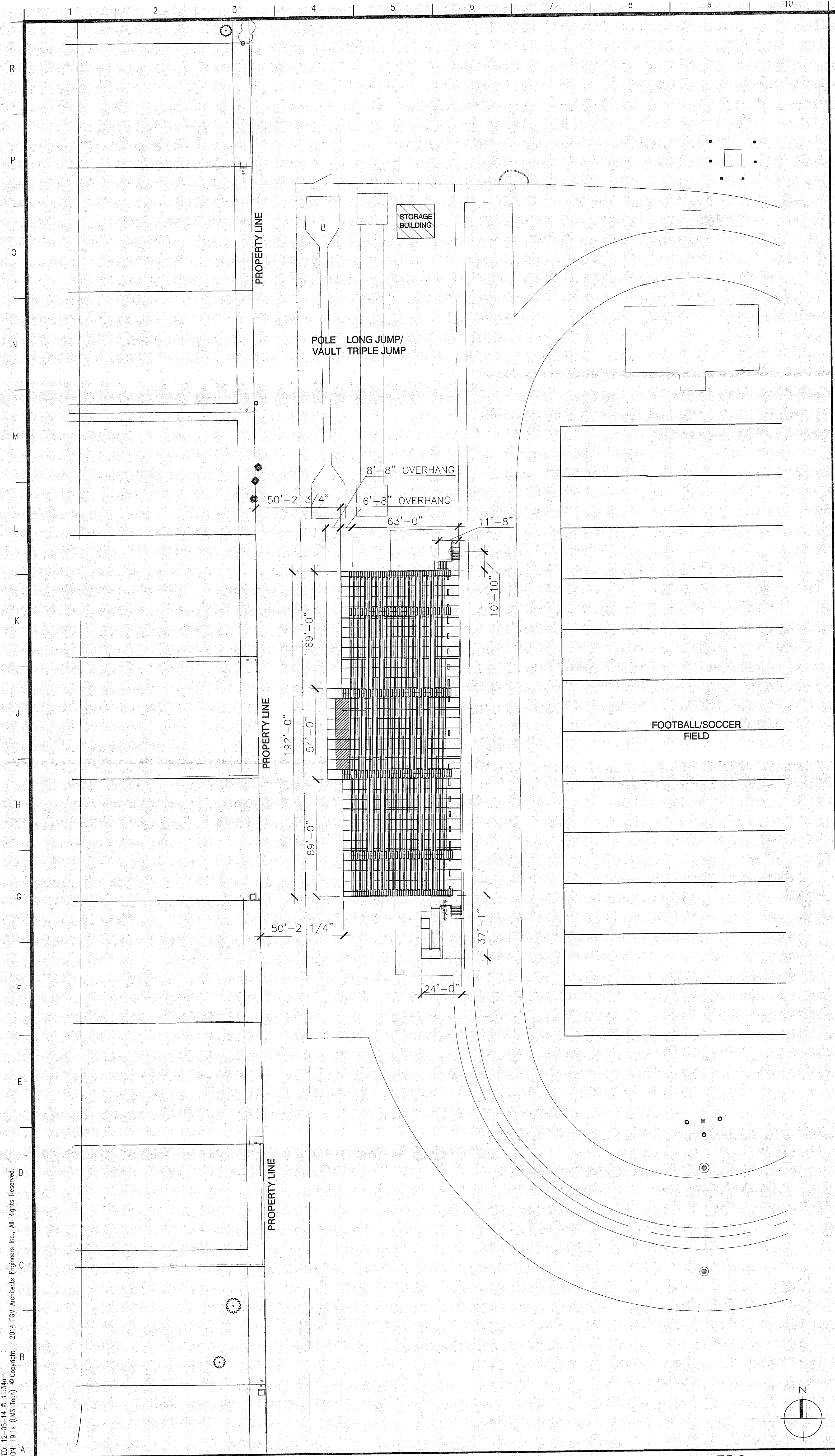
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- TCV = TRAFFIC CONTROL VAULT
- TF = TRANSFORMERS
- UND = UNDERGROUND WIRES
- UU = UTILITY UNIT
- VP = VENTILATION PIPES
- WSP = WOOD SERVICE POLE
- WV = WATER VALVE

UNIT TWO OF FOUR COLONIES
 Recorded January 11, 1973 as Document No. 584621
 N 89° 55'-43" W
 1713.38 = RECORD
 1713.10 = MEASURED

LOT 16
 LOT 17
 LOT 18
 LOT 19
 LOT 20
 LOT 21
 LOT 22
 LOT 23
 LOT 24
 LOT 25
 LOT 26
 LOT 27
 LOT 28
 LOT 29
 LOT 30
 LOT 1
 LOT 2
 LOT 62
 PARK SITE
 FOUR COLONIES UNIT TWELVE
 Recorded as Document No. 88934271

LOT 110
 LOT 109
 LOT 108
 LOT 107
 LOT 106
 LOT 105
 BENTWOOD ESTATES
 Recorded October 20, 1989 as Document No. 89035570
 LOT 104
 LOT 103
 LOT 102
 LOT 101
 LOT 100
 LOT 99
 LOT 98

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 PLOTTED: 12/05/14 @ 11:30am
 VERSION: 191s (MFG Tech) © Copyright 2014 FGM Architects Engineers Inc. All Rights Reserved.



GENERAL NOTES:
 REFER TO PLAT OF SURVEY FOR THE FOLLOWING INFORMATION:

- LAND AREA
- PARKING

BLEACHER DATA:

- WEST SIDE:
 - 2,924 TOTAL NET 18" SEATS
 - 38 TOTAL NET WHEELCHAIR SPACES
 - 2,960 TOTAL SEATING CAPACITY
- EAST SIDE:
 - 981 TOTAL NET 18" SEATS
 - 14 TOTAL NET WHEELCHAIR SPACES
 - 995 TOTAL SEATING CAPACITY
 - TOTAL SEATING CAPACITY: 3,955
- WEST SIDE BLEACHER HEIGHTS - EXISTING CONDITIONS:
 - TOP OF GUARDRAIL @ LAST ROW = +38'-1"
 - TOP OF GUARDRAIL @ PRESSBOX PLATFORM = +40'-2"
 - TOP OF PRESSBOX ROOF = +44'-6"
- WEST SIDE BLEACHER HEIGHT - PROPOSED (PRESSBOX REMOVED):
 - TOP OF GUARDRAIL @ LAST ROW = +38'-1"
- EAST SIDE BLEACHER HEIGHTS - EXISTING CONDITIONS:
 - TOP OF GUARDRAIL @ LAST ROW = +25'-8"
 - EAST SIDE BLEACHER HEIGHTS - PROPOSED (PRESSBOX ADDED):
 - TOP OF GUARDRAIL @ LAST ROW = +25'-8"
 - TOP OF GUARDRAIL @ PRESSBOX PLATFORM = +27'-7"
 - TOP OF PRESSBOX ROOF = +31'-7"

ISSUANCE NO.	DATE	DESCRIPTION	APPROVED
	12/04/14	ISSUED FOR ZONING	

FGM ARCHITECTS
 CHICAGO
 1911 West 22nd Street, Suite 705
 Oak Brook, IL 60523-2019
 Phone: 630.574.8300
 Fax: 630.574.9292
 www.fgmarchitects.com

DRAWN	JC	CHECKED	JC	APPROVED	JP

Professional Design Firm
 #19-0000530

COMMUNITY HIGH SCHOOL DISTRICT 155
 SOUTH HIGH SCHOOL - OUTDOOR BLEACHERS / PRESSBOX
 1200 SOUTH MCHENRY AVENUE
 CRYSTAL LAKE, ILLINOIS 60014

ARCHITECTURAL SITE PLAN

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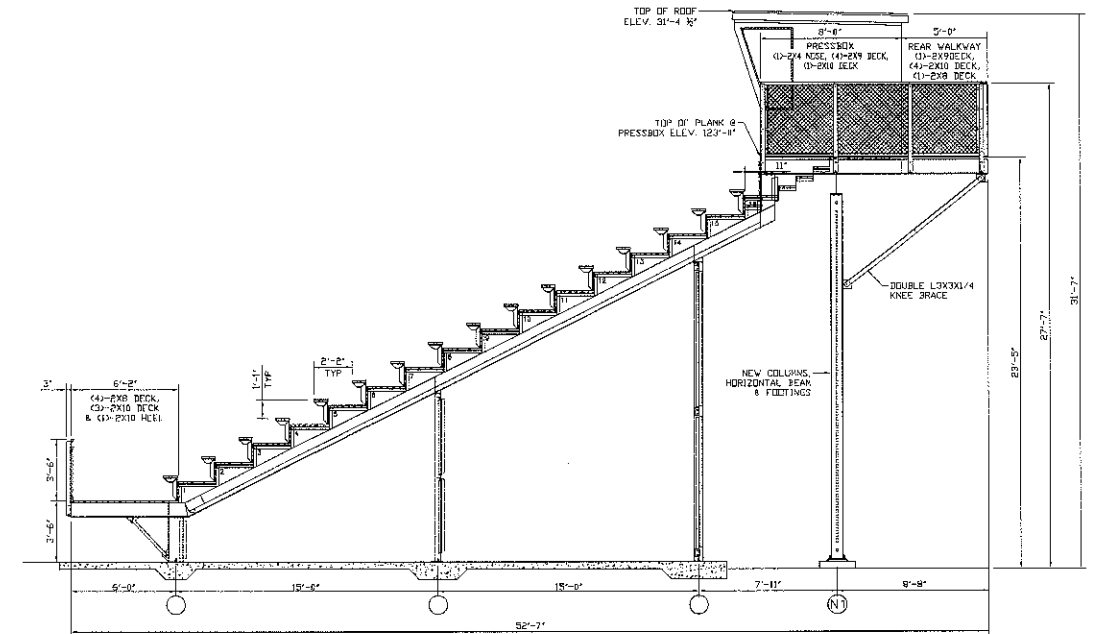
SHEET NO
A0.01
 OF

A1 ARCHITECTURAL SITE PLAN - EXISTING CONDITIONS WEST SIDE BLEACHERS
 SCALE: 1" = 30'-0"

A1 ARCHITECTURAL SITE PLAN - PROPOSED WEST SIDE BLEACHERS
 SCALE: 1" = 30'-0"

A21 NOTES
 SCALE: NTS

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1	12/15/14	ISSUED FOR ZONING	

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1211 West 2nd Street, Suite 705
Oak Brook, IL 60521-2119
Phone: 630.574.8800
Fax: 630.574.8972
www.fgmarchitect.com

