



#2021-163
431 N. Walkup Ave – Special Use Permit
Project Review for Planning and Zoning Commission

<u>Meeting Date:</u>	October 6, 2021
<u>Request:</u>	Special Use Permit for lighting standards for the reconstruction of the tennis courts.
<u>Location:</u>	431 N. Walkup Avenue
<u>Acreage:</u>	Approximately 131 acres
<u>Existing Zoning:</u>	RE Residential Estate
<u>Surrounding Properties:</u>	North: RE Residential Estate South: R-1 and R-2 Single Family Residential East: R-2 Single Family Residential and A-1 McHenry County West: RE Residential Estate, R-1 Single Family Residential and A-1 and R-1 in McHenry County
<u>Staff Contact:</u>	Elizabeth Maxwell (815.356.3615)

Background:

- **Existing Use:** Veteran Acres Park, features several athletic fields, picnic shelters, a sled hill and a splash pad supplementing several miles of walking paths.
- **Previous Approvals:** In past years the Park District has received several special use permits for improvements in this park.

Development Analysis:

General

- **Request:** Any park site that requires lighting or an accessory structure over 900 square feet is required to obtain a Special Use Permit. The request is to install 4 new lighting poles with several fixtures attached to each pole.
- The more efficient light fixtures will reduce light spillage and provide a higher quality illumination of the courts
- The tennis courts are being moved 10 feet closer to Walkup to avoid mature trees with the new surface and fencing.
- **Land Use:** The land use map shows the area as Parks and Open Space. This land use designation is appropriate for this use.

- **Zoning:** The site is zoned RE Residential Estate. The use of the property as a Park is a permitted use in this zoning district.

Comprehensive Land Use Plan 2030 Plan Review:

The Comprehensive Plan designates the subject property as Parks and Open Space, which allows for existing and future parks and natural areas. The following goal is applicable to this request:

Land Use – Parks and Open Space

Goal: Preserve, protect and enhance the City’s open space and natural resources, through cooperative efforts between the City and the Crystal Lake Park District.

This can be accomplished with the following supporting action:

Supporting Action: Support the Park District in achieving its goals.

Success Indicator: Number of development applications and building permits approved for work in the parks.

Findings of Fact:

SPECIAL USE PERMIT

The petitioner has requested a Special Use Permit to allow light poles for the tennis courts at the subject property. Special Uses require a separate review because of their potential to impact surrounding properties and the orderly development of the City. Section 2-400 B of the Unified Development Ordinance establishes standard for all Special Uses in Crystal Lake. The criteria are as follows:

1. The use is necessary or desirable, at the proposed location, to provide a service or facility which will further the public convenience and general welfare.
 Meets *Does not meet*
2. The use will not be detrimental to area property values.
 Meets *Does not meet*
3. The use will comply with the zoning districts regulations.
 Meets *Does not meet*
4. The use will not negatively impact traffic circulation.
 Meets *Does not meet*
5. The use will not negatively impact public utilities or municipal service delivery systems. If required, the use will contribute financially to the upgrading of public utilities and municipal service delivery systems.
 Meets *Does not meet*

6. The use will not negatively impact the environment or be unsightly.

Meets *Does not meet*

7. The use, where possible will preserve existing mature vegetation, and provide landscaping and architecture, which is aesthetically pleasing, compatible or complementary to surrounding properties and acceptable by community standards.

Meets *Does not meet*

8. The use will meet requirements of all regulating governmental agencies.

Meets *Does not meet*

9. The use will conform to any conditions approved as part of the issued Special Use Permit.

Meets *Does not meet*

10. The use will conform to the regulations established for specific special uses, where applicable.

Meets *Does not meet*

Recommended Conditions:

If a motion to recommend approval of the petitioner's request is made, it should be with the following conditions:

1. Approved plans, reflecting staff and advisory board recommendations, as approved by the City Council:
 - A. Application (Crystal Lake Park District, received 09/10/21)
 - B. Plan Set (Gewalt Hamilton, dated 08/19/21, received 09/10/21)
 - C. Lighting Specifications (Musco Lighting, dated 09/02/21, received 09/10/21)
2. The lights for the tennis courts shall be turned off by 11:00 pm at the latest.
3. The 10-foot fence is approved around the tennis court as part of this special use permit.
4. The petitioner shall address all of the review comments and requirements of the Community Development Department.

PIQ Map
431 N. Walkup



City of Crystal Lake Development Application

Office Use Only

File # _____

Project Title: Tennis Court Lighting Replacement

Action Requested

- | | |
|---|--|
| <input type="checkbox"/> Annexation | <input type="checkbox"/> Preliminary PUD |
| <input type="checkbox"/> Comprehensive Plan Amendment | <input type="checkbox"/> Preliminary Plat of Subdivision |
| <input type="checkbox"/> Conceptual PUD Review | <input type="checkbox"/> Rezoning |
| <input type="checkbox"/> Final PUD | <input checked="" type="checkbox"/> Special Use Permit |
| <input type="checkbox"/> Final PUD Amendment | <input type="checkbox"/> Variation |
| <input type="checkbox"/> Final Plat of Subdivision | <input type="checkbox"/> Other |

Petitioner Information

Name: Crystal Lake Park District

Address: 1 E. Crystal Lake Avenue

Crystal Lake, IL 60014

Phone: 815-459-0680 x 4205

Fax: 815-477-5005

E-mail: aviger@crystallakeparks.org

Owner Information (if different)

Name: _____

Address: _____

Phone: _____

Fax: _____

E-mail: _____

Property Information

Project Description: The Crystal Lake Park District will be rebuilding the existing tennis courts including replacing all of the paving, fencing and existing lighting. To avoid mature trees, the courts are being moved 10' to the south and 10' to the west, closer to Walkup Ave. The existing light fixtures are 35 years old. New fixtures will greatly improve lighting on the courts and greatly cut down light spillage on Walkup Ave and surrounding areas.

Project Address/Location: 431 N. Walkup Ave., Crystal Lake, IL

PIN Number(s): 14-33-126-001, 14-32-226-002, 14-33-101-003

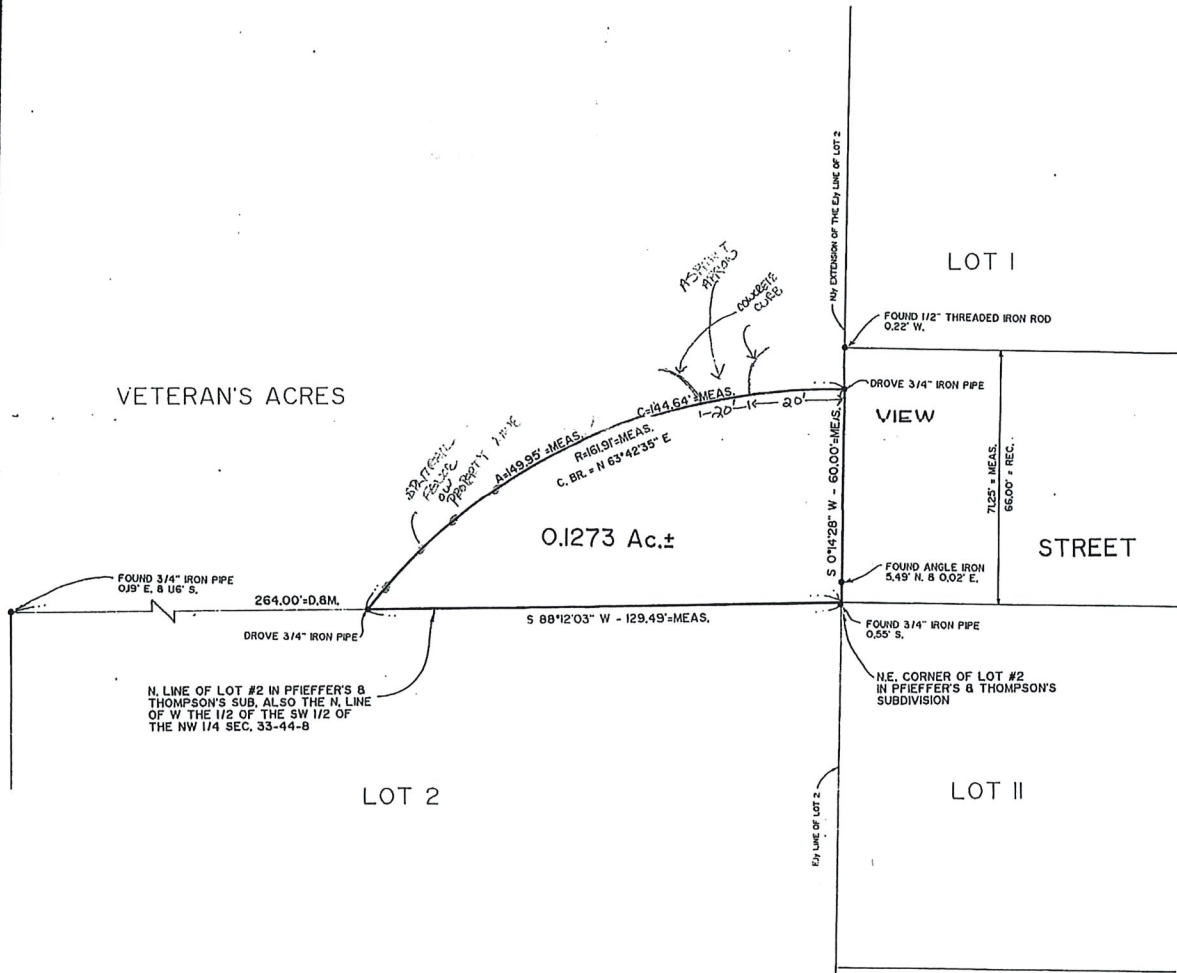
PLAT OF SURVEY

CHARLES A. MIONSKE, INC. SURVEYORS AND ENGINEERS
 2024 ROUTE 176 CRYSTAL LAKE, ILLINOIS 60014
 PHONE: 815/455-3252



VA
 Viewst.
 pkg-107

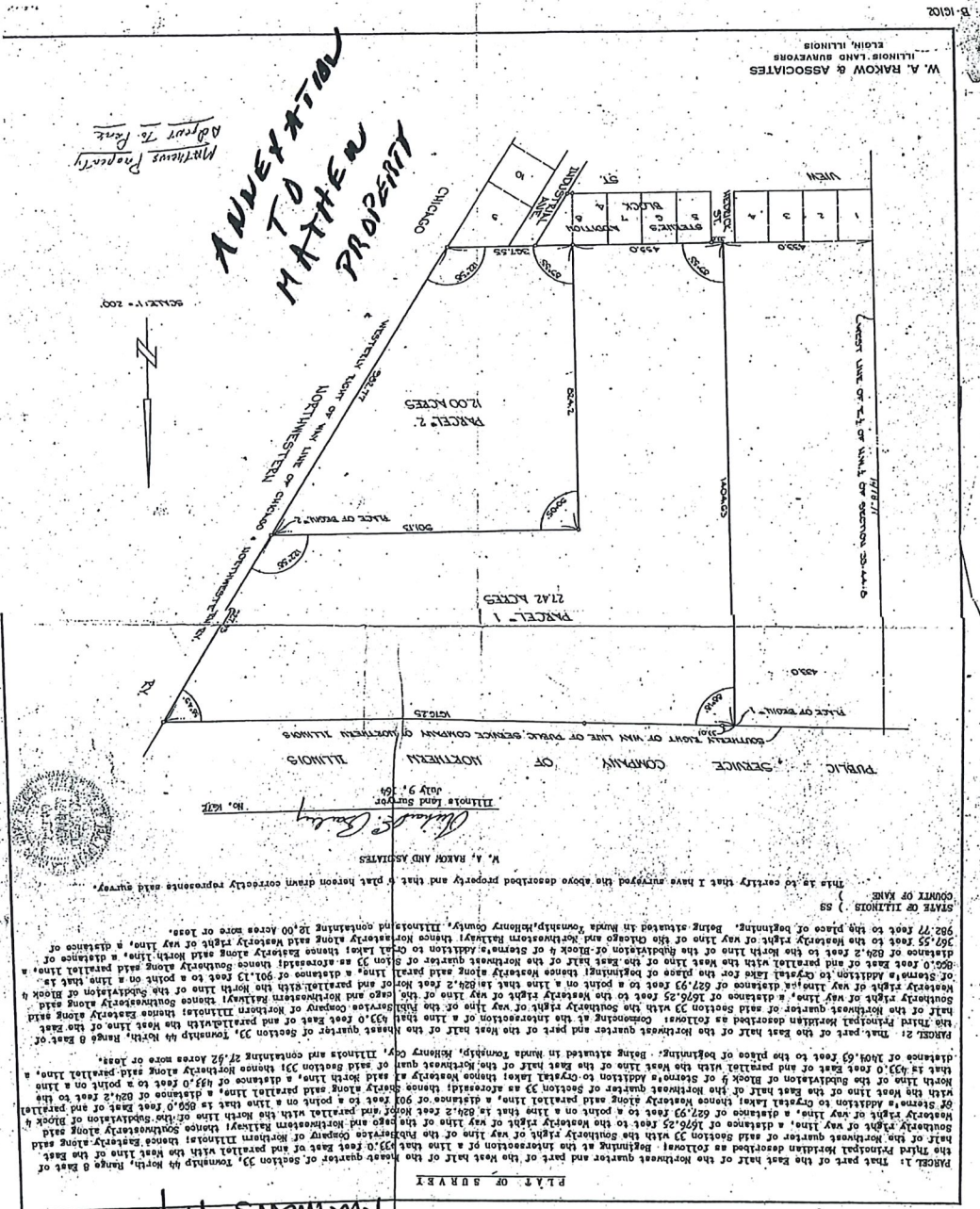
That part of the Northwest Quarter of the Northwest Quarter of Section 33, Township 44 North, Range 8 East of the Third Principal Meridian described as follows: Beginning at the Northeast corner of Lot 2 in Pfeiffer and Thompson's Subdivision, according to the Plat thereof recorded December 17, 1973, as Document #608378 in McHenry County, Illinois; thence South 69° 12' 03" West, 129.49 feet along the North line of said Lot 2; thence Northeasterly along a non-tangential curve having a radius of 161.91 feet as said curve is convex to the Northwest for arc distance of 149.95 feet; (said curve having a chord bearing of North 63° 42' 35" East and a chord distance of 144.64 feet) to a point located on the Northerly extension of the Easterly line of said Lot 2; thence South 0° 14' 28" West, 60.00 feet along the Northerly extension of said Easterly line to the point of beginning. All containing 0.1273 acres, more or less, in the City of Crystal Lake, in McHenry County, Illinois.



PLAT SCALE: 20 FEET TO THE INCH
 PREPARED FOR CRYSTAL LAKE PARK DISTRICT
 ADDRESS VIEW STREET
 INDICATES IRON STAKE
 JOB NUMBER 88116-PARK
 REFER TO DEED OR GUARANTEE POLICY FOR BUILDING LINES AND EASEMENTS NOT SHOWN HEREON.
 COMPARE DESCRIPTION AND POINTS BEFORE BUILDING AND REPORT ANY APPARENT DIFFERENCES.

DRAWN BY DIR	CHECKED BY C. A. M.	REVISED
-----------------	------------------------	---------

STATE OF ILLINOIS S S
 COUNTY OF MCHENRY
 THIS IS TO CERTIFY THAT I HAVE SURVEYED THE PROPERTY DESCRIBED ABOVE AND THAT THE PLAT DRAWN HEREON IS A CORRECT REPRESENTATION OF SAID SURVEY. ALL DIMENSIONS ARE GIVEN IN FEET AND DECIMALS THEREOF.
 GIVEN UNDER MY HAND AND SEAL AT CRYSTAL LAKE, ILLINOIS
 THIS 23rd DAY OF JUNE 1989
 Charles A. Mionske
 ILLINOIS LAND SURVEYOR NO. 1790



*Matthew Property
Advised To Part*

**ANNEXATION
TO
MATTHEW
PROPERTY**

W. A. RAKOW & ASSOCIATES
ILLINOIS LAND SURVEYORS
ELOIN, ILLINOIS



PLAT OF SUBDIVISION

PARCEL 1: That part of the east half of the Northwest quarter and part of the West half of the East half of Section 33, Township 44 North, Range 8 East of the North Line of the subdivision of Block 4 of the subdivision of the Northeast quarter of Section 33 as recorded thereon containing 2742.00 acres more or less.