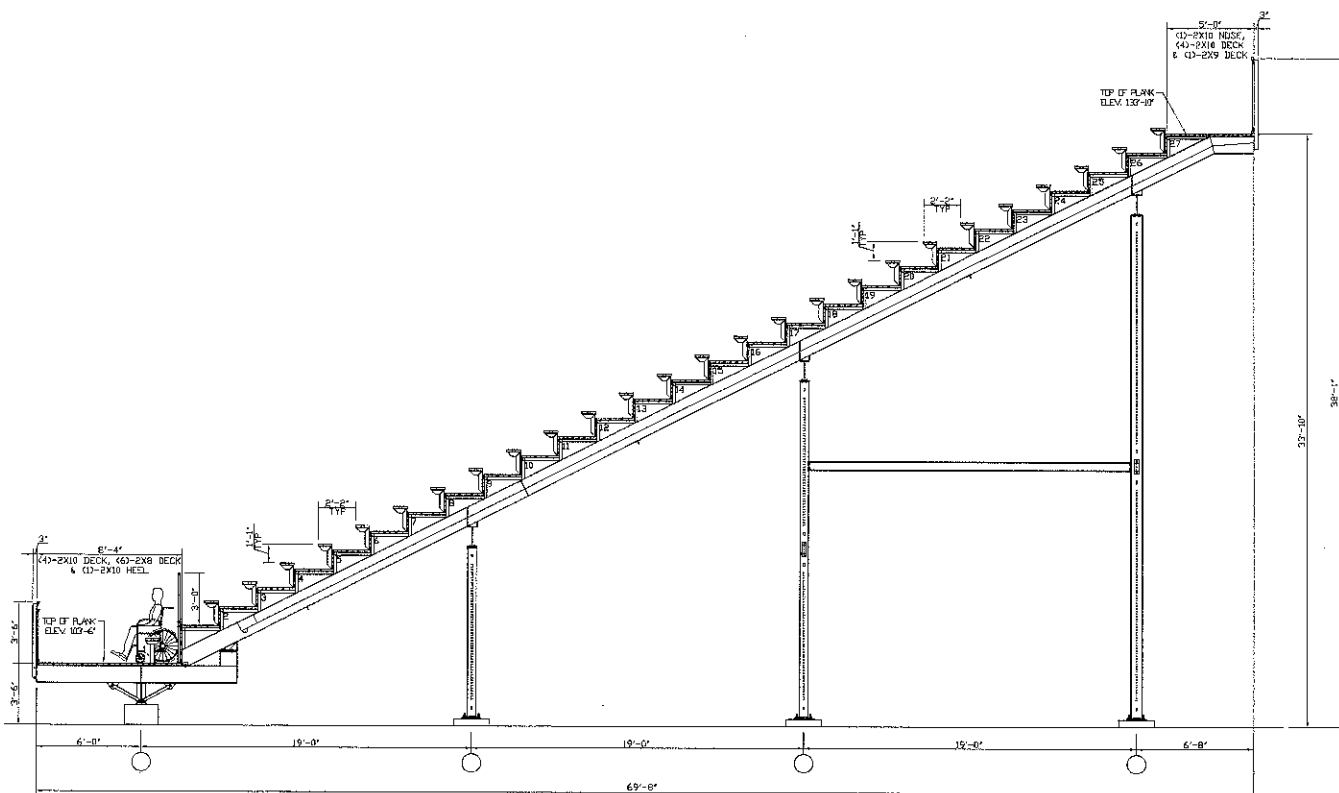
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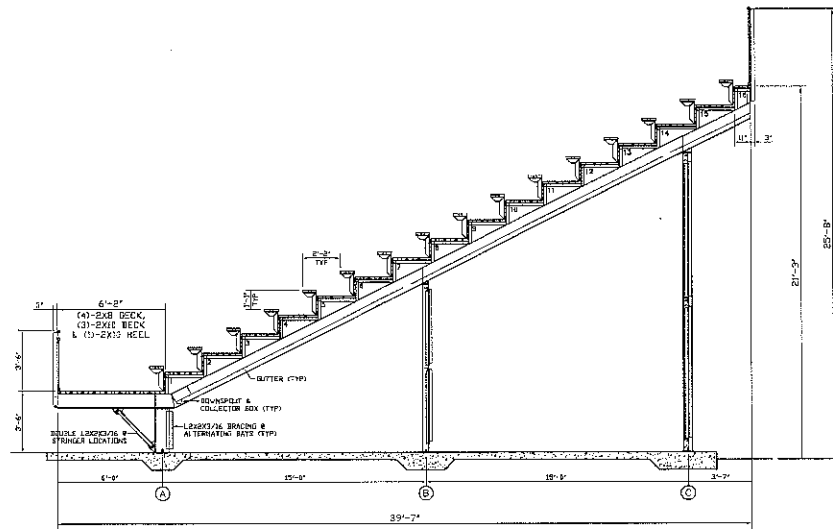
Professional Engineer Firm
#18-000050

J1 NOT USED

J14 ELEVATION/SECTION - PROPOSED EAST BLEACHERS W/ RELOCATED PRESSBOX
SCALE: 1/4" = 1'-0"



A1 TYPICAL ELEVATION/SECTION - PROPOSED WEST BLEACHERS
SCALE: 1/4" = 1'-0"



A14 TYPICAL ELEVATION/SECTION - EAST BLEACHERS
SCALE: 1/4" = 1'-0"

COMMUNITY HIGH SCHOOL DISTRICT 155
SOUTH HIGH SCHOOL - OUTDOOR BLEACHERS / PRESSBOX
1200 SOUTH MCHENRY AVENUE
CRYSTAL LAKE, ILLINOIS 60014
ELEVATIONS/SECTIONS EAST + WEST BLEACHERS

JOB NO 12-1558.03

SHEET NO
A1.02
OF

P:\12-1558\12-1558-ADD\12-1558-ADD\12-1558-ADD.dwg - Corentin\2014\12-1558.DWG
 12/15/14 10:15 AM
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LEGEND / LANDSCAPE REQUIREMENTS

- PROPOSED DECIDUOUS OVERSTORY TREE
- PROPOSED UNDERSTORY TREE
- PROPOSED EVERGREEN TREE
- PROPOSED SHRUB

25' LANDSCAPE BUFFER REQUIREMENTS (236' LINEAL FEET)

REQUIRED PER 100 LINEAL FEET:

- 2 OVERSTORY DECIDUOUS OR EVERGREEN TREES
- 6 UNDERSTORY TREES
- 16 SHRUBS

TOTAL PROPOSED PLANT MATERIALS:

- 2 OVERSTORY DECIDUOUS AND 3 EVERGREEN TREES
- 14 UNDERSTORY TREES
- 38 SHRUBS

REPRESENTATIVE PLANT LIST				
KEY	QUANTITY	BOTANIC NAME	COMMON NAME	SIZE
DECIDUOUS SHADE TREES				
AKR		ACER F. 'JEFFERS RED'	AUTUMN BLAZE FREEMAN MAPLE	3"
			16" HIGH X 8" WIDE @ INSTALLATION; 50" HIGH X 40" WIDE @ MATURITY	BB (1)
FWC		FRAXINUS X. ACERIFOLIA 'MORTON CIRCAE'	EXPLANATION LONDON PLANETREE	3"
			16" HIGH X 8" WIDE @ INSTALLATION; 60" HIGH X 45" WIDE @ MATURITY	BB (2)
DECIDUOUS ORNAMENTAL TREES				
HW		MALUS DONALD WYMAN	DONALD WYMAN CRABAPPLE	8"
			8" HIGH X 8" WIDE @ INSTALLATION; 20" HIGH X 25" WIDE @ MATURITY	BB (2)
SPH		SPIRAEA P. 'MORTON'	CHINA SNOW PINK LILAC	8"
			8" HIGH X 7" WIDE @ INSTALLATION; 25" HIGH X 20" WIDE @ MATURITY	BB (2)
EVERGREEN TREES				
FP		PICEA PARVENS	COLORADO SPRUCE	8"
			8" HIGH X 7" WIDE @ INSTALLATION; 45" HIGH X 18" WIDE @ MATURITY	BB (1)
PG		PICEA MARICA BENSATA	BLACK HILLS SPRUCE	8"
			8" HIGH X 7" WIDE @ INSTALLATION; 25" HIGH X 15" WIDE @ MATURITY	BB (1)
LARGE DECIDUOUS SHRUBS				
NM		VEURJAN D. 'MORTON'	NORTHERN BURGUNDY ARBORESCENT VIBURNUM	4"
			4" HIGH X 3" WIDE @ INSTALLATION; 10" HIGH X 9" WIDE @ MATURITY	BB
NDS		VEURJAN D. 'SPINEHEED'	CHICAGO LLISTRE ARBORESCENT VIBURNUM	4"
			4" HIGH X 3" WIDE @ INSTALLATION; 10" HIGH X 9" WIDE @ MATURITY	BB
REMARKS				
1. FULL SPECIMENS, BRANCHED TO THE GROUND				
2. MULTI-STEM, CLUMP FORM				

MATERIAL SCHEDULE			REMARKS
KEY	QUANTITY	MATERIAL	
-	-	C.Y. MULCH	SHREDDED HARDWOOD
AS REQ.	SEED -	KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS, FESCUE BLEND	FOR SITE RESTORATION WORK
-	1,082 S.Y.	SIDE-SLOPE NATIVE SEED MIX	SEE GENERAL NOTE BELOW
-	1,765 S.Y.	SWALE BOTTOM NATIVE SEED MIX	SEE GENERAL NOTE BELOW

SIDE-SLOPE NATIVE SEED MIX (4 SPECIES) INSTALL AT 16/LBS. PER ACRE

COMMON NAME	SCIENTIFIC NAME	AMOUNT
LITTLE BLUESTEM	ANDROPOGON SCOPARIUS	4 LBS.
SWITCHGRASS	PANICUM VIRGATUM	2 LBS.
SIDE-OWS GRAMA	BOULDER OBTusifolia	6 LBS.
VIRGINIA WILD RYE	ELYMUS VIRGINICUS	4 LBS.

SWALE BOTTOM NATIVE SEED MIX (9 SPECIES) INSTALL AT 11/LBS. PER ACRE

COMMON NAME	SCIENTIFIC NAME	AMOUNT
BROWN FOX SEDGE	CAREX VUSINDESA	1 LB.
RED-ROOTED SPINE RUSH	ELEOCHARIS ERIOPHYLLA	0.25 LBS.
BARNEYARD GRASS	ECHINOCHLOA CRUSSGALLI	5 LBS.
BENT GRASS	AGROSTIS ALBA PALUSTRE	3 LBS.
TICK SEED SPECIES	SOECS SP.	0.5 LBS.
SWAMP MILKWEED	ASCLEPIA INCARNATA	0.125 LBS.
RIVER BULRUSH	SCIRPUS FLUMINATUS	0.5 LBS.
SOFT STEM BULRUSH	SCIRPUS VALIDUS	0.5 LBS.
PAWLED ASTER	ASTER SPINEX	0.125 LBS.