PARCEL 2: That part of the east half of the Northwest quarter and part of the West half of the East half of Section 33, Township 44 North, Range 8 East of the North Line of the subdivision of Block 4 of the subdivision of the Northeast quarter of Section 33 as recorded thereon containing 1200.00 acres more or less.

CHICAGO

INDIAN

PUBLIC SERVICE COMPANY

ILLINOIS

W. A. RAKOW & ASSOCIATES
ILLINOIS LAND SURVEYORS
July 9, 1929

B-10102

14-33-1
14-32-2

BARRE BLUMENTHAL, AS TRUSTEE, ETC. }
TO } WARRANTY DEED
CRYSTAL LAKE PARK DISTRICT }

THIS INDENTURE WITNESSETH, That the Grantor Barre Blumenthal, as Trustee, in accordance with the authority conferred upon him under the provisions of a Trust Agreement dated November 10th, 1938 and Deed in Trust dated November 16th, 1938 and recorded November 22nd, 1938 in Book 235 of Deeds, Page 555, of the City of Chicago in the County of Cook and State of Illinois for and in consideration of the sum of Ten (\$10.00) DOLLARS in hand paid, CONVEY and WARRANT to the Crystal Lake Park District of the -- of -- County of McHenry and State of Illinois the following described Real Estate, to wit:-

Lot number nine (9) of Oakwoods Golf Course Addition to Crystal Lake, in accordance with the plat thereof. ALSO, the Northwest quarter of the Northwest Quarter of Section thirty-three (33). ALSO the Southwest quarter of the Northwest Quarter of Section thirty-three, (33), excepting and reserving therefrom the South 990.66 feet thereof. ALSO the East half of the Northeast Quarter of Section thirty-two (32) in Township forty-four (44) North, Range eight (8) East of the Third Principal Meridian in the County of McHenry and State of Illinois, excepting and reserving therefrom the following described property: Commencing at the quarter post on the East side of Section thirty-two (32); thence west on the quarter Section line to the West line of the East half of the Northeast Quarter; thence North on the last described line 128.9 feet to a point in range with the northerly line of Oakwoods Golf Course Addition to Crystal Lake, as shown on the plat of said Addition recorded in the Recorder's Office of County and State aforesaid in Book 5 of Plats, page 78; thence Easterly on the Northerly line of said Addition and said line extended to the East line of said Section; thence South on said Section line 172.2 feet to the place of beginning. ALSO excepting and reserving therefrom the Westerly thirty-three (33) feet of North Main Street as shown on the plat of Aury W. McCollum's Add. to the Village of Munda and recorded in said Recorder's Office, in Book 1 of Plats, page 76. ALSO excepting and reserving therefrom the West 33 feet of the following described property; Beginning at the Southeast corner of the Northeast quarter of said Section 32; thence West along the East and West quarter Section line twenty (20) chains and thirteen (13) links to the center line of the highway; thence North along the centerline of said highway 11.88 chains; thence North 86 1/2 degrees East 20.13 chains to the east line of said Section; thence South on said Section line 12.46 chains to the place of beginning. All of the above described property lying and being in Township forty-four (44) North, Range eight (8) East of the Third Principal Meridian, and containing a total area of 123.5 acres of land, more or less, situated in the Township of Munda in the County of McHenry in the State of Illinois, hereby releasing and waiving all rights under and by virtue of the Homestead Exemption Laws of the State of Illinois.

WITNESS my hand and seal this 15th day of December A. D. 1939.
Revenue Stamp \$20.00. Barre Blumenthal as Trustee (SEAL)
Under Declaration of Trust
dated Nov. 10th 1938.

STATE OF ILLINOIS }
COUNTY OF McHENRY } SS.

I, Myrtle Housholder, a Notary Public, in and for, and residing in said County, in the State aforesaid, DO HEREBY CERTIFY that Barre Blumenthal, as Trustee, in accordance with the authority conferred upon him under the provisions of a Trust Agreement dated November 10th, 1938 and Deed in Trust dated November 16th, 1938 and recorded November 22nd 1938 in Book 235 of Deeds, Page 555, personally known to me to be the same person whose name is subscribed to the foregoing

instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the said instrument as his free and voluntary act for the uses and purposes therein set forth, including the release and waiver of the right of homestead.

GIVEN under my hand and notarial seal, this 15th day of December A. D. 1939.

.....
Myrtle Housholder
Notary Public
McHenry County, Ill.
.....

Myrtle Housholder
Notary Public

My Commission Expires February 27, 1943.

No. 143343. Filed for record this 16th day of December A. D., 1939 at 11:40 o'clock A. M.

##

##

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

IN THE MATTER OF THE PETITION OF The Crystal Lake Park District

LEGAL NOTICE Notice is hereby given in compliance with the Unified Development Ordinance of the City of Crystal Lake, Illinois that a public hearing will be held before the Planning and Zoning Commission upon the application by Ann Viger, representing the Crystal Lake Park District, for a Special Use Permit relating to the following described real estate commonly known as Veteran Acres Park, 431 North Walkup Avenue, Crystal Lake, Illinois 60014, PINs: 14-33-126-001, 14-32-226-002, 14-33-101-003.

This application is filed for the purposes of seeking a Special Use Permit to allow the reconstruction of the tennis courts and fencing and adding new 40-foot high light poles, as well as any other variations as necessary to approve the request as presented; pursuant to Article 2, Article 3, Article 4, Article 9, and Article 10. Plans for this project can be viewed at the City of Crystal Lake Community Development Department at City Hall.

A public hearing before the Planning and Zoning Commission for this request will be held at 7:00 p.m. on Wednesday October 6, 2021, at the Crystal Lake City Hall, 100 West Woodstock Street, at which time and place any person determining to be heard may be present.

Jeff Greenman, Chairperson Planning and Zoning Commission City of Crystal Lake

(Published in the Northwest Herald September 16, 2021) 1918809

CRYSTAL LAKE PARK DISTRICT VETERAN ACRES TENNIS COURT RECONSTRUCTION & LIPPOLD PARK PAVEMENT MAINTENANCE

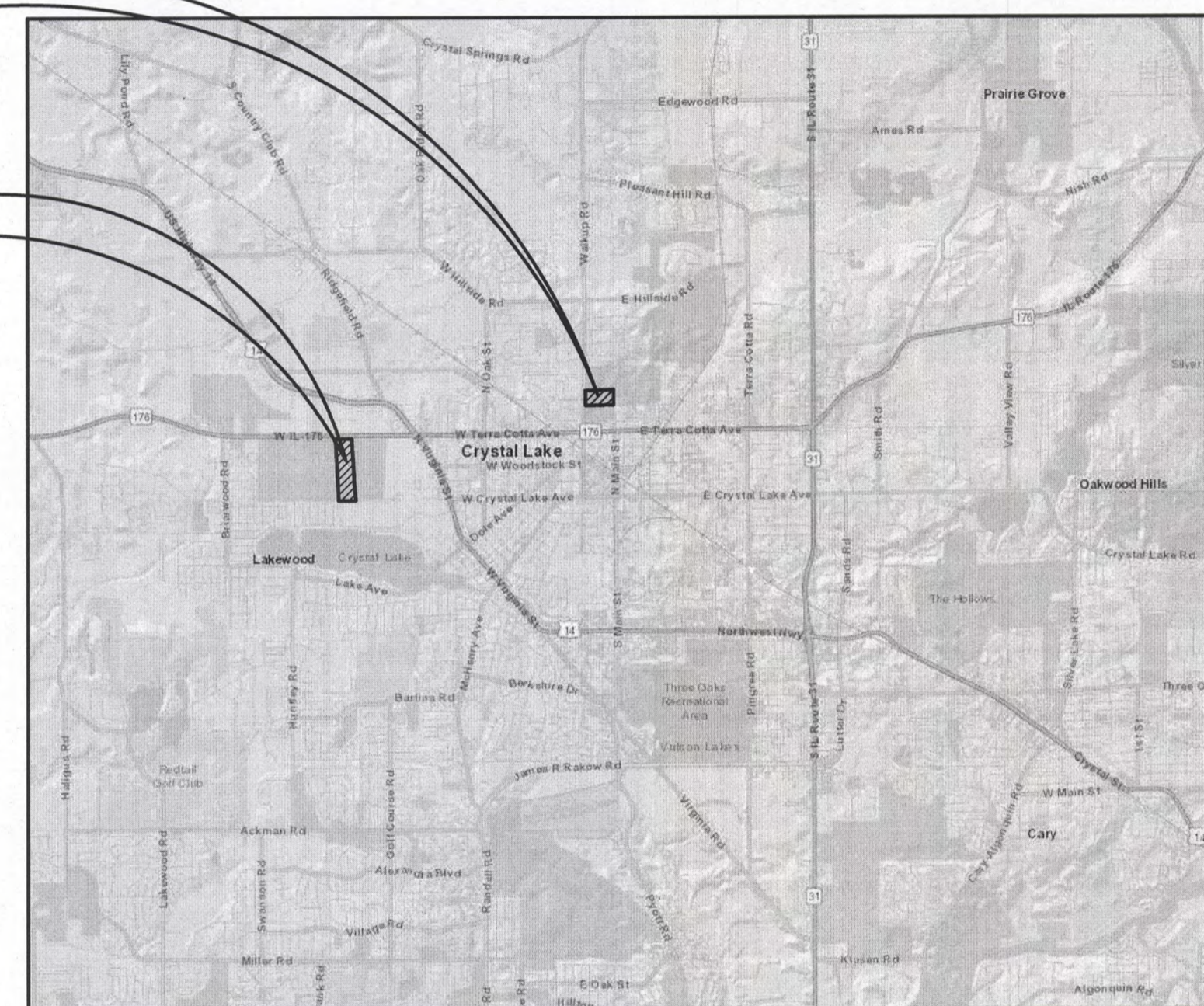
CRYSTAL LAKE, ILLINOIS 60014

STANDARD SYMBOLS

FEATURE	EXISTING	PROPOSED
BUFFALO BOX		
BUSH/SHRUB		
CATCH BASIN		
CLEANOUT		
COMBINE SEWER LINE		
CONTOUR		
CULVERT		
DITCH/SWALE		
ELECTRIC LINE		
ELECTRIC MANHOLE		
FENCE		
FIRE HYDRANT		
FLARED END SECTION		
GAS LINE		
GAS MANHOLE		
GAS VALVE		
INLET		
LIGHT POLE		
OVERHEAD WIRES		
POWER POLE		
R.O.W LINE		
R.O.W MARKER		
SANITARY FORCEMAIN LINE		
SANITARY SEWER LINE		
SANITARY SEWER MANHOLE		
SIGN		
SPOT ELEVATION		
STORM SEWER LINE		
STORM SEWER MANHOLE		
TELEPHONE LINE		
TELEPHONE MANHOLE		
TELEPHONE BOX/PEDESTAL		
TREE-CONIFEROUS (SIZE/TAG#)		
TREE-DECIDUOUS (SIZE/TAG#)		
VALVE BOX		
VALVE VAULT		
WATER VALVE		
WATERMAIN LINE		

PROJECT LOCATION
VETERAN ACRES PARK
431 WALKUP ROAD
CRYSTAL LAKE, ILLINOIS

PROJECT LOCATION
LIPPOLD PARK EAST ENTRANCE
851 IL-176
CRYSTAL LAKE, ILLINOIS



J.U.L.I.E.

JOINT
UTILITY
LOCATION
INFORMATION FOR
EXCAVATION
CALL 811



Know what's below.
Call before you dig.

GENERAL SHEETS

1. TITLE SHEET
2. GENERAL NOTES
3. SOIL EROSION AND SEDIMENT CONTROL DETAILS
4. DETAILS
5. DETAILS

VETERAN ACRES - TENNIS COURTS

6. EXISTING CONDITIONS/DEMOLITION PLAN
7. GEOMETRIC PLAN
8. UTILITY PLAN
9. GRADING PLAN
10. SOIL EROSION AND SEDIMENT CONTROL PLAN

ALTERNATE #2 - LIPPOLD PARK

11. SITE IMPROVEMENT PLAN

LOCATION MAP

(Not to Scale)

BENCHMARK:

BM #1 - FIRE HYDRANT A SOUTHWEST
CORNER OF MULBERRY LANE AND
BURBANK DRIVE ELEVATION: 903.33

BM #2 - FIRE HYDRANT A SOUTHWEST
CORNER OF MULBERRY LANE AND
HOLLY DRIVE ELEVATION: 902.79

PROFESSIONAL DESIGN FIRM LICENSE:

GEWALT HAMILTON ASSOCIATES, INC.
DESIGN FIRM - LAND SURVEYOR/PROF ENG
VERNON HILLS, ILLINOIS 60061
TELEPHONE: 847-478-9700

TOPOGRAPHIC SURVEY BY:

GEWALT HAMILTON ASSOCIATES, INC.
625 FOREST EDGE DRIVE
VERNON HILLS, ILLINOIS 60061
TELEPHONE: 847-478-9700

COORDINATING/PERMITTING AGENCIES:

CITY OF CRYSTAL LAKE 1-815-459-2020

PLANS PREPARED FOR:

CRYSTAL LAKE PARK DISTRICT
1 EAST CRYSTAL LAKE AVENUE
CRYSTAL LAKE, ILLINOIS 60014
TELEPHONE: 815-459-0680

SIGNED: _____ P.E.
THOMAS A. RYCHLIK

DATE: _____
ILLINOIS LICENSE NO.: 062-056334

EXPIRATION DATE: NOVEMBER 30, 2021

ISSUED FOR BID 8-19-2021

EXISTING UTILITIES: WHEN THE PLANS OR SPECIAL PROVISIONS INCLUDE INFORMATION PERTAINING TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES, SUCH INFORMATION REPRESENTS ONLY THE OPINION OF THE ENGINEER AS TO THE LOCATION OF SUCH UTILITIES AND IS ONLY INCLUDED FOR THE CONVENIENCE OF THE BIDDER. THE ENGINEER AND OWNER ASSUME NO RESPONSIBILITY WHATEVER IN RESPECT TO THE SUFFICIENCY OR ACCURACY OF THE INFORMATION SHOWN ON THE PLANS RELATIVE TO THE LOCATION OF UNDERGROUND UTILITY FACILITIES OR THE MANNER IN WHICH THEY ARE TO BE REMOVED OR ADJUSTED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL SUCH FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES, DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR REMOVING OR ADJUSTING THEM.

CONTRACTOR IS RESPONSIBLE FOR CONTACTING J.U.L.I.E. AT 1-800-892-0123 AND MUST ACQUIRE A DIG NUMBER A MINIMUM OF 72 HOURS PRIOR TO ANY WORK BEING DONE.

NOTE: CONSTRUCTION MEANS, METHODS AND JOB SITE SAFETY IS THE SOLE AND EXCLUSIVE RESPONSIBILITY OF THE CONTRACTOR

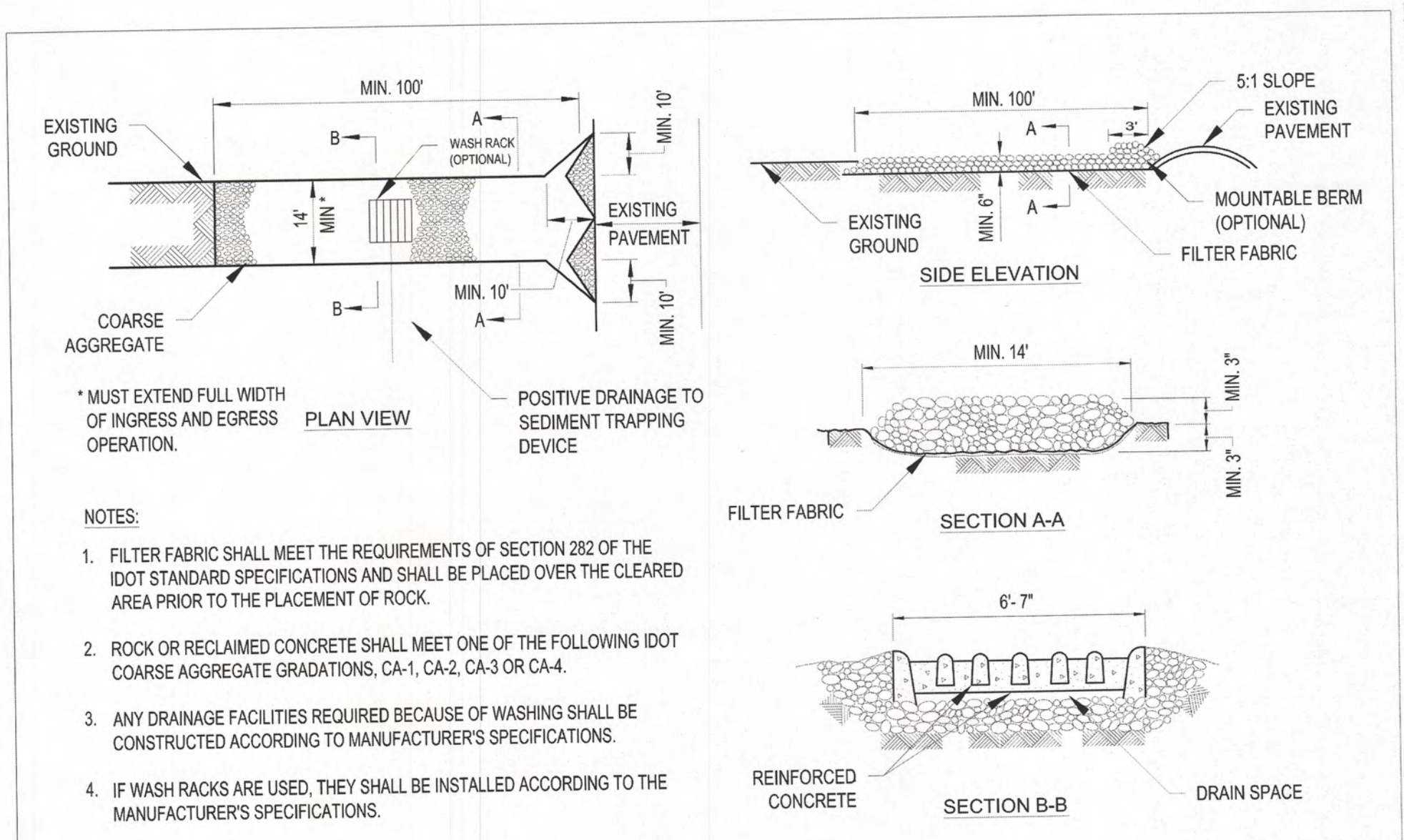
GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL 60061
Tel 847.478.9700 ■ Fax 847.478.9701

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TITLE SHEET
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: 4129.220-DT3.dwg	SHEET NUMBER:
DRAWN BY: JMB DATE: 8/18/2021	GHA PROJECT # 4129.220
CHECKED BY: TAR DATE: 8/18/2021	SCALE: N.A.
	OF 11 SHEETS



CONSTRUCTION ENTRANCE

Revised: 1. 06/12/2015
2.
3.
4.

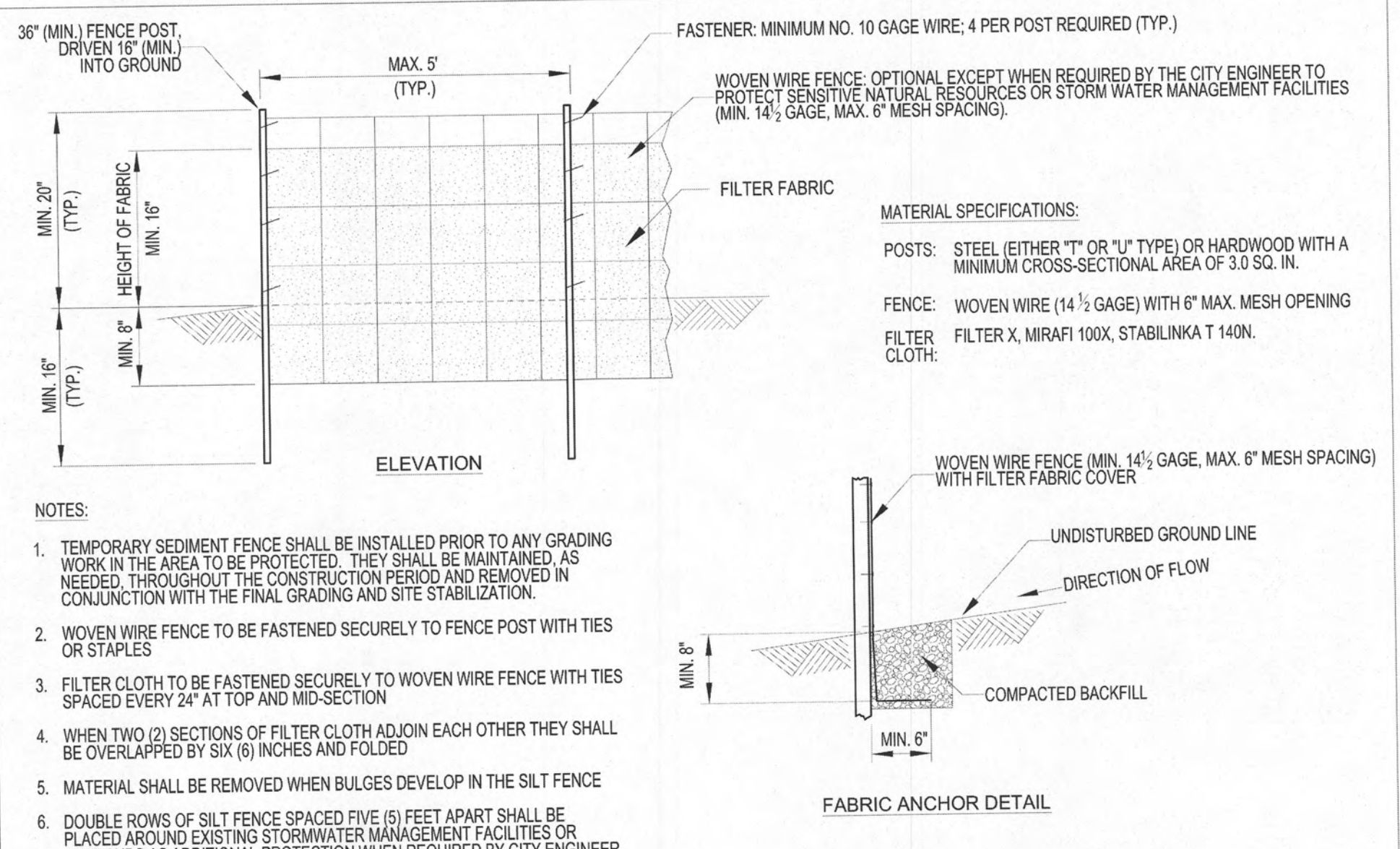
Drawing Name: CONSTRUCTION ENTRANCE

Drawing Number: EC-02

Date: 07/31/2012

Drawn: DD
Checked: AW

City of Crystal Lake, Illinois



SILT FENCE

Revised: 1. 06/12/2015
2.
3.
4.

Drawing Name: SILT FENCE

Drawing Number: EC-01

Date: 12/4/2012

Drawn: DD
Checked: AW

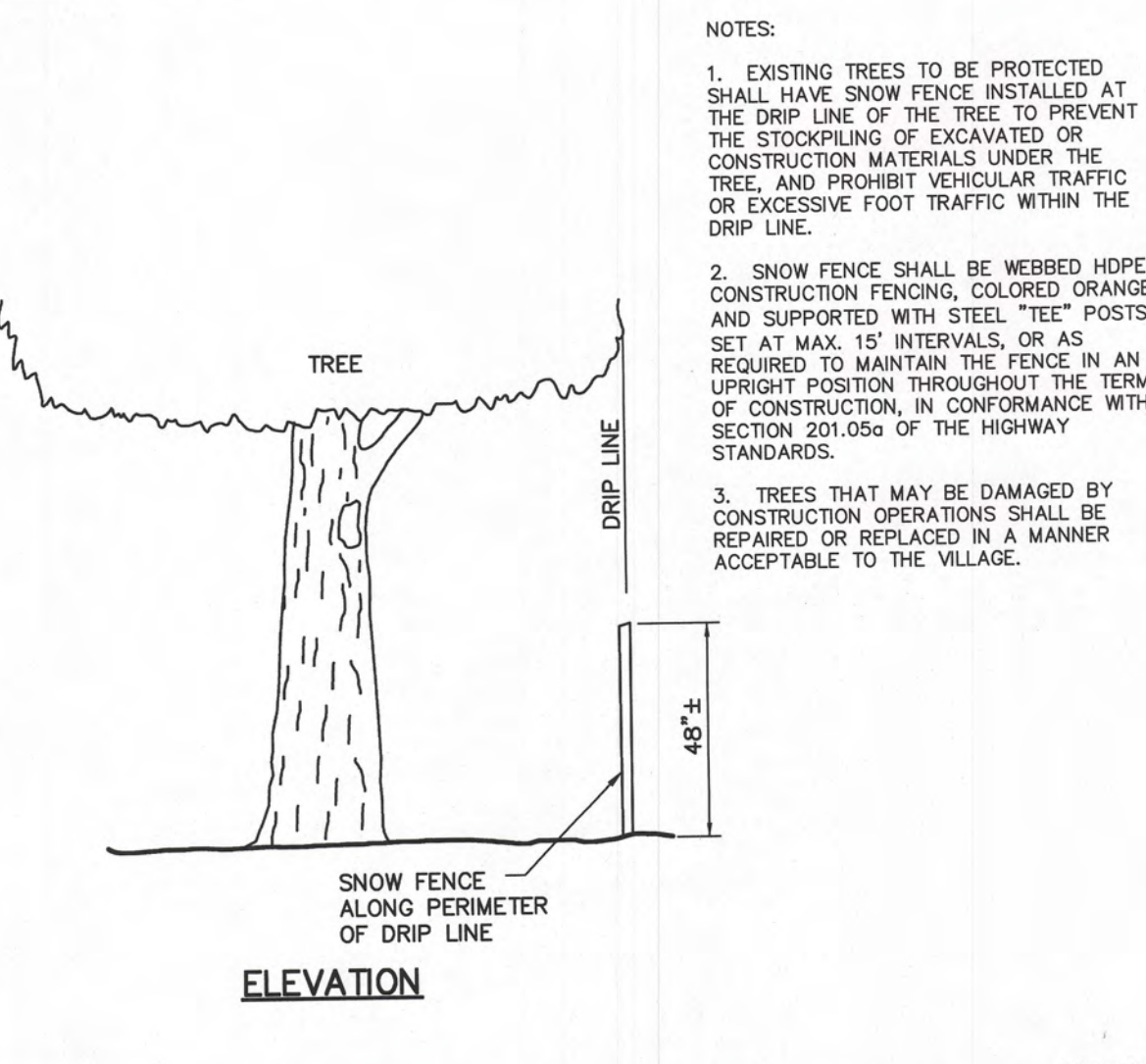
City of Crystal Lake, Illinois

Stabilization Type:	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Permanent Seeding			A	X	X	X	X	X	X	X		
Dormant Seeding	B											
Temporary Seeding			C	X	X	X	X	X	X			
Sodding			E	X	X							
Mulching	F											

A = KENTUCKY BLUEGRASS @ 90 LBS./AC. MIXED WITH PERENNIAL RYEGRASS @ 30 LBS./AC.
 B = KENTUCKY BLUEGRASS @ 135 LBS./AC. MIXED WITH PERENNIAL RYEGRASS @ 45 LBS./AC.
 C = SPRING OATS @ 100 LBS./AC.
 D = WHEAT OR CEREAL RYE @ 150 LBS./AC.
 E = SOD
 F = STRAW MULCH (HYDROMULCH OR USE STRAW BLANKET) @ 2 TONS/AC.
 XXX = IRRIGATION NEEDED
 IRRIGATION SHOULD BE PROVIDED AS NECESSARY TO THOROUGHLY ESTABLISH INTENDED GROWTH.
 NOTE: SPRAYED ON PRODUCTS CANNOT BE USED NOV.-FEB.

03.15.2016

GHA GEWALT HAMILTON ASSOCIATES, INC. TYPICAL SOIL PROTECTION CHART



TREE PROTECTION FENCING DETAIL

Revised: 03.15.2016

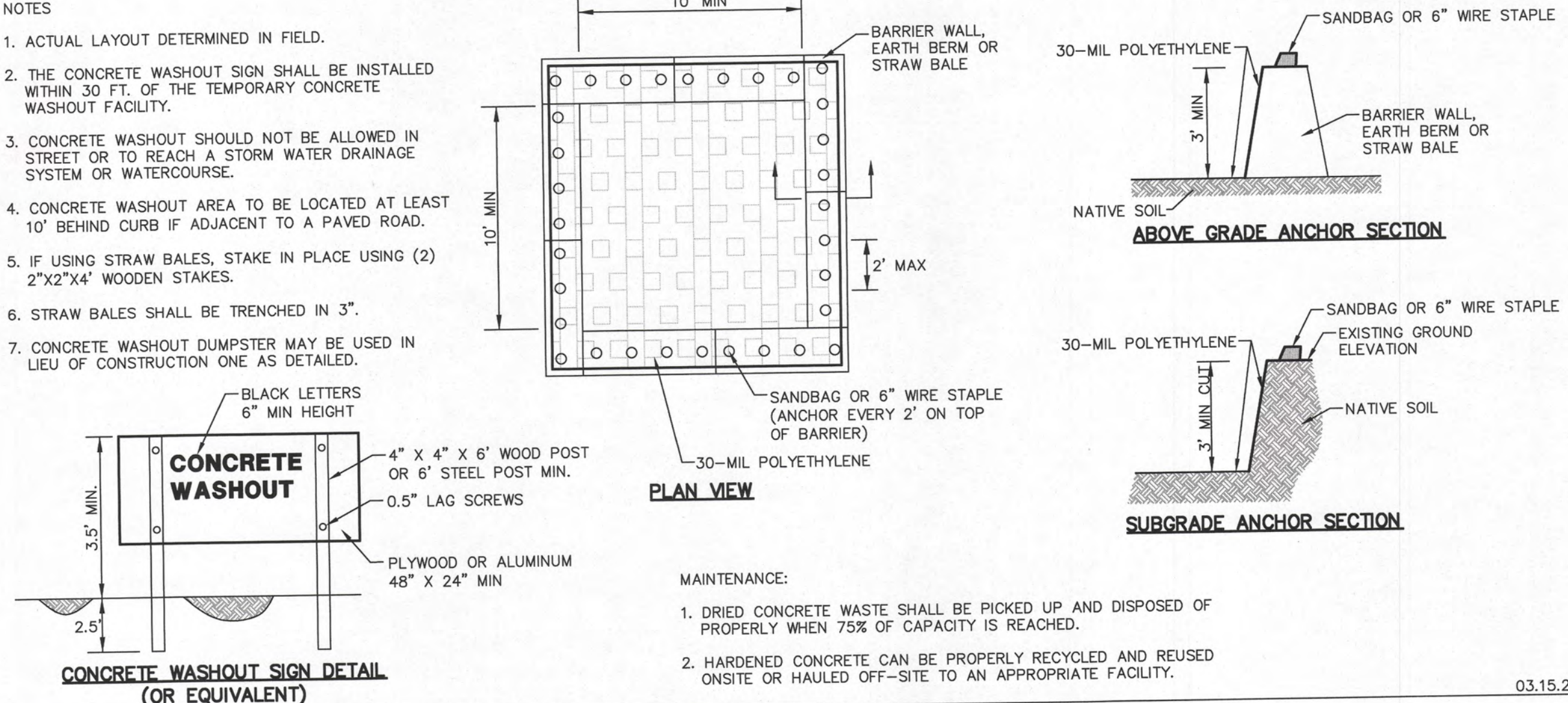
Drawing Name: TREE PROTECTION FENCING DETAIL