COVER CROP INSTALL AT 50/LBS. PER ACRE

COMMON NAME	SCIENTIFIC NAME
SEED OATS	AVENA SATIVA

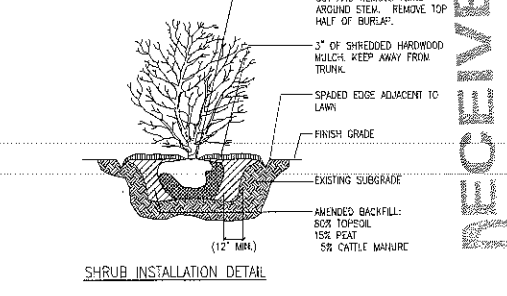
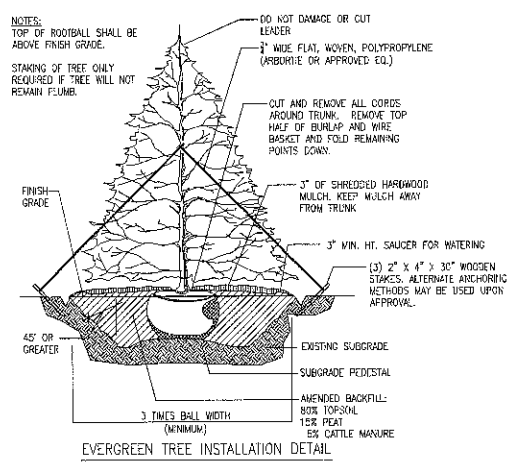
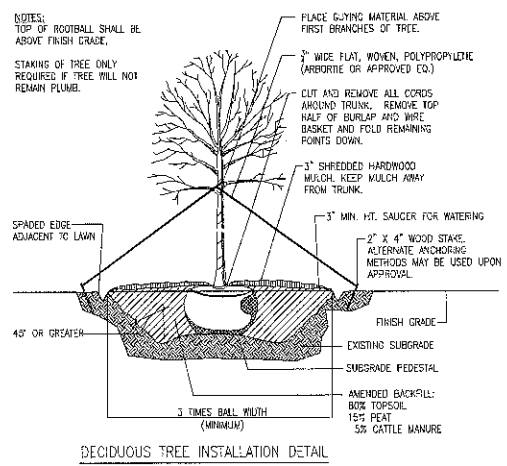
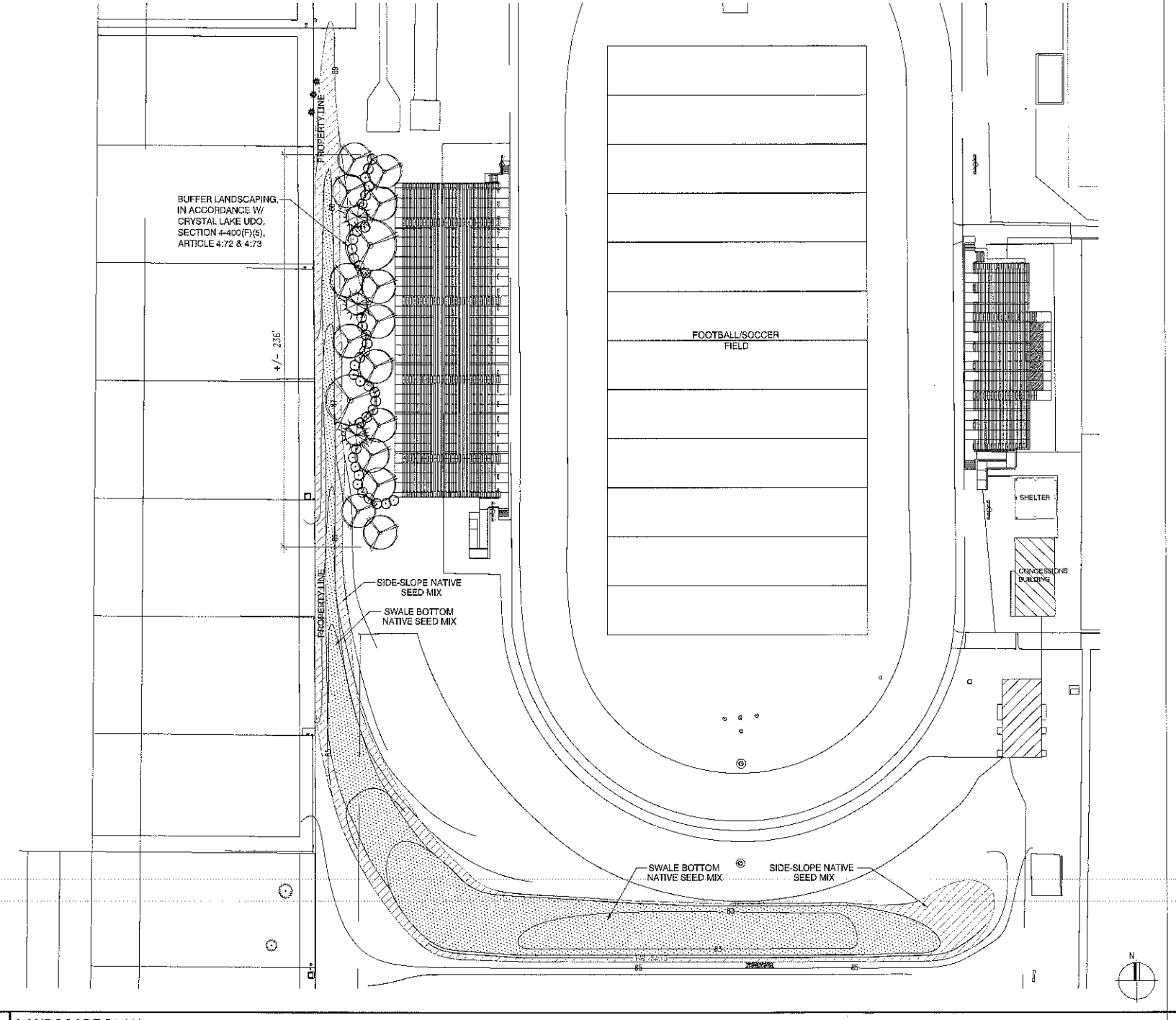
ISSUANCE

NO.	DATE	DESCRIPTION	APPROVED
02/20/15	12/17/14	ISSUED FOR ZONING	
	02/20/15	ISSUED FOR STORMWATER REVIEW RESPONSE	

N1 **LEGEND**
NOT TO SCALE

N8 **REPRESENTATIVE PLANT LIST**
NOT TO SCALE

N17 **SCHEDULE AND NOTES**



FGM ARCHITECTS

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JC
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JP

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COMMUNITY HIGH SCHOOL DISTRICT 155
SOUTH HIGH SCHOOL - OUTDOOR BLEACHERS / PRESSBOX
1200 SOUTH MCCHENRY AVENUE
CRYSTAL LAKE, ILLINOIS 60014

LANDSCAPE PLAN

JOB NO 12-1558.03

SHEET NO
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OF

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SITE IMPROVEMENT PLANS for CRYSTAL LAKE SOUTH HIGH SCHOOL OUTDOOR BLEACHERS

CRYSTAL LAKE, ILLINOIS

PROJECT NO: 6934.10

CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS

9575 W. Higgins Road, Suite 700, Rosemont, Illinois 60018
Phone: (847) 696-4060 Fax: (847) 696-4065

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS



FILENAME:
6934.10.DWG
DATE:
12/19/14
JOB NO.
6934.10
SHEET
C1
1 OF 9

CALL J.U.L.I.E. 1-800-892-0123
WITH THE FOLLOWING:

COUNTY McHENRY
CITY, TOWNSHIP CRYSTAL LAKE, ALGONQUIN TWN
SEC. & 1/4 SEC. NO. _____

48 HOURS BEFORE YOU DIG.
EXCLUDING SAT., SUN. & HOLIDAYS

NOTE:

SPACECO, INC. IS TO BE NOTIFIED AT LEAST
THREE (3) DAYS PRIOR TO STARTING CONSTRUCTION
AND SHALL BE INCLUDED IN THE PRECONSTRUCTION MEETINGS

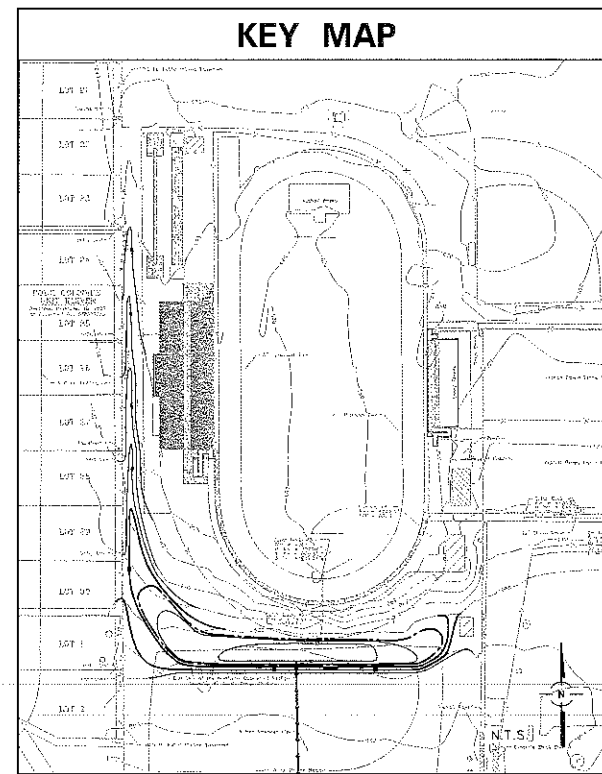
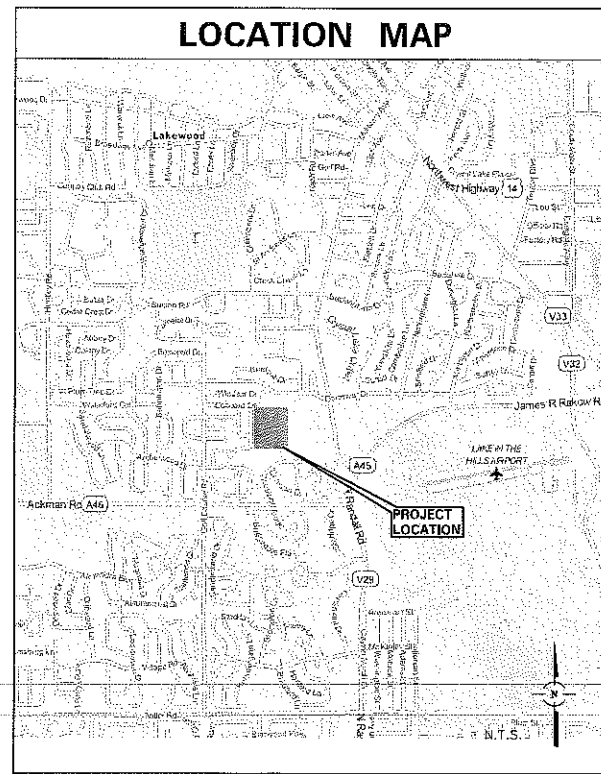
REVISIONS

ORIGINAL PLAN DATE: DECEMBER 19, 2014

#	SHEET #	REMARKS	DATE
1	3-9	PER CITY COMMENTS	01/22/15

INDEX

SHEET #	SHEET LD.	SHEET DESCRIPTION
1	C1	COVER SHEET
2	C2	GENERAL NOTES/ TYPICAL SECTIONS
3	C3	EXISTING CONDITIONS
4	C4	DEMOLITION PLAN
5	C5	ENGINEERING PLAN
6-B	C6-C8	SOIL EROSION AND SEDIMENT CONTROL PLANS
9	C9	SPECIFICATIONS AND DETAILS



ENGINEER
 THOMAS McCABE, JR., P.E.
 ILLINOIS REGISTRATION NO.: 062-044159
 EXPIRATION DATE: 11/30/2015
 PROFESSIONAL DESIGN FIRM NO.: 184-001157
 EXPIRATION DATE: 04/30/2015
THESE PLANS OR ANY PART THEREOF SHALL BE CONSIDERED VOID WITHOUT THE SIGNATURE, SEAL, AND EXPIRATION DATE OF SEAL OF THE ENGINEER.