Drawing Number: EC-03

Date: 07/31/2012

Drawn: DD
Checked: AW

City of Crystal Lake, Illinois



CONCRETE WASHOUT

Revised: 03.15.2016

Drawing Name: CONCRETE WASHOUT

Drawing Number: EC-04

Date: 07/31/2012

Drawn: DD
Checked: AW

City of Crystal Lake, Illinois

6. AUSTIN 4129.220.DWG. 5.18.2012. 8/18/2021. 4.12.14

GHA GEWALT HAMILTON ASSOCIATES, INC.
 625 Forest Edge Drive ■ Vernon Hills, IL. 60061
 TEL 847.478.9700 ■ FAX 847.478.9701

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SOIL EROSION AND SEDIMENT CONTROL DETAILS
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

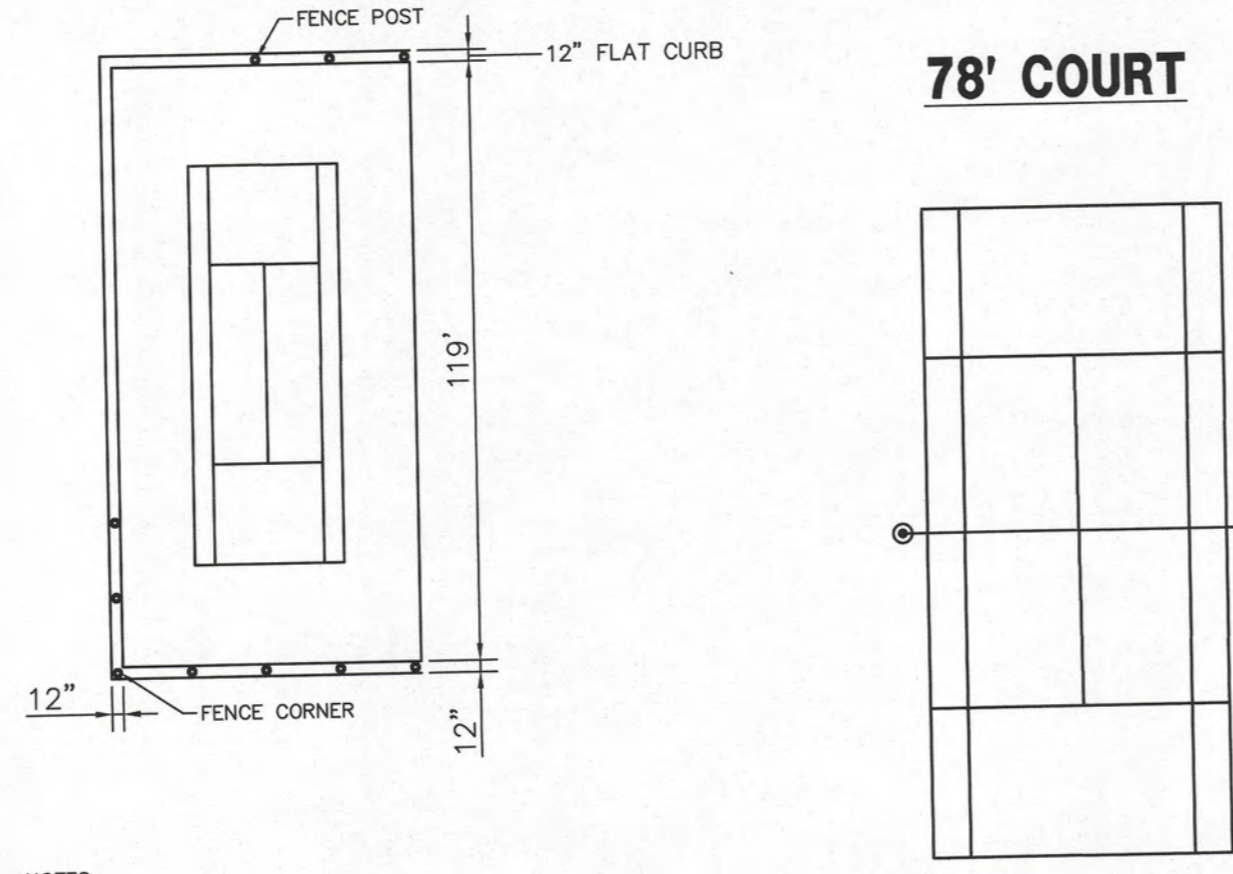
NO.	BY	DATE	REVISION

FILE: 4129.220-DT3.dwg
 DRAWN BY: JMB
 DATE: 8/18/2021
 GHA PROJECT #: 4129.220
 CHECKED BY: TAR
 DATE: 8/18/2021
 SCALE: N.A.

SHEET NUMBER: **3**
 OF 11 SHEETS

PCC NOTES

1. SET 3/4" EXPANSION JOINTS AT POINTS ABUTTING CURB OR PAVEMENT AND AT 45' MAX. INTERVALS.
2. CONTROL JOINTS SHALL BE 1/8" TO 1/4" WIDE AND 1/4 OF THE SIDEWALK THICKNESS DEEP. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A 1/4" RADIUS. JOINTS TO BE LOCATED AT 15' MAX. INTERVALS.
3. THREE #4 DEFORMED STEEL BARS SHALL BE INSTALLED IN THE SIDEWALK CENTERED OVER ALL TRENCH CROSSINGS. THEY SHALL EXTEND 10 FEET BEYOND THE EDGES OF THE TRENCH.
4. SIDEWALK ADJACENT TO NEW OR EXISTING CURB, OR EXISTING SIDEWALK SHALL BE DOWELED TO CURB OR EXISTING SIDEWALK WITH SMOOTH 12" EPOXY COATED #4 BARS AT 24" O.C.
5. SIDEWALK CONTRACTION AND EXPANSION JOINTS SHALL ALIGN WITH WITH NEW CURB JOINTS RESPECTIVELY.
6. ADD 2 POUNDS POLYPROPYLENE FIBER REINFORCEMENT PER CUBIC YARD OF CONCRETE. FIBERS PROVIDED BY W.R. GRACE OR APPROVED EQUAL.
7. SET EXPANSION JOINTS AT ALL PC'S, PT'S, FIVE FEET ON EITHER SIDE OF ANY FRAMES, AND AT 45' MAX. INTERVALS.
8. SAW CUT CONTRACTION JOINTS FULL FACE AND TOP, AT LEAST 2 INCHES IN DEPTH AND AT 15' MAXIMUM INTERVALS WITHIN 24 HOURS OF POURING.
9. TWO COATS CURING COMPOUND REQUIRED.



78' COURT

NOTES:

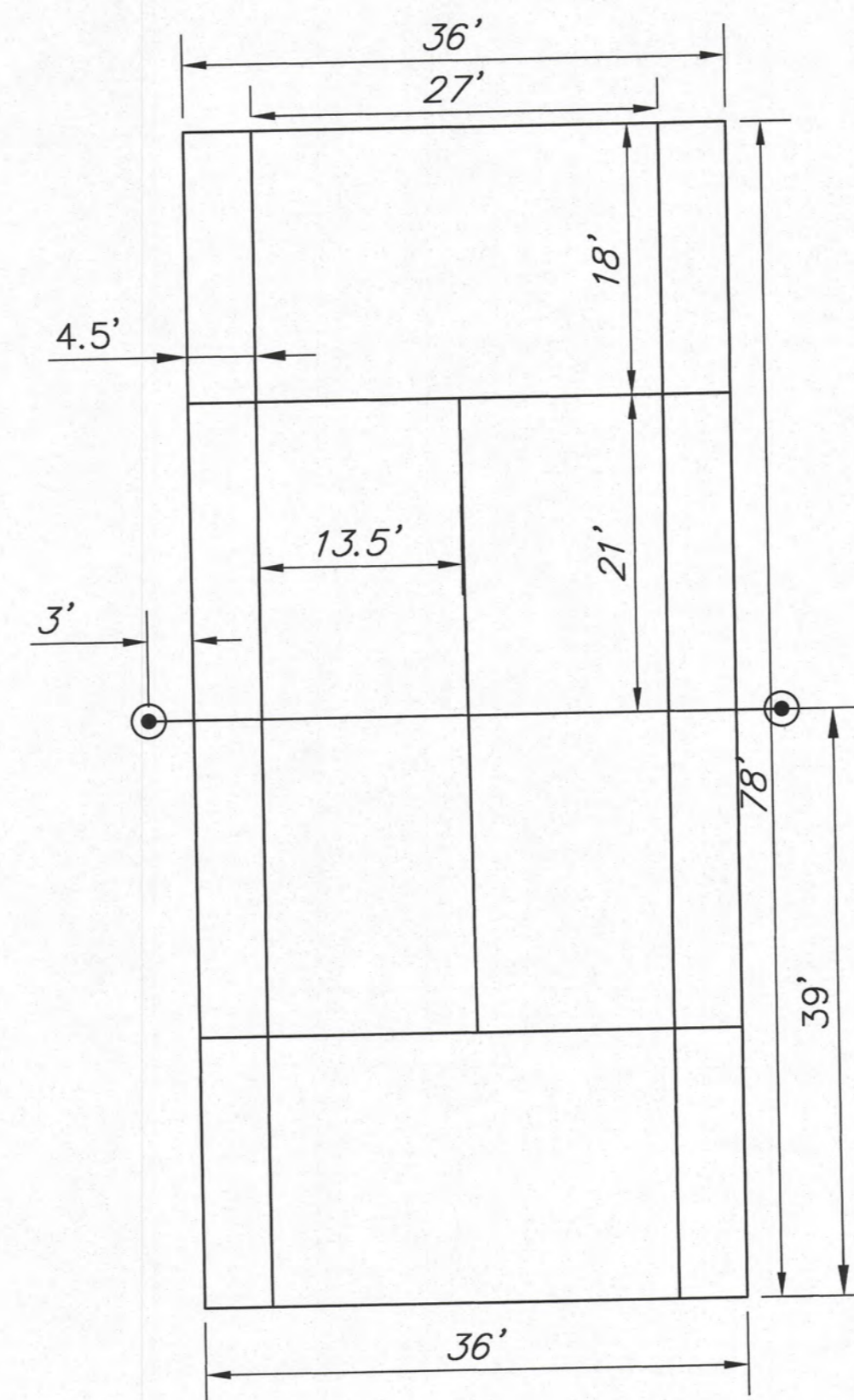
1. COLORCOAT SURFACE WITH TWO COATS OF SAND FILLED COLOR AND STRIPE TENNIS COURTS PER UNITED STATES TENNIS ASSOCIATION GUIDELINES. COLORCOAT SHALL BE SPECIFIED BY OWNER.
2. COLORCOAT SHALL BE PROVIDED BY LAYKOLD OR EQUIVALENT APPROVED IN ADVANCE BY OWNER.
3. CA-7 DRAINAGE STONE SHALL NOT BE CONTAMINATED DURING CONSTRUCTION. ANY DRAINAGE STONE WITH DEBRIS TO BE REMOVED AND REPLACED WITH CLEAN STONE.
4. COLOR AND COLORSHOP DRAWINGS TO BE APPROVED BY OWNERS

TENNIS COURT DIMENSIONS

TENNIS COURT LAYOUT

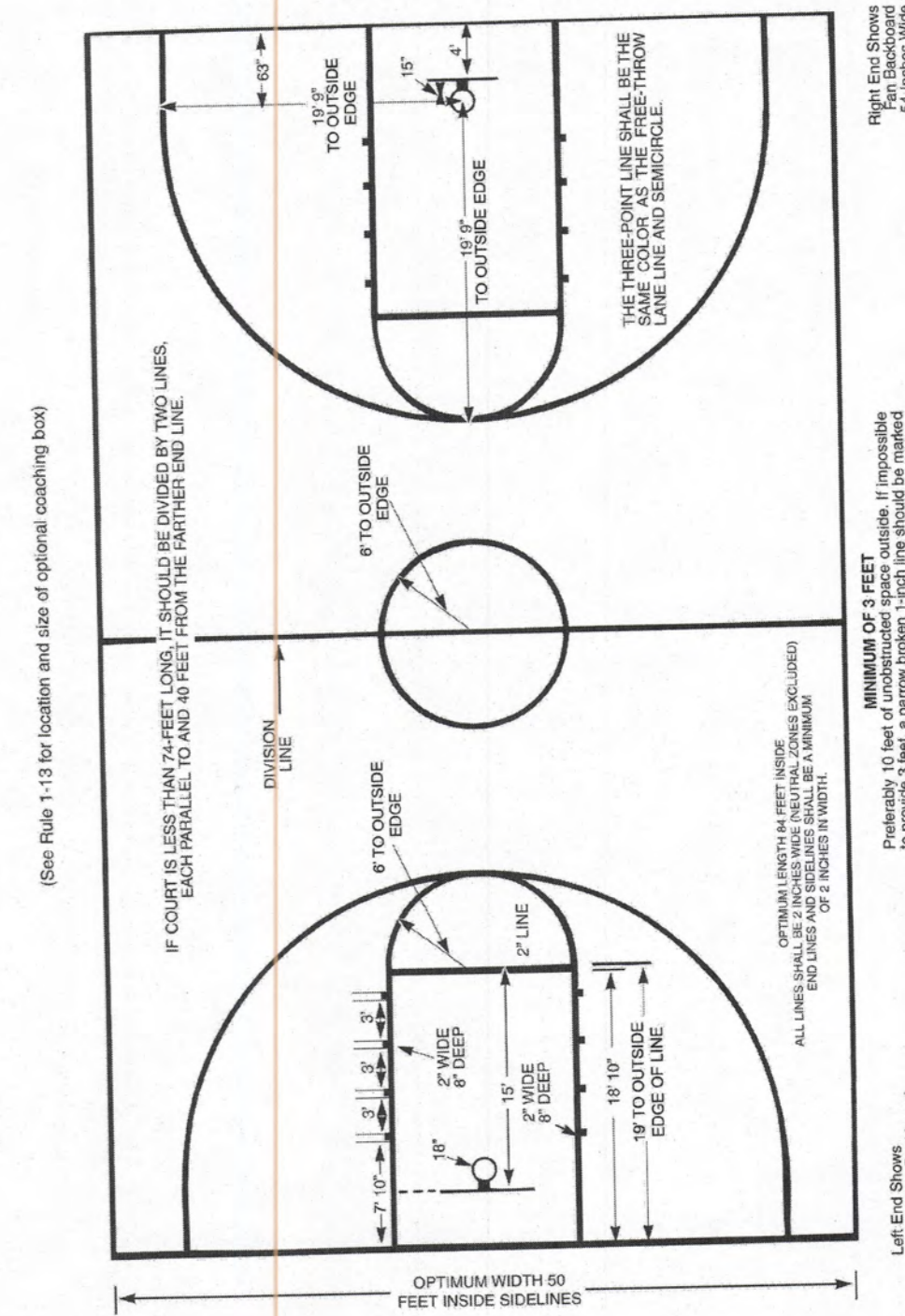
- TENNIS COURT CONSTRUCTION SEQUENCE**
1. REMOVE FENCE, FENCE FOUNDATIONS, LIGHTS AND OTHER TENNIS EQUIPMENT
 2. REMOVE AND STORE PRACTICE WALL FOR REINSTALLATION POST-CONSTRUCTION
 3. ROOT PRUNE AND REMOVE BRANCHES - UNDER SUPERVISION OF PARK DISTRICT ARBORIST
 4. EXCAVATE TO NEW SUB-GRADE
 5. INSTALL FENCE AND NET FOUNDATIONS
 6. INSTALL UNDERDRAIN AS SHOWN
 7. INSTALL FLAT CURB
 8. INSTALL PAVEMENT
 9. INSTALL FENCE
 10. PLACE COLOR COAT