01/22/15
 DATE

THOMAS McCABE, JR.
 44159
 REGISTERED
 PROFESSIONAL
 ENGINEER
 OF
 ILLINOIS

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GENERAL NOTES

- 1. REFERENCED CODES
A. ALL PAVEMENT AND STORM SEWER CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION...
B. ALL SANITARY SEWER AND WATERMAIN CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION...
C. ALL SIDEWALK AND PUBLIC AREAS MUST BE CONSTRUCTED IN ACCORDANCE WITH CURRENT ADA, ILLINOIS HANDICAP ACCESSIBILITY AND ANY APPLICABLE LOCAL ORDINANCES...
D. THE LATEST STANDARD SPECIFICATIONS, CODES AND PERMITS, WITH THESE CONSTRUCTION PLANS AND DETAILS, ARE ALL TO BE CONSIDERED PART OF THE CONTRACT...
2. UTILITY LOCATIONS
A. THE UTILITY COMPANIES HAVE BEEN CONTACTED IN REFERENCE TO UTILITIES THEY OWN AND OPERATE WITHIN THE LIMITS FOR THIS PROJECT...
B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE UTILITY COMPANIES LOCATE THEIR FACILITIES IN THE FIELD PRIOR TO CONSTRUCTION...
C. EASEMENTS FOR THE EXISTING UTILITIES, BOTH PUBLIC AND PRIVATE, AND UTILITIES WITHIN PUBLIC RIGHTS-OF-WAY ARE SHOWN ON THE PLANS...
3. UTILITY COORDINATION
A. OWNER SHALL OBTAIN EASEMENTS AND PERMITS NECESSARY TO FACILITATE CONSTRUCTION OF THE PROPOSED UTILITIES...
B. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE NATURE AND STATUS OF ALL UTILITY RELOCATION WORK PRIOR TO THE START OF CONSTRUCTION...
C. THE OWNER AND THE ENGINEER SHALL BE NOTIFIED IN WRITING BY THE CONTRACTOR AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION...
4. NO PLAN SHALL BE USED FOR CONSTRUCTION UNLESS SPECIFICALLY MARKED 'FOR CONSTRUCTION'...
5. ALL PROPOSED ELEVATIONS SHOWN ON THE PLANS ARE FINISHED SURFACE ELEVATIONS...
6. UPON AWARDING OF THE CONTRACT, AND WHEN REQUIRED BY THE MUNICIPALITY OR OWNER, THE CONTRACTOR SHALL FURNISH A LABOR, MATERIAL AND PERFORMANCE BOND...
7. THE CONTRACTORS SHALL PLAN THEIR WORK BASED ON THEIR OWN BORINGS, EXPLORATIONS AND OBSERVATIONS TO DETERMINE SOIL CONDITIONS...
8. CONTRACTOR SHALL VIDEO TAPE WORK AREA PRIOR TO CONSTRUCTION FOR THE PURPOSE OF DOCUMENTING EXISTING CONDITIONS...
9. COMMENCING CONSTRUCTION
A. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR HIS REPRESENTATIVE AND THE AFFECTED GOVERNMENTAL AGENCIES IN WRITING AT LEAST THREE (3) WORKING DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION...
B. FAILURE OF CONTRACTOR TO ALLOW PROPER NOTIFICATION TIME WHICH RESULTS IN TESTING COMMANDS TO BE UNABLE TO VISIT SITE AND PERFORM TESTING WILL CAUSE CONTRACTOR TO SUSPEND OPERATION...
10. ALL CONTRACTORS SHALL KEEP ACCESS AVAILABLE AT ALL TIMES FOR ALL TYPES OF TRAFFIC...
11. THE CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES UNTIL THEY ARE NO LONGER NEEDED...
12. ANY EXISTING SIGNS, LIGHT STANDARDS AND UTILITY POLES WHICH INTERFERE WITH CONSTRUCTION OPERATIONS...
13. REMOVAL OF SPECIFIED ITEMS, INCLUDING BUT NOT LIMITED TO, PAVEMENT, SIDEWALK, CURB, CURB AND CUTTER, COLVERTS, ETC...
14. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION OPERATIONS SHALL BE CONNECTED TO THE PROPOSED STORM SEWER SYSTEM...
15. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB...
16. THE CONTRACTOR SHALL COLLECT AND REMOVE ALL CONSTRUCTION DEBRIS, EXCESS MATERIALS, TRASH, OIL AND GREASE RESIDUE...
17. ALL EXISTING UTILITIES OR IMPROVEMENTS, INCLUDING WALKS, CURBS, PAVEMENT AND PARKWAYS DAMAGED OR REMOVED DURING CONSTRUCTION SHALL BE PROMPTLY RESTORED TO THEIR RESPECTIVE ORIGINAL CONDITION...
18. TREES NOT MARKED FOR REMOVAL SHALL BE CONSIDERED AS DESIGNATED TO BE SAVED AND SHALL BE PROTECTED UNDER THE PROVISIONS OF (SSRBC) ARTICLE 201.05...
19. LIMB PRUNING SHALL BE PERFORMED UNDER THE SUPERVISION OF THE LANDSCAPE ARCHITECT MEETING THE OWNER'S APPROVAL...
20. ALL LIMBS, BRANCHES, AND OTHER DEBRIS RESULTING FROM THIS WORK SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR...
21. ALL CUTS OVER 1" IN DIAMETER SHALL BE MADE FLUSH WITH THE NEXT LARGER BRANCH. WOUNDS OVER 1" IN DIAMETER SHALL BE PAINTED WITH AN APPROVED TREE PAINT.

- 22. GENERAL EXCAVATION/UNDERGROUND NOTES
A. SLOPE SIDES OF EXCAVATIONS TO COMPLY WITH CODES AND ORDINANCES HAVING JURISDICTION, SHORE AND BRACE WHERE SLOPING IS NOT POSSIBLE EITHER BECAUSE OF SPACE RESTRICTIONS OR STABILITY OF MATERIAL...
B. PROVIDE MATERIALS FOR SHORING AND BRACING, SUCH AS SHEET PILING, UPRIGHTS, STRINGERS AND CROSS BRACES...
C. PREVENT SURFACE WATER AND SUBSURFACE OR DRIPWATER FROM FLOWING INTO EXCAVATIONS...
D. IMMEDIATELY REPORT CONDITIONS THAT MAY CAUSE UNSOUND BEARING TO THE OWNER/DEVELOPER BEFORE CONTINUING WORK...
23. FINAL ACCEPTANCE
A. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE GUARANTEED BY THE CONTRACTOR AND HIS SURETY FOR A PERIOD OF TWELVE (12) MONTHS...
B. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED BY THE OWNER OR HIS REPRESENTATIVE...
C. NO UNDERGROUND WORK SHALL BE COVERED UNTIL IT HAS BEEN APPROVED BY THE MUNICIPALITY...
D. AT THE CLOSE OF EACH WORKING DAY AND AT THE CONCLUSION OF CONSTRUCTION OPERATIONS...
24. UNDERGROUND NOTES
A. UNDERGROUND WORK SHALL INCLUDE TRENCHING, INSTALLATION OF PIPE, CASTINGS, STRUCTURES, BACKFILLING OF TRENCHES AND COMPACTION AND TESTING AS SHOWN ON THE CONSTRUCTION PLANS...
B. WHERE SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, EXISTING DRAINAGE STRUCTURES AND SYSTEMS SHALL BE CLEANED OF DEBRIS AND PATCHED AS NECESSARY TO ASSURE INTEGRITY OF THE STRUCTURE...
C. ANY DEMATERING OF SEWER AND WATER TRENCHES AS WELL AS TEMPORARY SHEETING OR BRACING THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR...
D. TRENCH BACKFILL WILL BE REQUIRED FOR THE FULL TRENCH DEPTH WITHIN TWO (2) FEET OF PROPOSED OR EXISTING PAVEMENTS...
E. THE CONTRACTOR SHALL INSTALL A 4" x 4" x 8" (NOMINAL) POST AT THE TERMINUS OF THE SANITARY, WATER AND STORM SERVICES...
F. AFTER THE STORM SEWER SYSTEM HAS BEEN CONSTRUCTED, THE CONTRACTOR SHALL PLACE EROSION CONTROL AT EACH TRENCH LOCATION...
G. HYDRANTS SHALL NOT BE FLOUSED DIRECTLY ON THE ROAD SURFACES...
H. ALL TOP OF FRAMES FOR STORM AND SANITARY SEWERS AND VALVE VAULT COVERS ARE TO BE ADJUSTED TO MEET FINAL FINISH GRADE...
I. SLEEVES FOR UTILITY (CABLE, TELEPHONE, ETC.) STREET CROSSING SHALL BE INSTALLED WHERE DIRECTED BY THE OWNER...
J. THE CONTRACTOR SHALL VERIFY THE SIZE AND INVERT ELEVATION OF ALL CONNECTIONS TO AVOID ANY CONFLICTS BEFORE STARTING WORK...
25. IT SHALL BE UNDERSTOOD THAT NEITHER THE MUNICIPALITY, ITS OFFICIALS, CONSULTANTS, NOR ITS EMPLOYEES ARE AGENTS OF OR REPRESENTATIVES OF THE OWNER...
26. DRAIN TILE NOTES
A. DRAIN TILE SYSTEMS DISTURBED DURING DEVELOPMENT MUST BE RECONNECTED BY THE RESPONSIBLE FOR THEIR DISTURBANCE...
27. PROJECT BENCHMARK
SANITARY MANHOLE RIM SOUTH OF VISITOR PARKING
ELEVATION: 859.34 (NAVD88)

LEGEND table with columns: EXISTING, DESCRIPTION, PROPOSED. Includes symbols for DRAIN TILE, STORM SEWER, SANITARY SEWER, WATER MAIN, PIPE TRENCH BACKFILL, GAS MAIN, TELEPHONE LINES, ELECTRIC LINE, FENCE, RIGHT-OF-WAY, EASEMENT, PROPERTY LINE, SETBACK LINE, CENTERLINE, CONTOUR, SANITARY MANHOLE, STORM MANHOLE, CATCH BASIN, INLET, FIRE HYDRANT, PRESSURE CONNECTION, PIPE REDUCER, VALVE AND VAULT, VALVE, FLARED END SECTION, STREET LIGHT, UTILITY POLE, CONTROL POINT, SIGN, SPOT ELEVATION, SOIL BORING, OVERLAND FLOW ROUTE, DRAINAGE SLOPE, GUARDRAIL, WATER'S EDGE, CONCRETE, REVERSE PITCH CURB, TREE, FIR TREE, BUSH, & PROPOSED TREE TO REMOVE.

ABBREVIATIONS table with columns: SYMBOL, DESCRIPTION, DESCRIPTION. Includes M - STORM MANHOLE, S - SANITARY MANHOLE, CB - CATCH BASIN, LP - LIGHT POLE, VV - VALVE VAULT, VE - END SECTION, FH - FIRE HYDRANT, GR - GRADE RING (HYDRANT), I - INVERT OR INLET, TF - TOP OF FOUNDATION, GF - GARAGE FLOOR, TC - TOP OF CURB, YD - TOP OF DEPRESSED CURB, TW - TOP OF RETAINING WALL, BW - BOTTOM OF RETAINING WALL, OP - OUTLET OF PIPE, T/P - TOP OF PIPE, B/P - BOTTOM OF PIPE, WM - WATERMAIN, SAN - SANITARY SEWER, STM - STORM SEWER, LD - LOOK OUT, PLO - PARTIAL LOOK OUT.