78' COURT



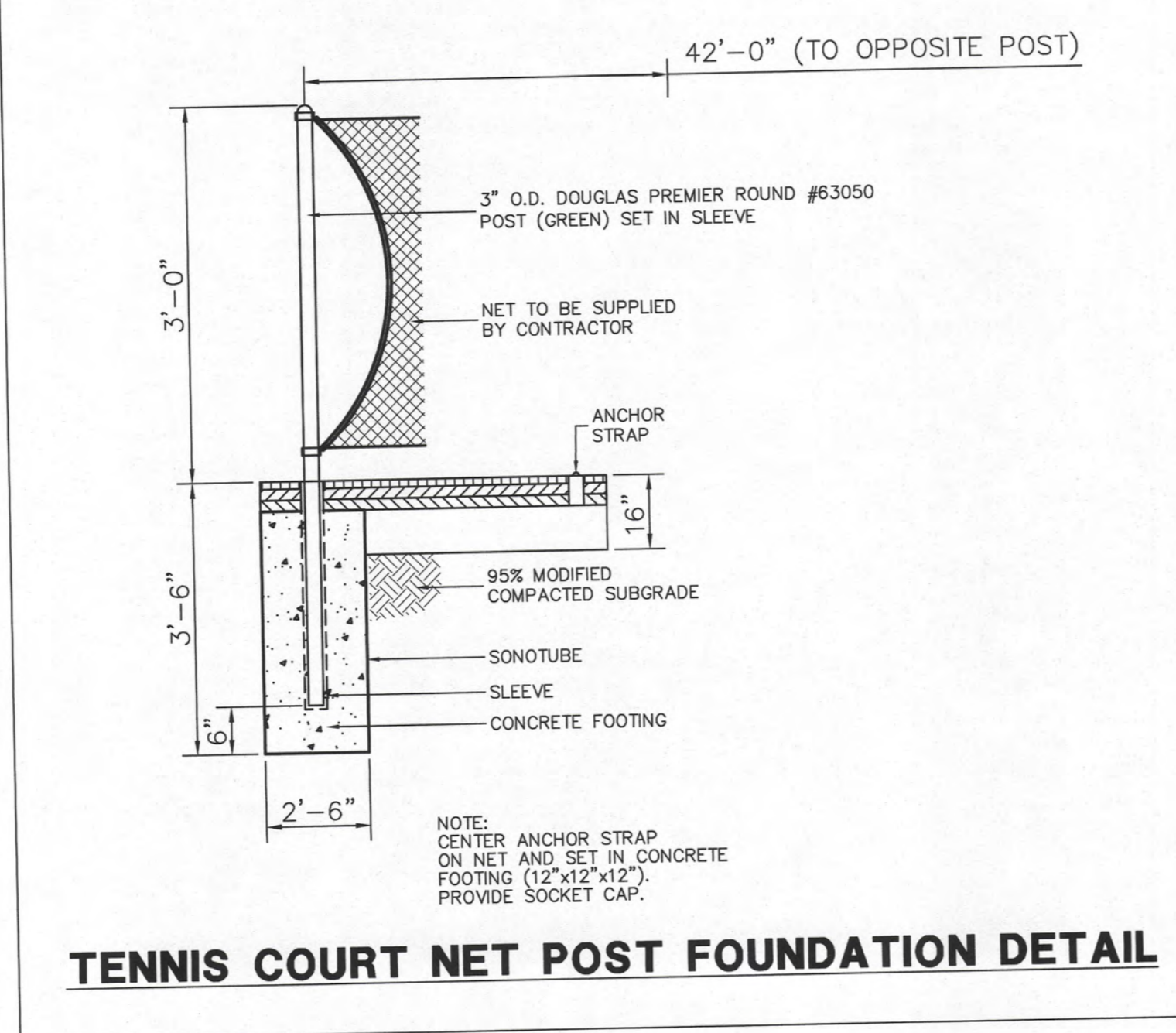
TENNIS COURT DIMENSIONS

Figure 1-1 Basketball Court Diagram

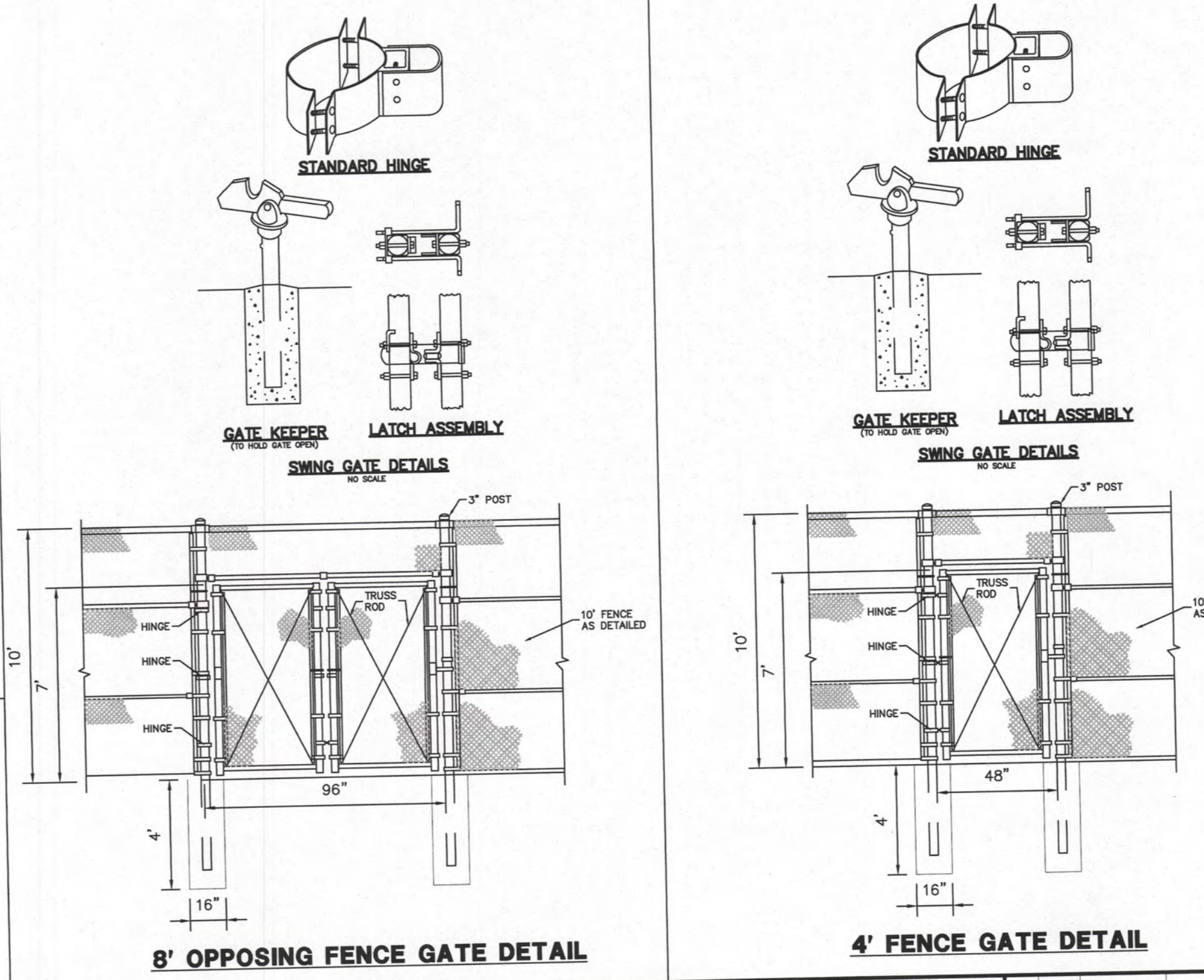


NOTE: Except as specifically stated in the rules, information on field diagrams in this book is suggestive only; it is not required by NFHS rules. The construction and layout of all courts and fields used for high school competition are subject to any controlling laws and building codes, and to the sound judgment of the persons in charge of the facilities.

ALTERNATE #1

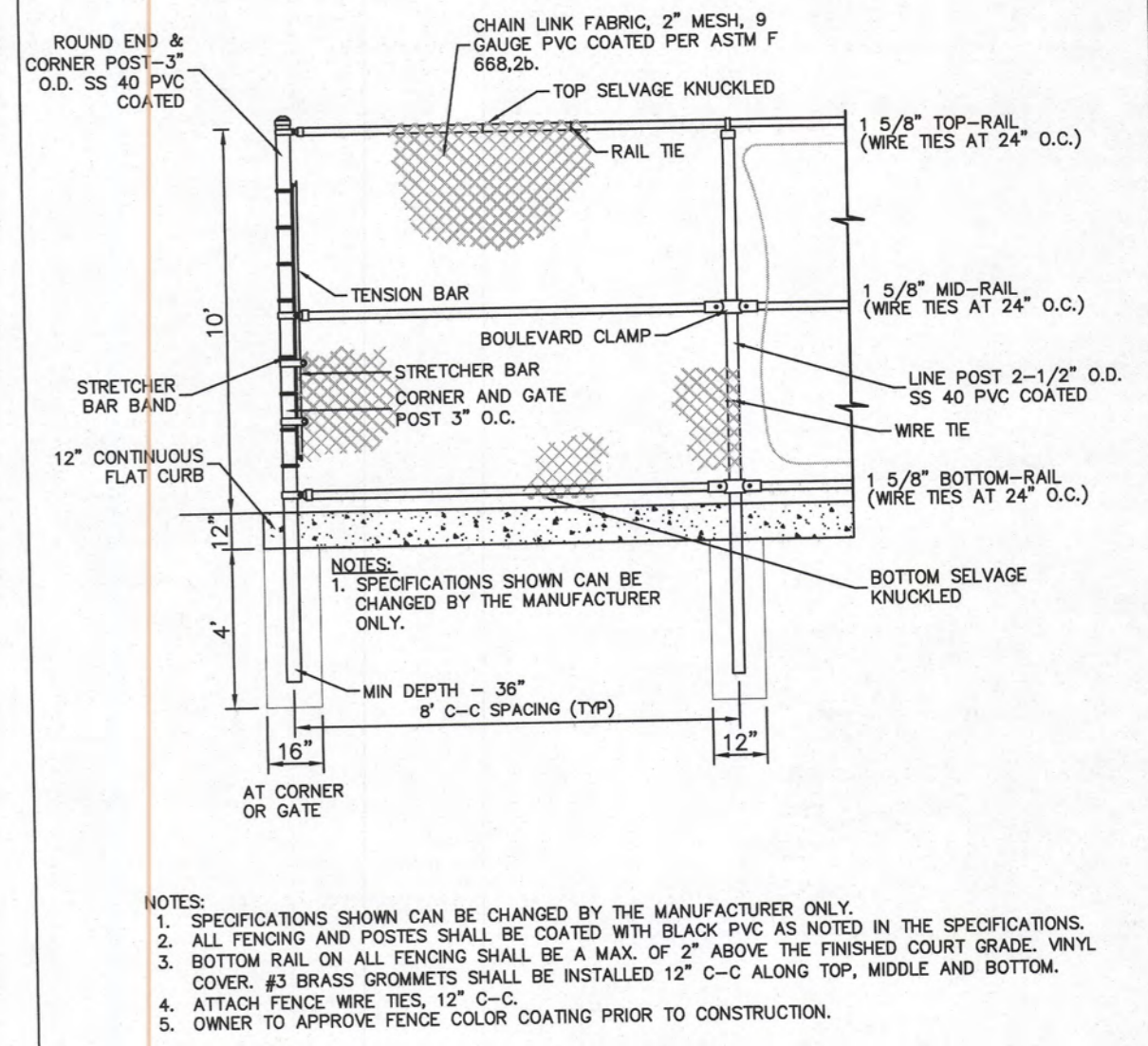


TENNIS COURT NET POST FOUNDATION DETAIL



8' OPPOSING FENCE GATE DETAIL

4' FENCE GATE DETAIL



10' FENCE DETAIL

DETAILS

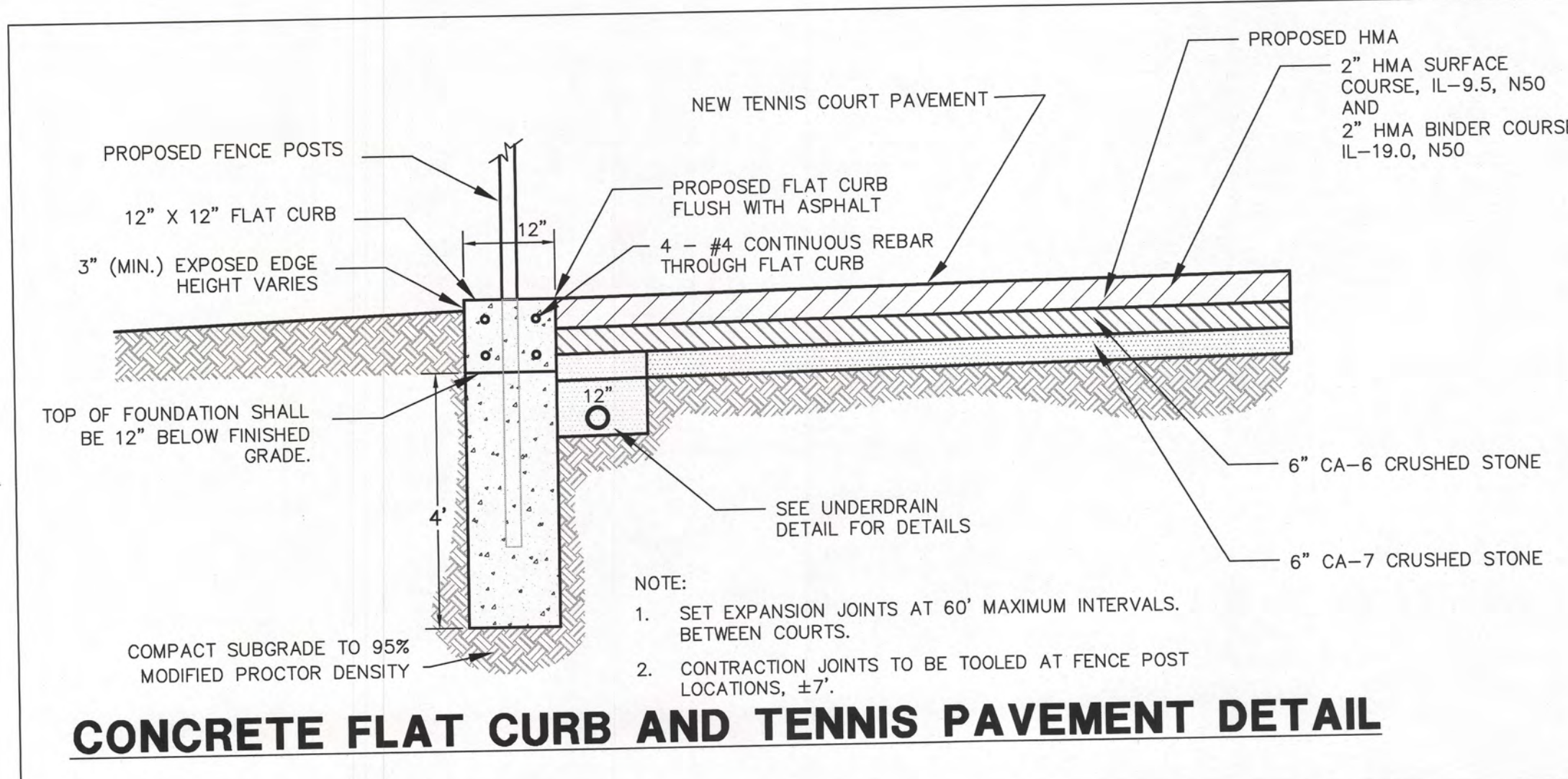
**CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS**

GHA GEWALT HAMILTON ASSOCIATES, INC.
625 Forest Edge Drive ■ Vernon Hills, IL. 60061
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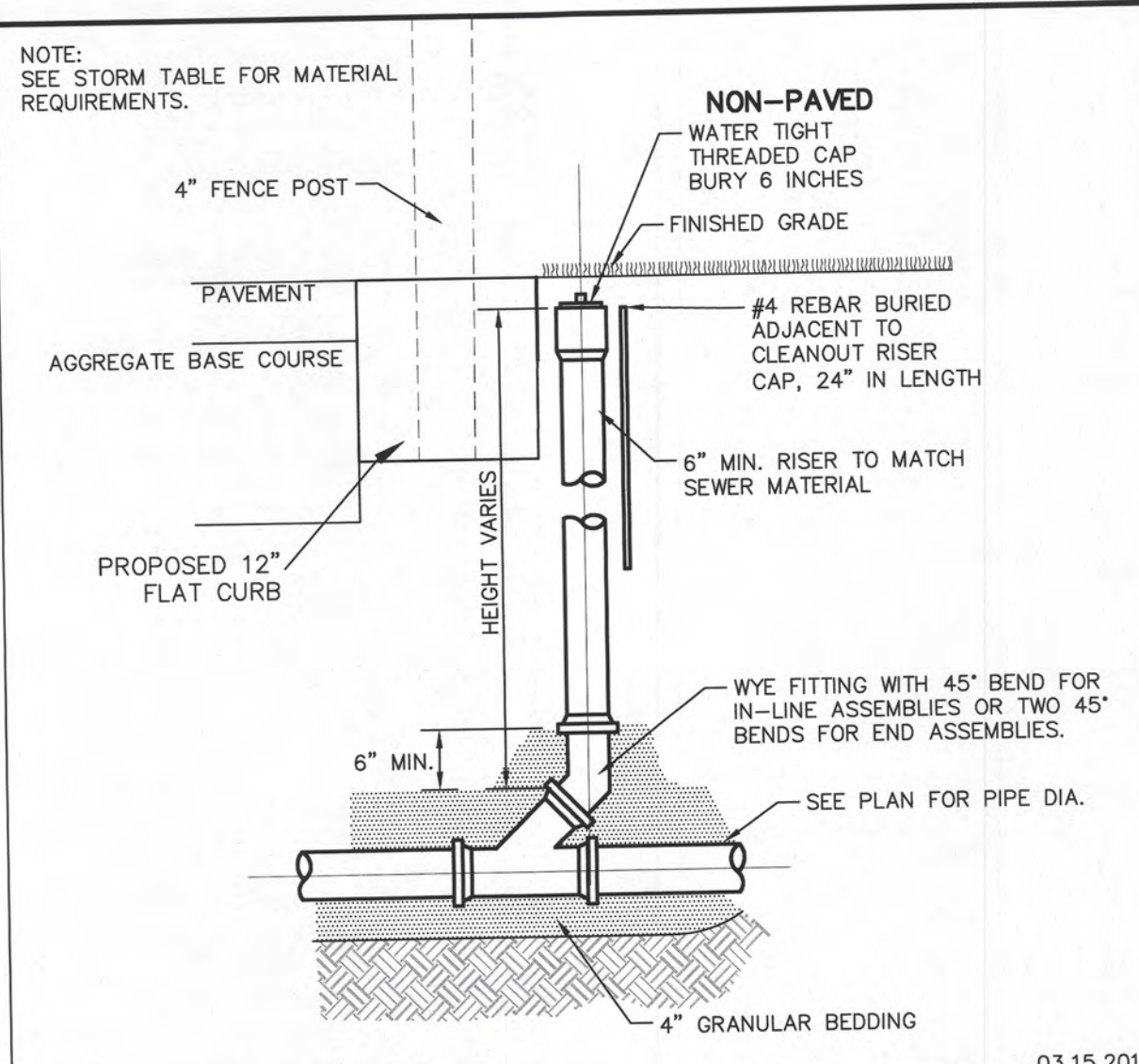
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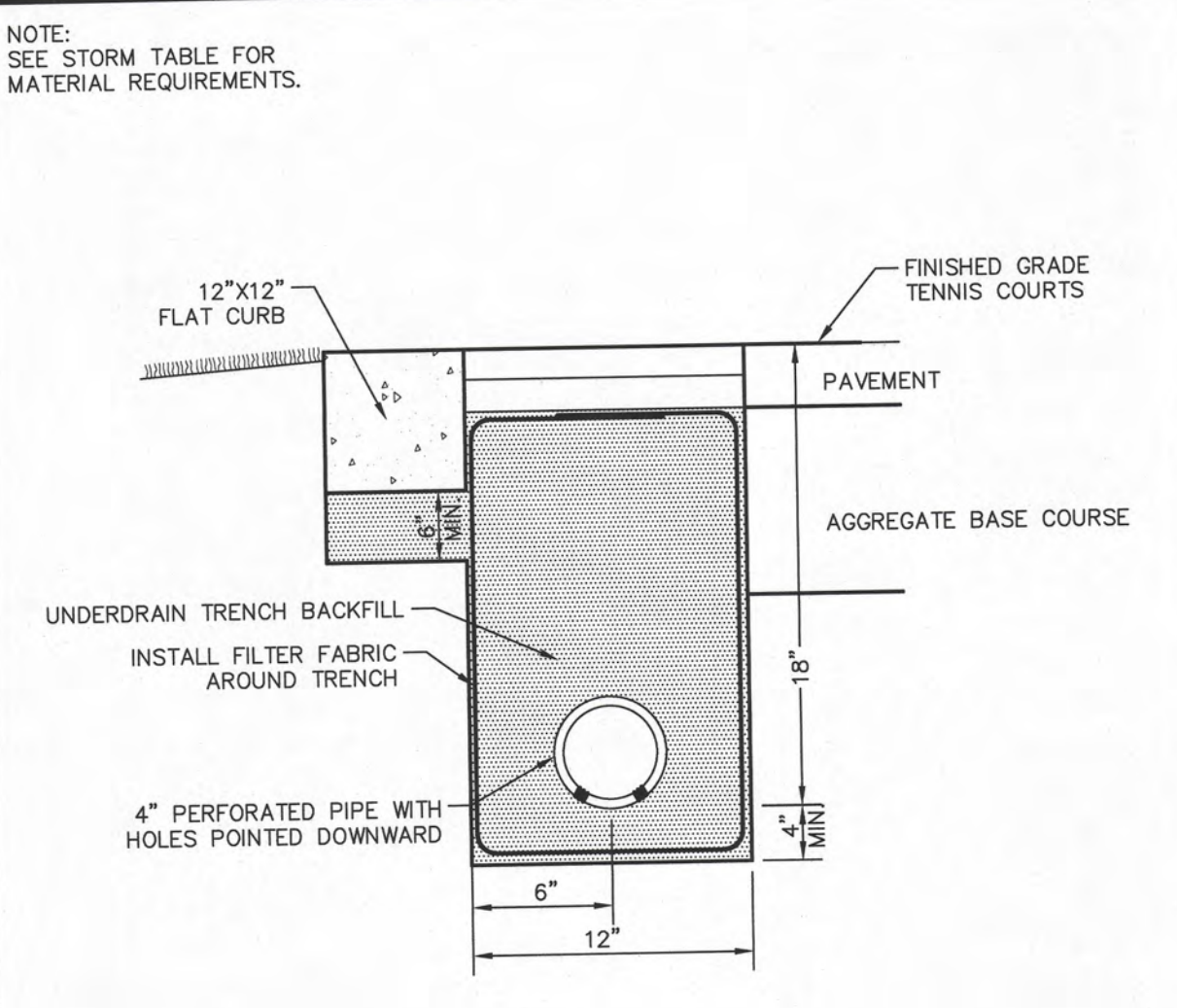
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DRAWN BY: JMB	GHA PROJECT # 4129.220
DATE: 8/18/2021	
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DATE: 8/18/2021	
	OF 11 SHEETS



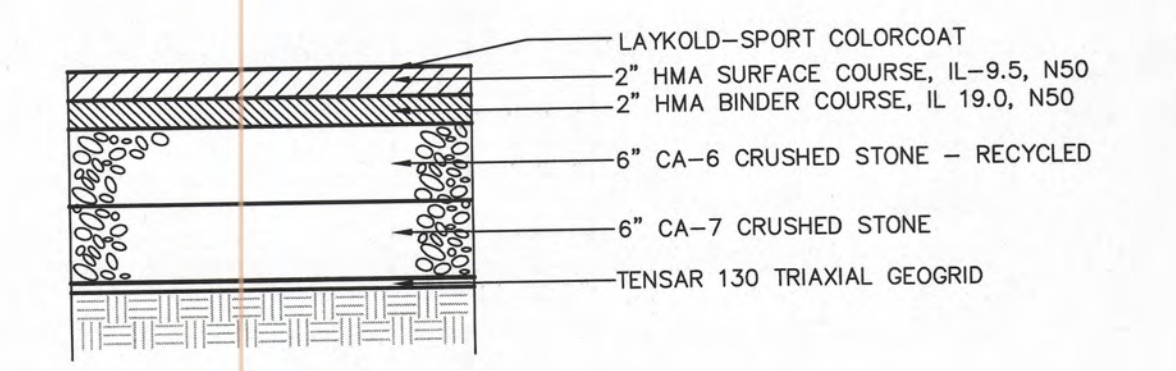
CONCRETE FLAT CURB AND TENNIS PAVEMENT DETAIL