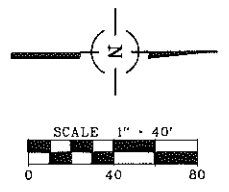
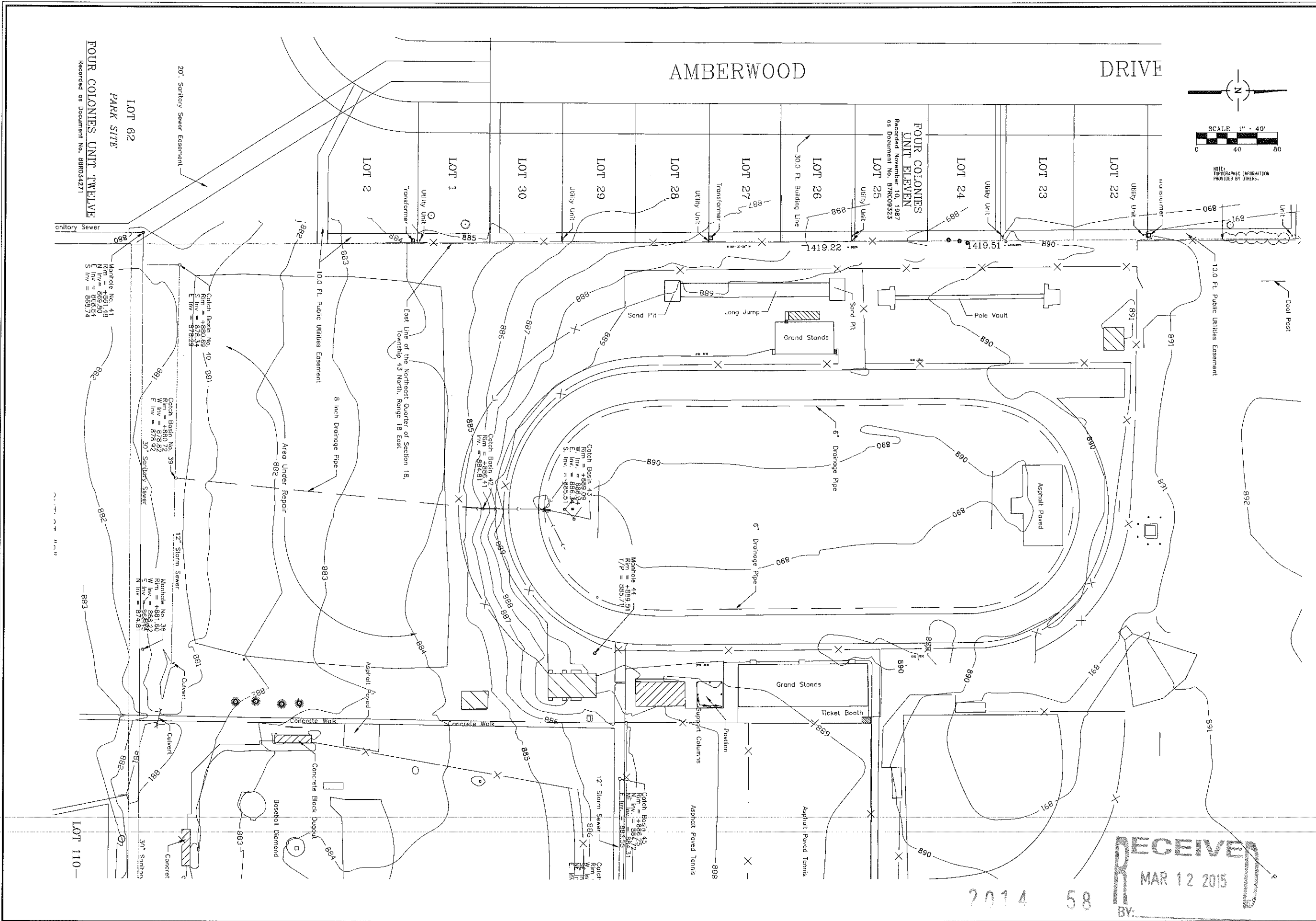
PERMITS table with columns: DESCRIPTION, LOG NO., PERMIT NO., DATE ISSUED. Includes CRYSTAL LAKE STORMWATER MANAGEMENT PERMIT.

PROJECT BENCHMARK
SANITARY MANHOLE RIM SOUTH OF VISITOR PARKING
ELEVATION: 859.34 (NAVD88)

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Vertical sidebar containing project title: TYPICAL SECTIONS AND GENERAL NOTES, CRYSTAL LAKE SOUTH HIGH SCHOOL, OUTDOOR BLEACHERS, CRYSTAL LAKE, ILLINOIS. Includes logos for CONSULTING ENGINEERS, SITE DEVELOPMENT ENGINEERS, LAND SURVEYORS, SPACECO INC., and project metadata like FILENAME: 6934.10GN, DATE: 12/19/14, JOB NO: 6934.10, SHEET: C2 OF 9.



NOTE: TOPOGRAPHIC INFORMATION PROVIDED BY OTHERS.

NO.	DATE	REMARKS

NO.	DATE	REMARKS
1	10/22/15	PER CITY

EXISTING CONDITIONS
CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS
 CRYSTAL LAKE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS
 957 S. W. Highway Road, Suite 300
 Rosemont, Illinois 60018
 Phone: (847) 697-0600 Fax: (847) 697-0605



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6934.10

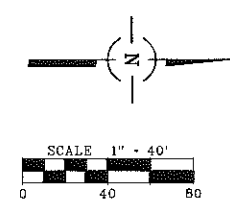
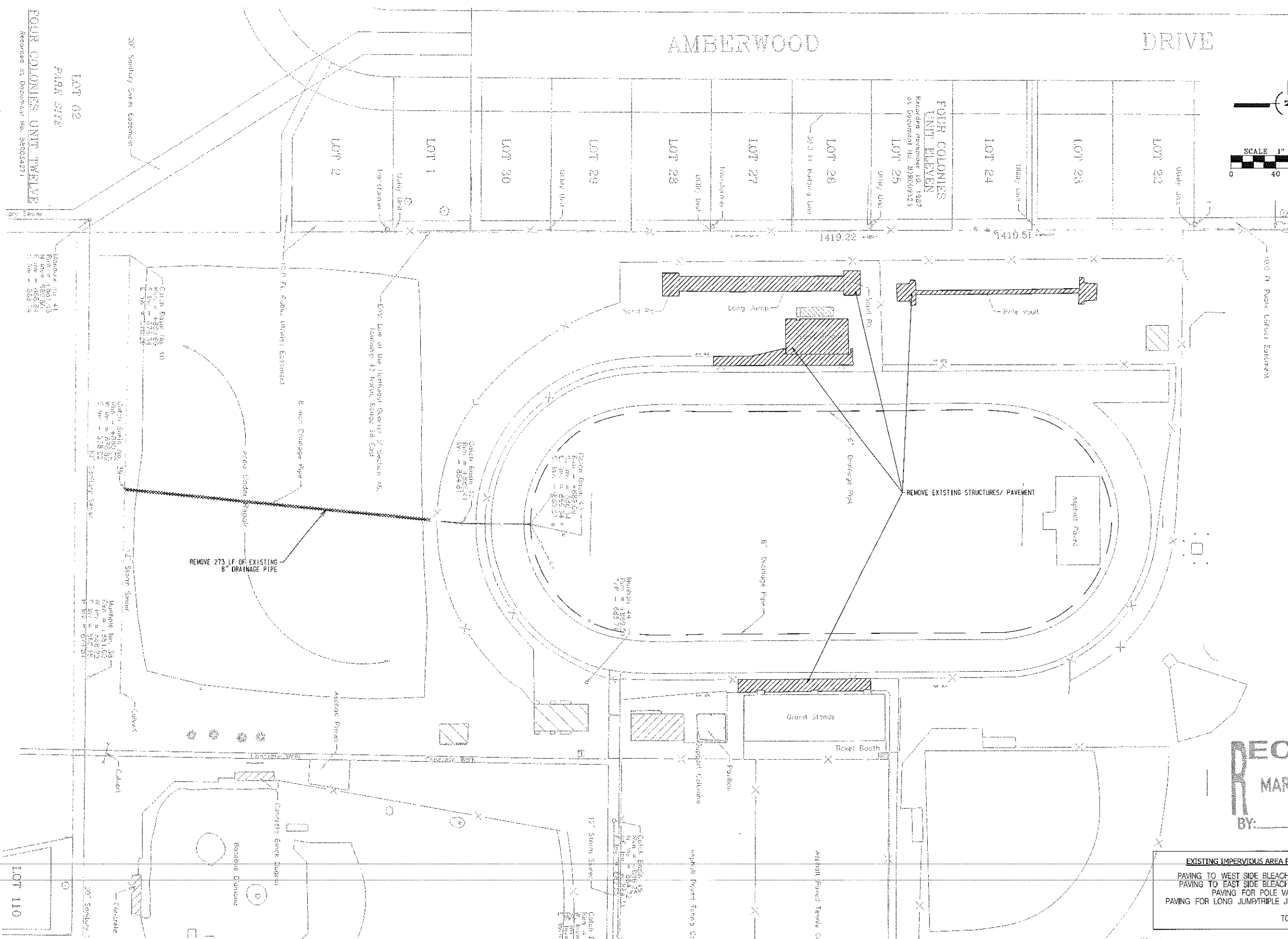
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3 OF 9

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LOT 62
 PARK SITE
 FOUR COLONIES UNIT TWELVE
 Recorded as Document No. 889034271

LOT 110



LOT 02
 PLANNED SIZE
 FOUR COLONIES UNIT TWELVE
 Reference to Document No. SBR04271

FOUR COLONIES
 UNIT ELEVEN
 Reference to Document No. SBR04272
 or Document No. SBR04273

NO.	DATE	REMARKS
1	07/22/15	PER CITY

DEMOLITION PLAN
CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS
 CRYSTAL LAKE, ILLINOIS

CONSULTING ENGINEERS
 SITE DEVELOPMENT ENGINEERS
 LAND SURVEYORS
 9375 W. Higgins Road, Suite 700,
 Crystal Lake, IL 60154
 Phone: (847) 666-4000 Fax: (847) 666-6055