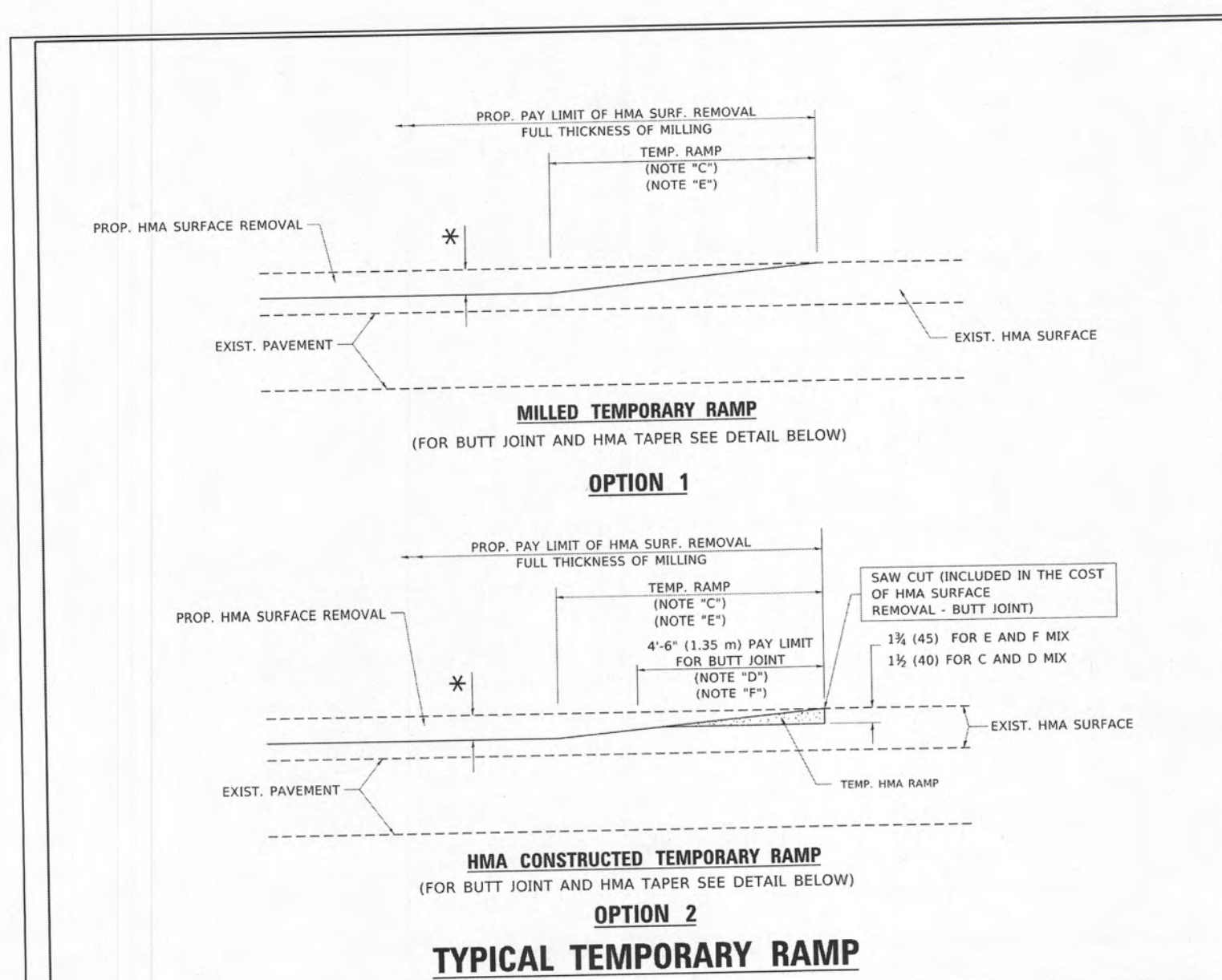
STORM SEWER CLEAN-OUT DETAIL



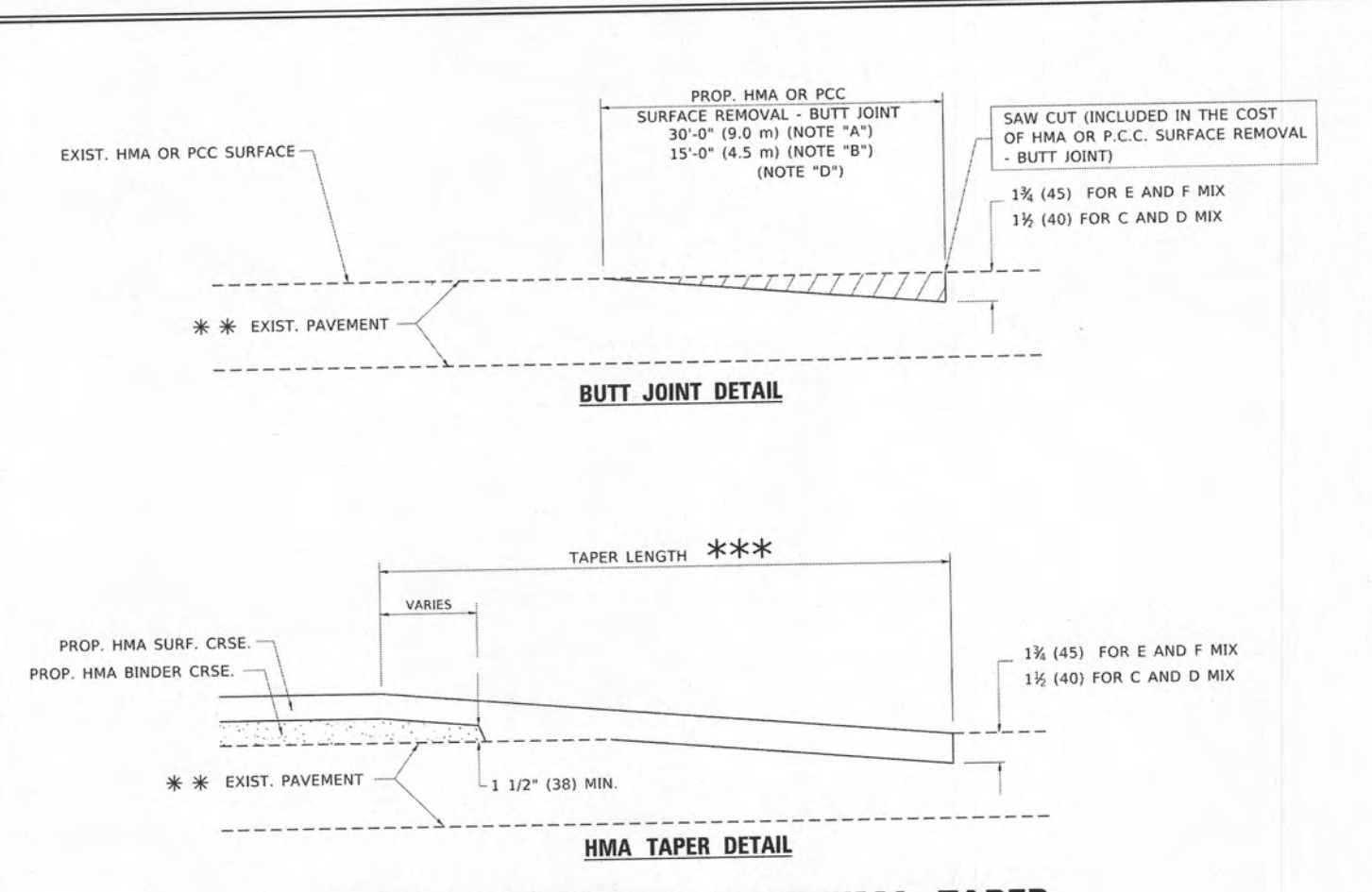
STORM UNDERDRAIN DETAIL TENNIS COURTS



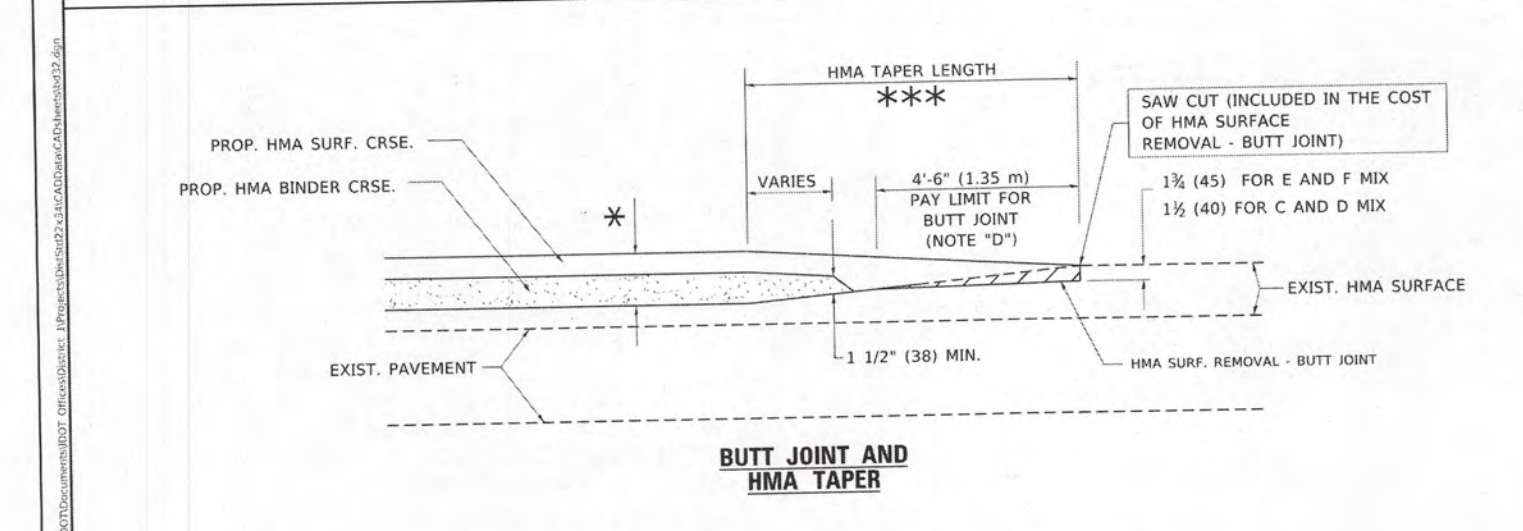
BASE BID - VETERAN ACRES PAVEMENT DETAIL



TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

NOTES

- MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- MINOR SIDE ROADS.
- THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSE.
- TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT.
- SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- SEE ARTICLE 608.08 AND 608.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT."
- 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
- 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT

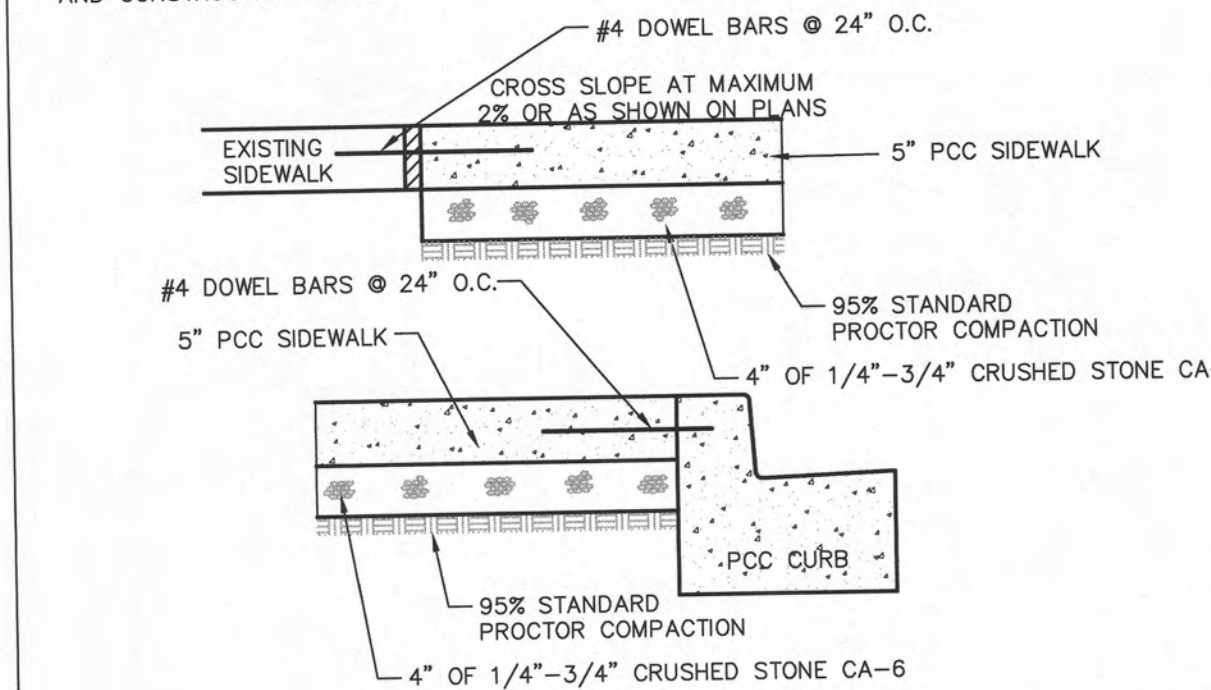
THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METERS) FOR "HOT MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT."

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

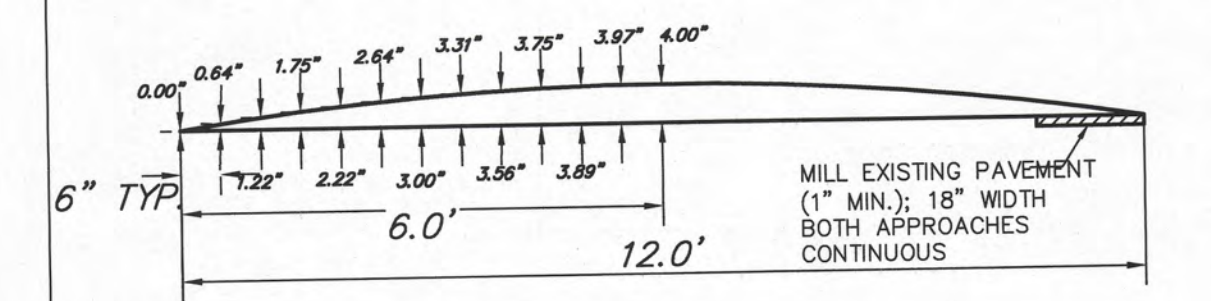
DESIGNED BY: M. DE YOUNG	REVISION: R. SHAN 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS	SHEET 1 OF 1 SHEETS
DRAWN BY: A. ABRAS 03-21-97	REVISION: A. ABRAS 03-21-97	SCALE: NONE	NO. BY DATE	REVISION
CHECKED BY: R. GOMEZ 04-04-01	REVISION: R. GOMEZ 04-04-01	FILE: 4129.220-DT3.dwg	NO. BY DATE	REVISION
DATE: 06-13-90	REVISION: 6-06-90 01-01-07	PROJECT: 4129.220-DT3.dwg	NO. BY DATE	REVISION

NOTES:

- SET 1/2" EXPANSION JOINTS AT POINTS ABUTTING CURB OR PAVEMENT AND AT 60' MAX. INTERVALS.
- CONTROL JOINTS SHALL BE 1/8" TO 1/4" SIDE AND 1/4 OF THE SIDEWALK THICKNESS DEEP. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A 1/4" RADIUS.
- SIDEWALK WIDTH AS SHOWN ON PLANS.
- SIDEWALK JOINTS SHALL MATCH CURB CONTROL AND CONSTRUCTION JOINTS.



PCC SIDEWALK DETAIL

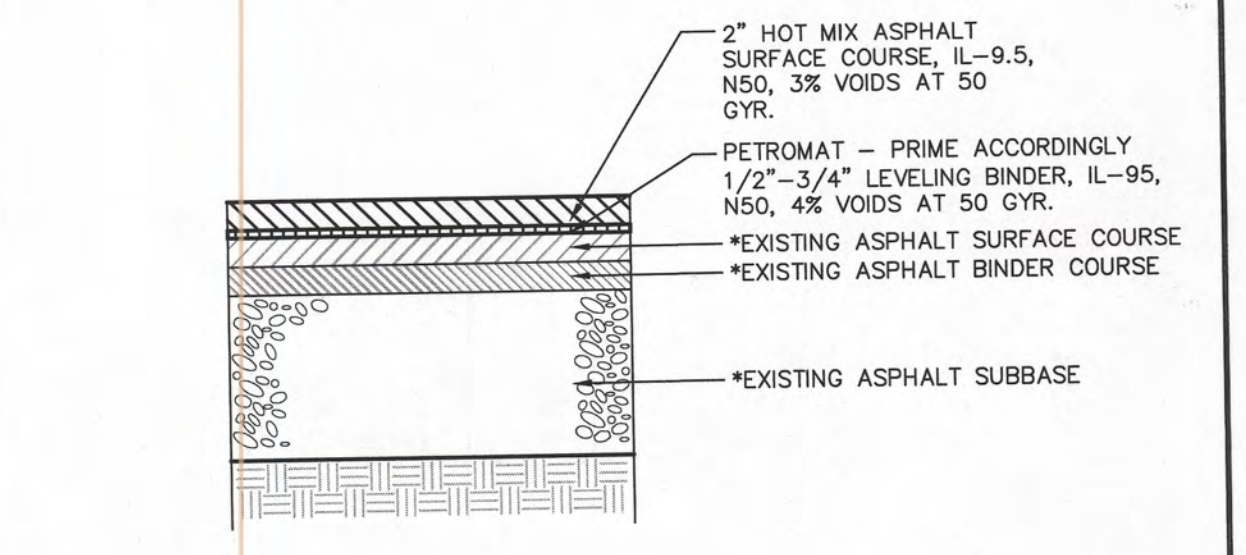


TEMPORARY PAVEMENT MARKINGS SHALL BE INSTALLED ON THE SAME DAY AS SPEED HUMPS UNTIL PERMANENT MARKINGS ARE USED. ALL SIGNAGE ASSOCIATED WITH SPEED HUMPS SHALL BE INSTALLED ON THE SAME DAY AS THE SPEED HUMPS OR IF THE SIGNAGE IS INSTALLED EARLIER, IT IS TO BE COVERED WITH BAGS AND THE BAGS SHALL BE REMOVED THE SAME DAY THAT THE HUMPS ARE INSTALLED.

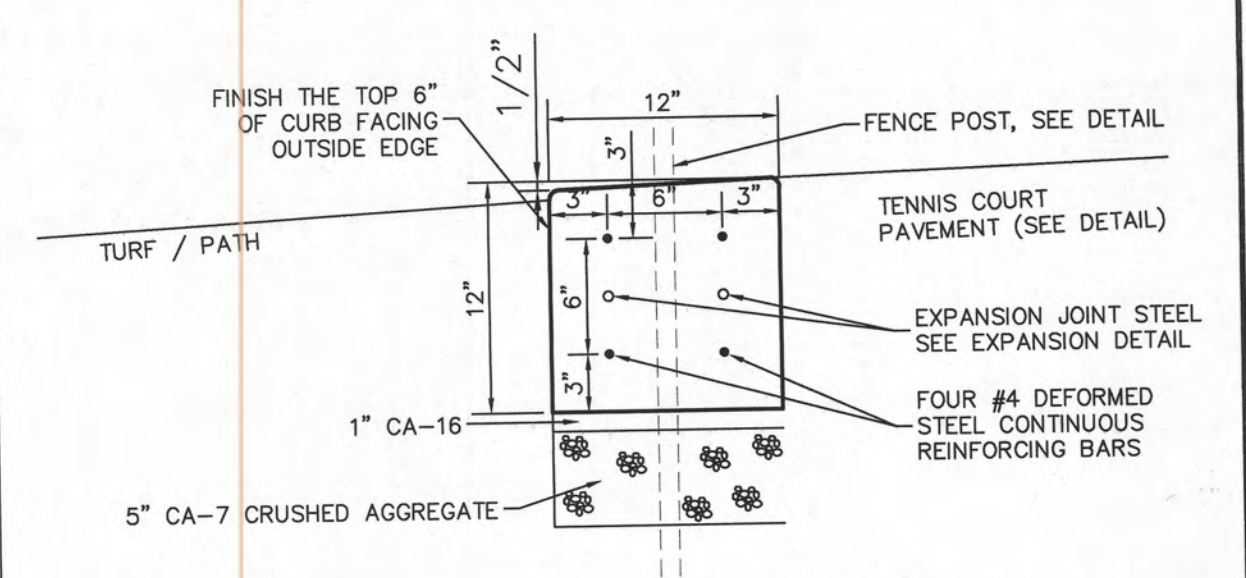
THE EXACT LOCATION OF THE HUMPS SHALL BE AS DIRECTED BY THE ENGINEER.

- A TEMPLATE SHALL BE CONSTRUCTED TO VERIFY THE ACCURACY OF THE HUMP PROFILE AND TO ENSURE THAT THE DESIRED VERTICAL DIMENSIONS ARE ATTAINED WITHIN REASONABLE TOLERANCES (ONE QUARTER OF AN INCH OR LESS, (1/4"), PROVIDED THE HUMP DOES NOT EXCEED 4").
- PAVEMENT SHALL BE BITUMINOUS SURFACE COURSE, IL-9.5, N50 UNLESS OTHERWISE NOTED.