FILENAME:
 6934.10DEM.DGN
 DATE:
 12/19/14
 JOB NO.
 6934.10

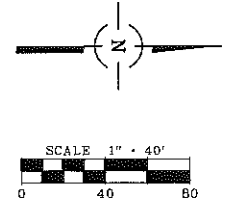
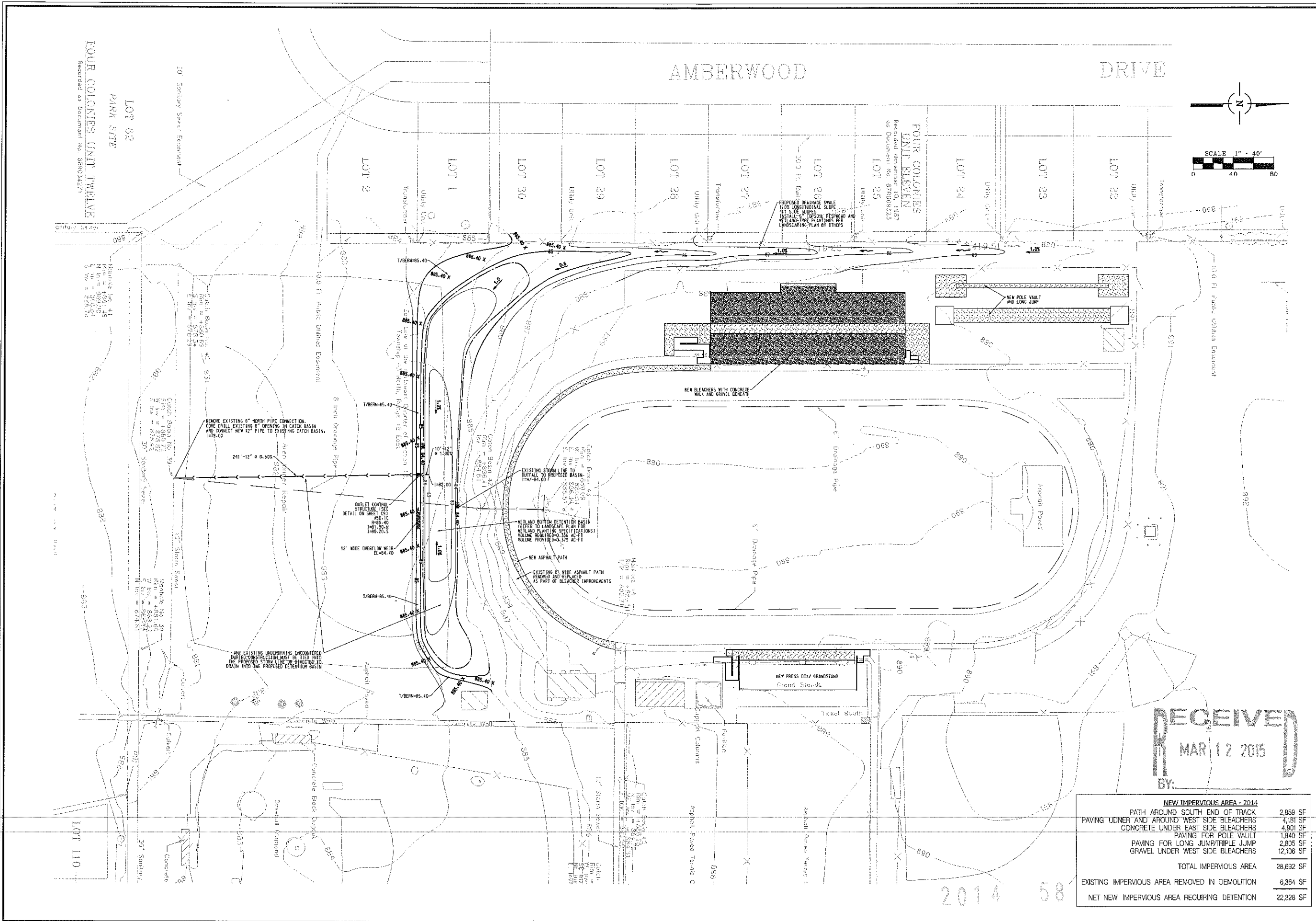
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 4 OF 9

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EXISTING IMPERVIOUS AREA REMOVED - 2014	
PAVING TO WEST SIDE BLEACHERS	1,420 SF
PAVING TO EAST SIDE BLEACHERS	1,216 SF
PAVING FOR POLE VAULT	1,175 SF
PAVING FOR LONG JUMP/TRIPLE JUMP	2,553 SF
TOTAL	6,364 SF

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NO.	DATE	REMARKS

NO.	DATE	REMARKS
1	07/22/15	PER CITY

ENGINEERING PLAN
CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS
 CRYSTAL LAKE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS

9375 W. Higgins Road, Suite 700
 Crystal Lake, IL 60142
 Phone: (815) 494-8000 Fax: (815) 494-4055

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NEW IMPERVIOUS AREA - 2014	
PATH AROUND SOUTH END OF TRACK	2,869 SF
PAVING WIDEN AND AROUND WEST SIDE BLEACHERS	4,181 SF
CONCRETE UNDER EAST SIDE BLEACHERS	4,901 SF
PAVING FOR POLE VAULT	1,840 SF
PAVING FOR LONG JUMP/TRIPLE JUMP	2,805 SF
GRAVEL UNDER WEST SIDE BLEACHERS	12,106 SF
TOTAL IMPERVIOUS AREA	28,692 SF
EXISTING IMPERVIOUS AREA REMOVED IN DEMOLITION	6,364 SF
NET NEW IMPERVIOUS AREA REQUIRING DETENTION	22,328 SF



FILENAME:
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Catch-All is a manufactured inlet filtration device designed to significantly reduce the ingress of pollutants into stormwater systems, and therefore, improve water quality. Designs are available for a custom fit in virtually any drainage structure casting.

Catch-All BR is available to provide the added benefit of hydrophobic removal.

Design Benefits:

1. Pollution Prevention
2. Pollution Removal
 - Hydrocarbons (Catch-All ITR)
 - Total Suspended Solids
 - Phosphorus
 - Nitrogen
 - Heavy Metals
 - Any other pollutants

Applications:

1. Site Development & Highway Construction
 - Inlet Protection / Sediment Control
 - Stormwater BMP
 - Maintenance Yards
 - Wash Bays
 - Parking Lots & Garages
 - Alleviate - Trench, Catch Basins, Roadside Retention
 - Bank/Foot Road Drains
 - Reduce Maintenance of Underground Drainage Systems
 - Reduce Maintenance of Underground Oil/Water Separators

PLAN CODE: FF

YARD GRATE INLET PROTECTION

PLAN CODE: FF

PIPE OUTLET TO FLAT AREA

PLAN CODE: EB

PIPE OUTLET TO CHANNEL

PLAN CODE: LA

STABILIZED CONSTRUCTION ENTRANCE PLAN

PLAN CODE: SE

STABILIZED CONSTRUCTION ENTRANCE PLAN

PLAN CODE: SE

SILT FENCE PLAN SPACECO, INC. PRIMARY DETAIL

PLAN CODE: SK

SILT FENCE WITH WIRE SUPPORT PLAN SPACECO, INC. ALTERNATE DETAIL

PLAN CODE: SK

TREE PROTECTION - FENCING

PLAN CODE: TP

TEMPORARY CONCRETE WASHOUT FACILITY - BARRIER WALL

PLAN CODE: CW

TEMPORARY CONCRETE WASHOUT FACILITY - EARTHEN TYPE

PLAN CODE: CW

TEMPORARY CONCRETE WASHOUT FACILITY - STRAW BALE

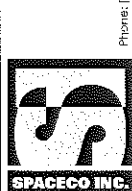
PLAN CODE: CW

PERFORATED RISER DETAIL

PLAN CODE: PR

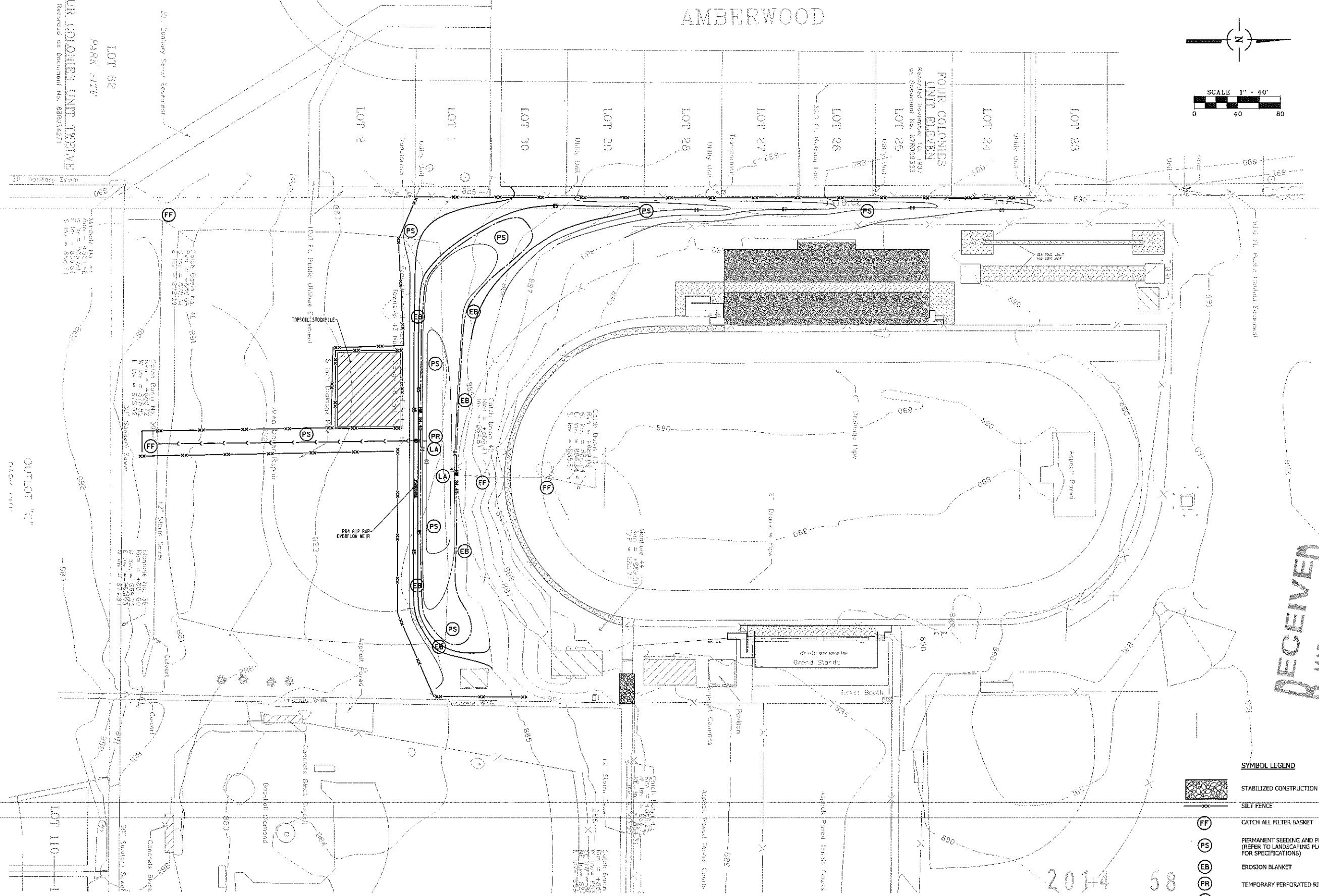
SOIL EROSION AND SEDIMENT CONTROL PLAN
CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS
CRYSTAL LAKE, ILLINOIS

CONSULTING ENGINEERS
SITE DEVELOPMENT ENGINEERS
LAND SURVEYORS



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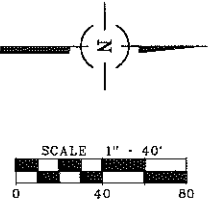
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LOT 62
PARK SITE
FOUR COLONIES UNIT TWENTY
Recorded as Document No. 698352271

AMBERWOOD

FOUR COLONIES
UNIT ELEVEN
Recorded November 16, 1987
as Document No. 678025223



- SYMBOL LEGEND**
- STABILIZED CONSTRUCTION ENTRANCE
 - xx SILT FENCE
 - FF CATCH ALL FILTER BASKET
 - PS PERMANENT SEEDING AND PLANTINGS (REFER TO LANDSCAPING PLANS FOR SPECIFICATIONS)
 - EB EROSION BLANKET
 - PR TEMPORARY PERFORATED RISER
 - LA RIP RAP LINED APRON

2014 58

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MAR 12 2015

SOIL EROSION AND SEDIMENT CONTROL PLAN
CRYSTAL LAKE SOUTH HIGH SCHOOL
OUTDOOR BLEACHERS
CRYSTAL LAKE, ILLINOIS

CONSULTING ENGINEERS
SITING/DEVELOPMENT ENGINEERS
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4575 W. Higgins Road, Suite 700
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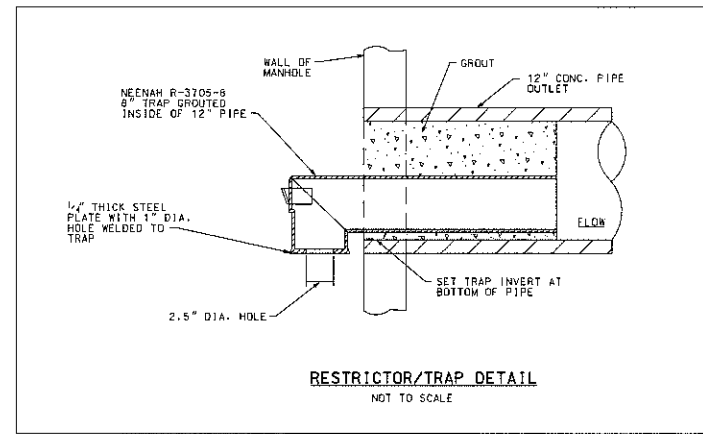
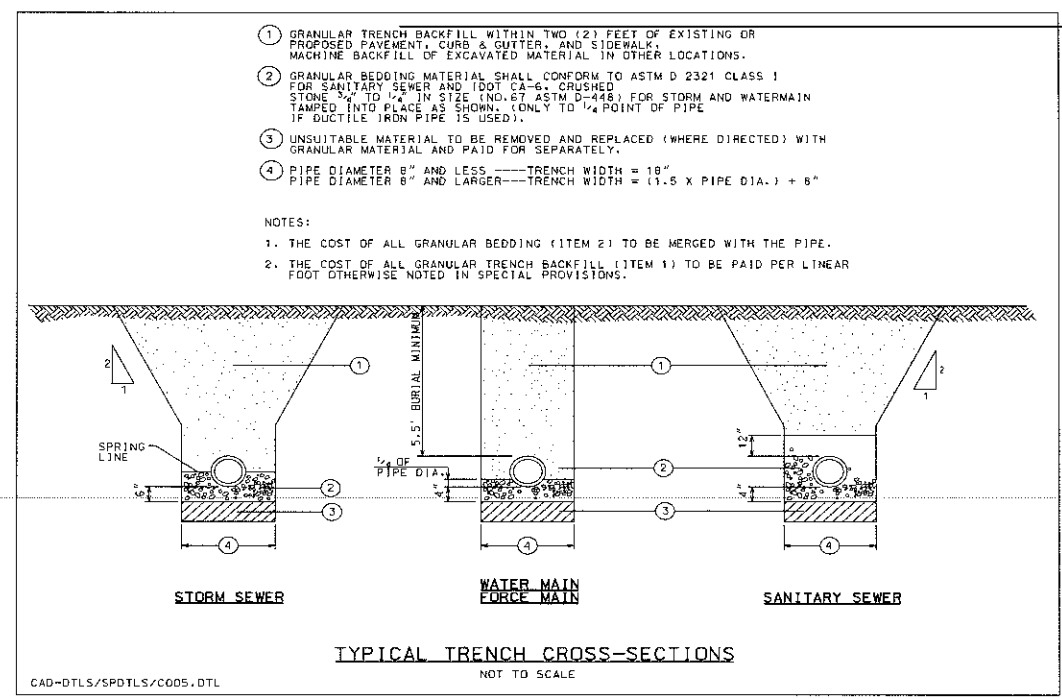
EARTHWORK NOTES

- GENERAL
 - IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE SOIL AND GROUNDWATER CONDITIONS AT THE SITE. THE CONTRACTOR SHALL OBTAIN AND READ THE GEOLOGICAL REPORTS AVAILABLE FROM THE OWNER.
 - ANY QUANTITIES IN THE BID PROPOSAL ARE INTENDED AS A GUIDE FOR THE CONTRACTOR'S USE IN DETERMINING THE SCOPE OF THE CONSTRUCTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE MATERIAL QUANTITIES AND APPRAISE HIMSELF OF ALL SITE CONDITIONS. THE CONTRACT PRICE SUBMITTED BY THE CONTRACTOR SHALL BE CONSIDERED AS LOW FOR THE COMPLETE PROJECT. NO CLAIMS FOR EXTRA WORK WILL BE RECOGNIZED UNLESS ORDERED IN WRITING BY THE OWNER.
 - THE CONTRACTOR WILL NOTE THAT THE ELEVATIONS SHOWN ON THE CONSTRUCTION PLANS ARE FINISHED GRADE ELEVATIONS AND THAT PAVEMENT THICKNESS, TOPSOIL, ETC. MUST BE SUBTRACTED TO DETERMINE SUBGRADE ELEVATIONS.
 - THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE DURING CONSTRUCTION, AND PREVENT STORMWATER FROM RUNNING INTO OR STANDING IN EXCAVATED AREAS. THE FAILURE TO PROVIDE PROPER DRAINAGE WILL NEGATE ANY POSITIVE ADDED COMPENSATION REQUESTED DUE TO DELAYS OR UNSUITABLE MATERIALS CREATED AS A RESULT THEREOF. FINAL GRADES SHALL BE PROTECTED AGAINST DAMAGE FROM EROSION, SEDIMENTATION AND TRAFFIC.
 - PLANS FOR THE SITE WATERING, IF EMPLOYED, SHALL BE SUBMITTED TO AND APPROVED BY THE OWNER PRIOR TO IMPLEMENTATION. NO ADDITIONAL COMPENSATION SHALL BE MADE FOR WATERING DURING CONSTRUCTION.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION OF THE "SOIL EROSION AND SEDIMENTATION CONTROL MEASURES", THE INITIAL ESTABLISHMENT OF EROSION CONTROL PROCEDURES AND THE PLACEMENT OF SILT AND FILTER FENCING, ETC. TO PROTECT ADJACENT PROPERTY. WEEDS, ETC. SHALL OCCUR BEFORE GRADING BEGINS. A MUNICIPAL EROSION CONTROL INSPECTOR MAY BE REQUIRED BEFORE ANY EARTHWORK IS PERFORMED.
 - PRIOR TO COMMENCEMENT OF GRADING ACTIVITIES, THE CONTRACTOR SHALL ERECT A "SNOW FENCE" AROUND ANY TREE DESIGNATED TO BE PRESERVED. SAID FENCE SHALL BE PLACED IN A CIRCLE CENTERED AROUND THE TREE. THE DIAMETER OF WHICH SHALL BE SUCH THAT THE ENTIRE DUMP ZONE (EXTENT OF FURTHEST EXTENDING BRANCHES) SHALL BE WITHIN THE FENCE LIMITS. THE EXISTING GRADE WITHIN THE FENCED AREA SHALL NOT BE DISTURBED.
 - EXCESS MATERIALS, IF NOT UTILIZED AS FILL, SHALL BE COMPLETELY REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
 - ALL EARTHWORK SHALL BE DONE UNDER THE SUPERVISION OF AN ILLINOIS LICENSED ENGINEER WHO SPECIALIZES IN THE GEOTECHNICAL FIELD (SOILS ENGINEER). THIS ENGINEER WILL BE RESPONSIBLE FOR ENSURING THAT ALL UNSUITABLE MATERIALS ARE REMOVED, ALL STRUCTURAL FILL MATERIALS ARE PROPERLY PLACED AND COMPACTED, ALL PAVEMENT SUBGRADES ARE PROPERLY PREPARED, PROOF ROLLING SUBGRADES AND BASE COURSES, AND ENSURING THAT ALL WATER RETAINING EMBANKMENTS ARE PROPERLY CONSTRUCTED. THE DEVELOPER/PAYS FOR ALL GEOTECHNICAL SERVICES.
- TOPSOIL EXCAVATION INCLUDES:
 - EXCAVATION OF TOPSOIL AND OTHER STRUCTURALLY UNSUITABLE MATERIALS WITHIN THOSE AREAS THAT WILL REQUIRE EARTH EXCAVATION OR COMPACTED EARTH FILL MATERIAL. EXISTING VEGETATION SHALL BE REMOVED PRIOR TO SUPERVISION OF EXCAVATION OR FILLING AREAS.
 - PLACEMENT OF THE EXCAVATED MATERIAL IN OWNER DESIGNATED AREAS FOR FUTURE USE WITHIN AREAS TO BE LANDSCAPED, AND THOSE AREAS NOT REQUIRING STRUCTURAL FILL MATERIAL. PROVIDE NECESSARY EROSION CONTROL MEASURES FOR STOCKPILE.
 - TOPSOIL STOCKPILED FOR RESPADE SHALL BE FREE OF CLAY AND SHALL NOT CONTAIN ANY OF THE TRANSITIONAL MATERIAL BETWEEN THE TOPSOIL AND CLAY. THE TRANSITIONAL MATERIAL SHALL BE USED IN NON-STRUCTURAL FILL AREAS OR DISPOSED OF OFF-SITE.
 - TOPSOIL RESPADE SHALL INCLUDE MIXING AND SPREADING 6" OF TOPSOIL OVER AREAS TO BE LANDSCAPED WHERE SHOWN ON THE PLANS OR DIRECTED BY THE OWNER.
 - MODERATE COMPACTION IS REQUIRED IN NON-STRUCTURAL FILL AREAS.
- EARTH EXCAVATION INCLUDES:
 - EXCAVATION OF CLAY AND OTHER MATERIALS WHICH ARE SUITABLE FOR USE AS STRUCTURAL FILL. THE EXCAVATION SHALL BE TO WITHIN A TOLERANCE OF 0.1 FEET OF THE PLAN SUBGRADE ELEVATIONS WHILE MAINTAINING PROPER DRAINAGE. THE TOLERANCE WITHIN PAVEMENT AREAS SHALL BE SUCH THAT THE EARTH MATERIALS SHALL "BALANCE" DURING THE FINISH GRADING OPERATION.
 - PLACEMENT OF THE CLAY AND OTHER SUITABLE MATERIALS SHALL BE WITHIN THOSE AREAS REQUIRING STRUCTURAL FILL. IN ORDER TO ACHIEVE THE PLAN SUBGRADE ELEVATIONS TO WITHIN A TOLERANCE OF 0.1 FEET, THE FILL MATERIAL SHALL BE PLACED IN LOOSE LIFTS THAT SHALL NOT EXCEED EIGHT (8) INCHES IN THICKNESS, AND THE WATER CONTENT SHALL BE ADJUSTED IN ORDER TO ACHIEVE REQUIRED COMPACTION. STRUCTURAL FILL MATERIAL MAY BE PLACED WITHIN THOSE PORTIONS OF THE SITE NOT REQUIRING STRUCTURAL FILL. TO WITHIN SIX (6) INCHES OF THE PLAN FINISHED GRADE ELEVATION. IN AREAS REQUIRING STRUCTURAL FILL, HOWEVER, THIS MATERIAL SHALL NOT BE PLACED OVER TOPSOIL OR OTHER UNSUITABLE MATERIALS UNLESS SPECIFICALLY DIRECTED BY A SOILS ENGINEER WITH THE CONCUERANCE OF THE OWNER.
 - COMPACTION OF THE CLAY AND OTHER SUITABLE MATERIALS, SHALL BE TO AT LEAST 93% OF THE MODIFIED PROCTOR DRY DENSITY WITHIN PROPOSED PAVEMENT AREAS, SIDEWALKS, ETC. COMPACTION SHALL BE AT LEAST 95% OF THE MODIFIED PROCTOR WITHIN PROPOSED BUILDING PAD AREAS.
 - EXCAVATIONS: QUANTITIES OF EARTH EXCAVATION INDICATED ELSEWHERE IN THIS CONTRACT HAVE BEEN COMPUTED BY THE TWO AREA METHOD AS PROVIDED FOR IN SECTION 207 OF THE STANDARD SPECIFICATIONS. EXCAVATED MATERIALS NOT NEEDED FOR THIS JOB SITE SHALL BE LEGALLY DISPOSED OF. PAYMENT SHALL BE MADE AT THE CONTRACT UNIT PRICE PER CUBIC YARD OF EARTH EXCAVATION.
- UNSUITABLE MATERIAL

UNSUITABLE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS NOT SUITABLE FOR THE SUPPORT OF PAVEMENT AND BUILDING CONSTRUCTION, AND IS ENCOUNTERED BELOW NORMAL TOPSOIL DEPTHS AND THE PROPOSED SUBGRADE ELEVATION. THE DECISION TO REMOVE SAID MATERIAL, AND TO WHAT EXTENT, SHALL BE MADE BY A SOILS ENGINEER WITH THE CONCUERANCE OF THE OWNER.
- MISCELLANEOUS THE CONTRACTOR SHALL:
 - SPREAD AND COMPACT UNIFORMY TO THE DEGREE SPECIFIED ALL EXCESS TRENCH SPOIL AFTER COMPLETION OF THE UNDERGROUND IMPROVEMENTS.
 - SCARIFY, DISC, AERATE, AND COMPACT, TO THE DEGREE SPECIFIED, THE UPPER TWELVE (12) INCHES OF THE SUITABLE SUBGRADE MATERIAL, IN ALL AREAS THAT MAY BE SOFT DUE TO EXCESS MOISTURE CONTENT. THIS APPLIES TO CUT AREAS AS WELL AS FILL AREAS.
 - PROVIDE WATER TO ADD TO SOIL MATERIAL IN ORDER TO ADJUST THE MOISTURE CONTENT FOR THE PURPOSE OF ACHIEVING THE SPECIFIED COMPACTION.
 - BACKFILL THE CURB AND CUTTER AFTER ITS CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE BASE COURSE MATERIAL. THE CURBS SHALL NOT BE BACKFILLED UNTIL THE CONCRETE HAS CURED FOR AT LEAST 7 DAYS.
 - TRENCH COMPACTION: ALL TRENCHES SHALL BE COMPACTED BY MECHANICAL TECHNIQUES APPROVED BY THE SOILS ENGINEER UNTIL PROPER COMPACTION IS ACHIEVED. THE REQUIREMENT FOR MECHANICAL COMPACTION MAY BE WAIVED IF, IN THE OPINION OF THE SOILS ENGINEER AND THE MUNICIPAL ENGINEER, THE BACKFILLED TRENCHES MEET THE DENSITY REQUIREMENTS. "JETTING" OF TRENCHES FOR COMPACTION WILL NOT BE ALLOWED.
 - TESTING AND FINAL ACCEPTANCE
 - THE CONTRACTOR SHALL PROVIDE AS A MINIMUM, A FULLY LOADED SIX-WHEEL TANDEM AXLE TRUCK FOR PROOF ROLLING THE PAVEMENT SURFACE PRIOR TO THE PLACEMENT OF THE CURB AND CUTTER AND THE BASE MATERIAL. THIS SHALL BE WITNESSED BY MUNICIPAL ENGINEER AND THE OWNER. SEE PAVING SPECIFICATION.
 - ANY UNSUITABLE AREA ENCOUNTERED AS A RESULT OF PROOF ROLLING SHALL BE REMOVED AND REPLACED WITH SUITABLE MATERIAL, OR OTHERWISE CORRECTED, APPROVED BY THE SOILS CONSULTANT.
 - ANY TESTING THAT IS REQUIRED OF THIS CONSTRUCTION IS CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE.

STORM SEWER NOTES

- BEDDING:
 - ALL STORM SEWERS SHALL BE INSTALLED ON A TYPE A GRANULAR BEDDING, 1/4" TO 3/4" IN SIZE (CA-13) WITH A MINIMUM THICKNESS EQUAL TO 1/4 THE OUTSIDE DIAMETER OF THE SEWER PIPE BUT NOT LESS THAN 4". BEDDING OF ANY KIND FOR GRADE IS NOT PERMITTED. THE BEDDING MATERIALS SHALL BE COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY. BEDDING SHALL EXTEND TO THE SPRINGLINE ON ALL RCP AND DIP PIPE. BEDDING SHALL EXTEND TO 12" OVER ANY PVC OR HDPE PIPE. COST OF BEDDING SHALL BE CONSIDERED INCIDENTAL TO THE COST OF PIPE. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS.
- STRUCTURES:
 - MANHOLE, CATCH BASIN AND INLET BOTTOMS SHALL BE PRECAST CONCRETE SECTIONAL UNITS OR MONOLITHIC CONCRETE. MANHOLES AND CATCH BASINS SHALL BE A MINIMUM 4' IN DIAMETER UNLESS OTHERWISE SPECIFIED ON THE PLANS. STRUCTURE JOINTS SHALL BE SEALED WITH O-RING OR BUTYL ROPE. A MAXIMUM OF EIGHT (8) INCHES OF ADJUSTING RINGS SHALL BE USED.
 - A CONCRETE BENCH TO DIRECT FLOWS SHALL BE CONSTRUCTED IN THE BOTTOM OF ALL INLETS AND MANHOLES.
 - THE FRAME, GRATE, AND/OR CLOSED LID SHALL BE CAST IRON OF THE STYLE SHOWN ON THE PLANS.
 - MANHOLE LIDS SHALL BE MACHINE SURFACED, NON-WORKING DESIGN. THE CLOSED LIDS SHALL HAVE THE WORD "STORM" CAST ON THE LID. THE JOINTS BETWEEN CONCRETE SECTION ADJUSTING RINGS, AND FRAME SHALL BE SEALED WITH A MASTIC COMPOUND.
- FRENCH DRAIN:
 - ALL LOW POINT STORM STRUCTURES ARE TO HAVE FOUR 1" DIAMETER WEEP HOLES PROVIDED 24" BELOW THE TOP OF LID. THE HOLES SHALL BE COVERED WITH A GEOTEXTILE FILTER FABRIC CEMENTED IN PLACE WITH BITUMINOUS MASTIC. THE DRAIN SHALL BE BACKFILLED WITH BEDDING OR CA-7 CRUSHED STONE TO TOP OF SURFACE OR BOTTOM OF TOPSOIL.
- CASTINGS:
 - CASTINGS FOR SEWER OR OTHER STRUCTURES SHALL BE "KEENAH" OR APPROVED EQUAL. COST OF CASTINGS SHALL BE CONSIDERED INCIDENTAL TO THE COST OF THE STRUCTURE. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS ITEM.
- CLEANING:
 - THE STORM SEWER SYSTEM SHALL BE THOROUGHLY CLEANED PRIOR TO FINAL INSPECTION AND TESTING.
- TELEVISIONS:
 - THE STORM SEWER SYSTEM SHALL BE TELEVIEWED IF REQUIRED BY MUNICIPALITY.



STORM SEWER NOTES

- GENERAL
 - ALL STORM SEWER PIPE SHALL BE RCP, UNLESS OTHERWISE NOTED ON THE PLANS, IN ACCORDANCE WITH THE FOLLOWING:

PLAN CODE: MATERIAL
RCP: REINFORCED CONCRETE PIPE (ASTM C-76) WITH O-RING GASKETED JOINTS, (ASTM C-443) TYPE 1, CLASS IV, PER SECTION 603, ELLIPTICAL RCP PIPE SHALL BE TYPE 1, RE-181 PER SECTION 515. PRECAST FLARED END SECTIONS MAY HAVE MASTIC JOINTS. PAYMENTS SHALL BE MADE AT THE CONTRACT UNIT PRICE PER LINEAR FOOT OF STORM SEWER COMPLETE IN PLACE.

DIP: DUCTILE IRON WATERMAIN QUALITY PIPE CLASS 52 (ANSI 21-51) WITH MECHANICAL OR PUSH-ON JOINTS (ANSI 21-111, CEMENT LUBING IS NOT REQUIRED).

PVC: POLYVINYL CHLORIDE SEWER PIPE, SDR 26, CONFORMING TO ASTM D-3034 WITH ASTM D-3212 PUSH-ON GASKETED JOINTS.

HDPE: HIGH DENSITY POLYETHYLENE CORRUGATED PIPE WITH SMOOTH INTERIOR WEAVING ASHTO M-294 SUCH AS ADS-N-12 BY ADVANCED DRAINAGE SYSTEMS; COLUMBUS-OH; OR H1-0 BY HANCOCK-FINCKLEY, OH. JOINTS SHALL BE SPLIT CORRUGATED BANDS BY THE PIPE MANUFACTURER.

HD-RIGID: PERFORATED PVC UNDERDRAIN PIPE-ASTM D-2229-99; SDR-35; OR SCHEDULE 40; WITH SOLVENT WELD JOINTS AND FILTER FABRIC WRAPPING OR SOCK. PERFORATED HDPE PIPE ALSO ACCEPTABLE.
 - "BAND SEAL" OR SIMILAR COUPLINGS SHALL BE USED WHEN JOINING SEWER PIPES OF DISSIMILAR MATERIALS. "BAND SEAL", "TERRICO", AND "MISSION" TYPE COUPLINGS SHALL NOT BE USED ON SEWER MAINS. CHANGES IN PIPE MATERIAL SHALL BE MADE AT A STRUCTURE.
 - ALL STORM SEWERS ARE TO BE CONSTRUCTED USING A LASER INSTRUMENT TO MAINTAIN LINE AND GRADE.
 - ALL FOOTING DRAIN AND SUMP PUMP DISCHARGE PIPES SHALL BE CONNECTED TO THE STORM SEWER SYSTEM. DOWNSPUTS SHALL DISCHARGE TO THE GROUND.
 - THE CONTRACTOR SHALL MAINTAIN AT LEAST THREE (3') FEET OF COVER OVER THE TOP OF SHALLOW PIPES AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR SHALL MOUND OVER ANY PIPES WHICH HAVE LESS THAN THREE (3') FEET OF COVER DURING CONSTRUCTION UNTIL THE AREA IS FINELY GRADED OR PAVED.

NO. DATE		REMARKS	
1	01/22/15	PER CITY	
NO. DATE		REMARKS	
SPECIFICATIONS AND DETAILS CRYSTAL LAKE SOUTH HIGH SCHOOL OUTDOOR BLEACHERS CRYSTAL LAKE, ILLINOIS			
CONSULTING ENGINEERS SITE DEVELOPMENT ENGINEERS LAND SURVEYORS 9375 W. Higgins Road, Suite 700 Rosemont, Illinois 60018 Phone: (847) 876-4060 Fax: (847) 876-4065			
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