ALTERNATE #2 4' SPEED HUMP



ALTERNATE #2 PAVEMENT OVERLAY DETAIL - PETROMAT



12' FLAT CURB - TENNIS COURTS

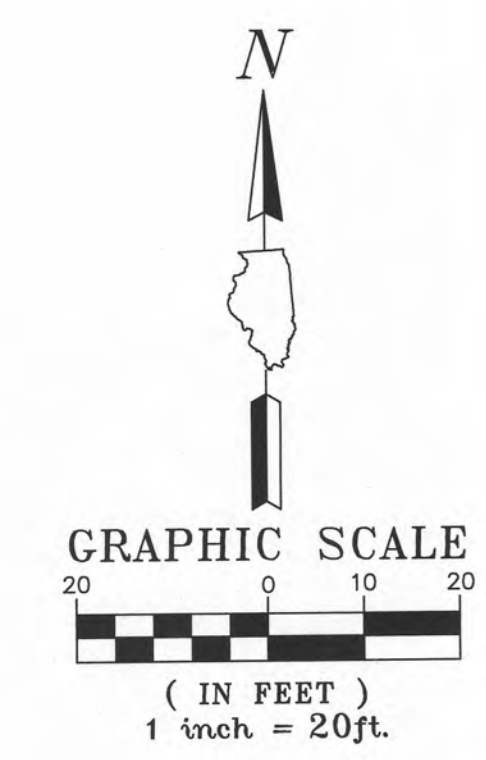
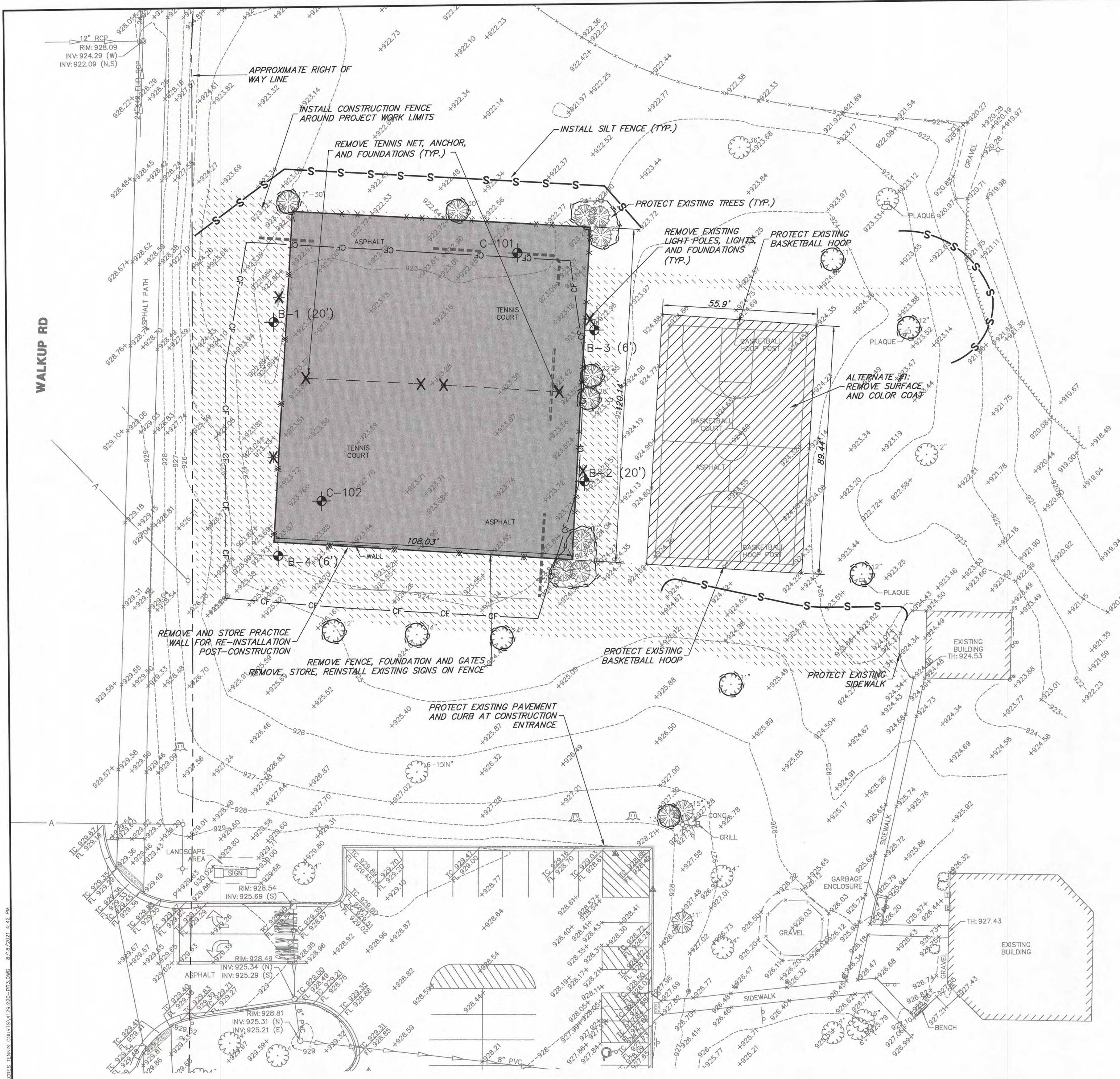
- PCC NOTES:**
- SET 3/4" EXPANSION JOINTS AT POINTS ABUTTING CURB OR PAVEMENT AND AT 45' MAX. INTERVALS.
 - CONTROL JOINTS SHALL BE 1/8" TO 1/4" WIDE AND 1/4 OF THE SIDEWALK THICKNESS DEEP. THE EDGE OF THE CONTROL JOINTS SHALL BE GIVEN A 1/4" RADIUS.
 - SIDEWALK WIDTH AS SHOWN ON PLANS.
 - ADD 2 POUNDS POLYPROPYLENE FIBER REINFORCEMENT PER CUBIC YARD OF CONCRETE. FIBERS PROVIDED BY W.R. GRACE OR APPROVED EQUAL.
 - TOP OF FLAT CURB SHALL BE 1/2" LOWER THEN THE COURT SIDE ELEVATION. SPOT ELEVATION ON GRADING PLAN CALLS OUT THE COURT FACE TOP OF CURB ELEVATION.

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DETAILS
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

FILE: 4129.220-DT3.dwg	SHEET NUMBER: 5
DRAWN BY: JMB	GHA PROJECT #: 4129.220
DATE: 8/18/2021	SCALE: N.A.
CHECKED BY: TAR	OF 11 SHEETS
DATE: 8/18/2021	



EXISTING CONDITION AND DEMOLITION NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Contractor shall refer to subsurface soil exploration report.
4. The contractor shall be responsible for fencing the active work zone from the public and protecting the public from any construction related hazards. At a minimum, all excavation, demolition areas and other areas potentially hazardous to pedestrians and vehicles must be protected.
5. The contractor is responsible for the demolition and disposal of all existing improvements onsite necessary to complete the job. These improvements include, but are not limited to, existing pavements, curbs, sidewalks, utilities, lighting, light bases, manholes, fences, foundations, and other structures within the work area. Excavate and grade to proposed pavement and building subbase grades. (Refer to foundation plans for proposed building subbase grades.) These items shall be completely removed and legally disposed of offsite.
6. Temporarily remove, store and protect sign and posts within affected work zone for reinstallation. Coordinate onsite storage with Property Owner.
7. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
8. The contractor shall submit to the Owner and / or City a construction staging and fencing plan. Pedestrian access conforming to ADA standards shall be maintained on all ADA routes impacted by construction at all times.
9. Contractor to strip existing topsoil and stockpile in the location shown on the plans. Prior to final placement of topsoil the topsoil shall be screened on-site.
10. Existing condition survey provided by Gewalt Hamilton Associates dated Tuesday, July 27th 2021.

CONSTRUCTION SEQUENCE:

1. REMOVE FENCE, FENCE FABRIC, LIGHTS AND OTHER TENNIS EQUIPMENT
2. REMOVE AND STORE PRACTICE WALL FOR REINSTALLATION POST-CONSTRUCTION
3. ROOT PRUNE AND REMOVE BRANCHES - UNDER SUPERVISION OF PARK DISTRICT ARBORIST
4. RECLAIM EXISTING HMA PAVEMENT STOCKPILE ON SITE
5. EXCAVATE TO NEW SUB-GRADE
6. INSTALL FENCE AND NET FOUNDATIONS
7. INSTALL UNDERDRAIN AS SHOWN
8. INSTALL IN-LINE CURB
9. INSTALL PAVEMENT
10. INSTALL FENCE FABRIC
11. PLACE COLOR COAT

REMOVAL LEGEND

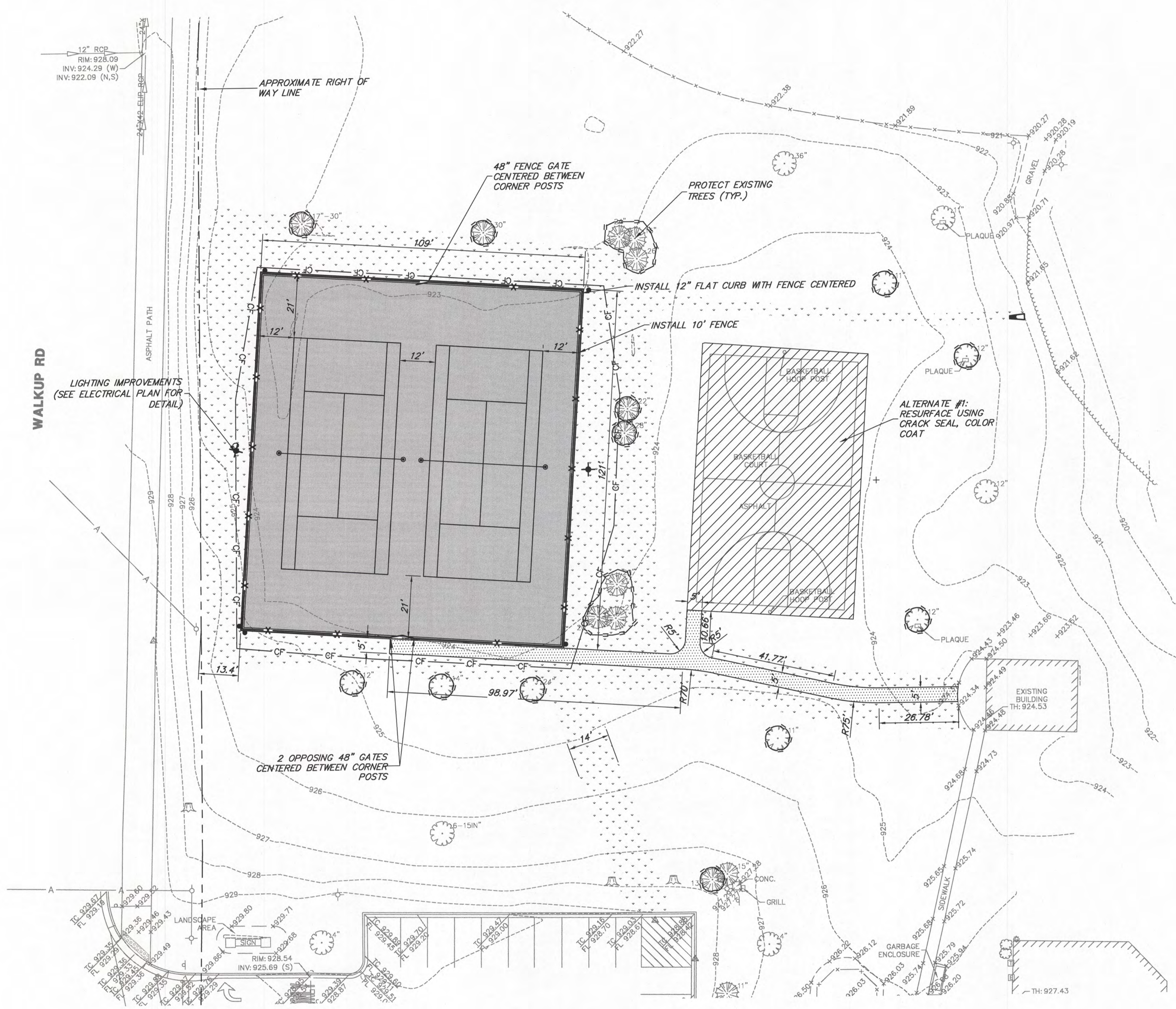
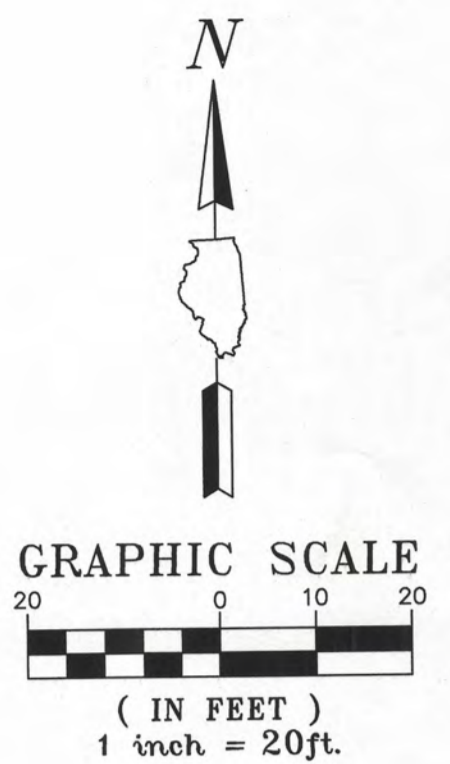
- EARTH REMOVAL
- PAVEMENT REMOVAL FULL DEPTH
- CURT RESURFACING (ALTERNATE #1)
- LIGHT POLE REMOVAL
- PERIMETER EROSION BARRIER
- FENCE AND FOUNDATION (FULL DEPTH) TO BE REMOVED
- TREE ROOT PRUNING - IN PRESENCE OF PARK DISTRICT ARBORIST
- CONSTRUCTION FENCE
- SOIL BORING
- TREE TRUNK PROTECTION FENCE

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EXISTING CONDITIONS/DEMOLITION PLAN
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

NO.		BY		DATE		REVISION		NO.		BY		DATE		REVISION	
FILE: 4129.220-PR3.dwg		DRAWN BY: JMB		DATE: 8/18/2021		GHA PROJECT # 4129.220		CHECKED BY: TAR		DATE: 8/18/2021		SCALE: 1"=20'		SHEET NUMBER: 6 OF 11 SHEETS	



GEOMETRIC AND PAVING PLAN

1. All pavement dimensions are to edge of pavement, unless otherwise noted.
2. Install all curb and sidewalk as shown.
3. Provide 1.90% cross slope and 4.5% maximum longitudinal slope on all sidewalks and pedestrian paths unless otherwise indicated. Illinois accessibility code requires a maximum constructed cross slope of 2.00% and longitudinal slope of 5.00%.
4. Install bituminous pavement as shown. Refer to detail sheet for specific pavement sections and general note sheet for construction, testing and compaction requirements.
5. Contractor shall install temporary erosion control seed and blanket as necessary to meet soil erosion and sediment control requirements. Refer to notes and details throughout the plan set for specific material requirements.
6. For final restoration, the contractor shall be responsible for restoring all disturbed turf areas and proposed turf areas as follows:
 - a. Refer to SESC plans for topsoil, seed and sod material and restoration requirements.
 - b. Prior to placement of topsoil restoration area subgrade material shall be rototilled and re-compacted to a maximum of 80% standard proctor to a depth of 6".
 - c. Spread a minimum of 6" of existing site salvaged screened topsoil or new pulverized topsoil on all disturbed areas. Compact to 80% standard proctor.
 - d. Topsoil must be free of litter, brush, rocks and earth clods of greater than 1 inch in any dimension. Contain between 1%-10% organic matter, 12%-50% clay, and less than 55% sand content. pH shall be between 6.0 and 8.0.
 - e. Seed restoration areas as follows:
 - IDOT Class 1 seed. (Lawn mixture)
 - Fertilizer shall be applied following IDOT requirements.
 - f. Contractor shall be responsible for watering the restored area per IDOT specifications for a duration of 30 days prior to the Owner's final review and acceptance. If restoration has not shown a "catch" or uniform stand, the contractor shall repeat reseeding or sodding until a uniform stand is achieved.
8. Once restoration has been completed, the contractor shall remove erosion control devices. Silt fence trenches shall be backfilled and restored in kind. Storm structures shall be cleaned of debris.

PROPOSED LEGEND

- TENNIS COURT PAVEMENT (SEE DETAIL)
- BASKETBALL COURT RESURFACE (ALTERNATE #1)
- 12" X 12" FLAT CURB
- 10' FENCE
- 5" PCC SIDEWALK
- TURF GRASS RESTORATION
- PROPOSED LIGHT POLE AND FOUNDATION

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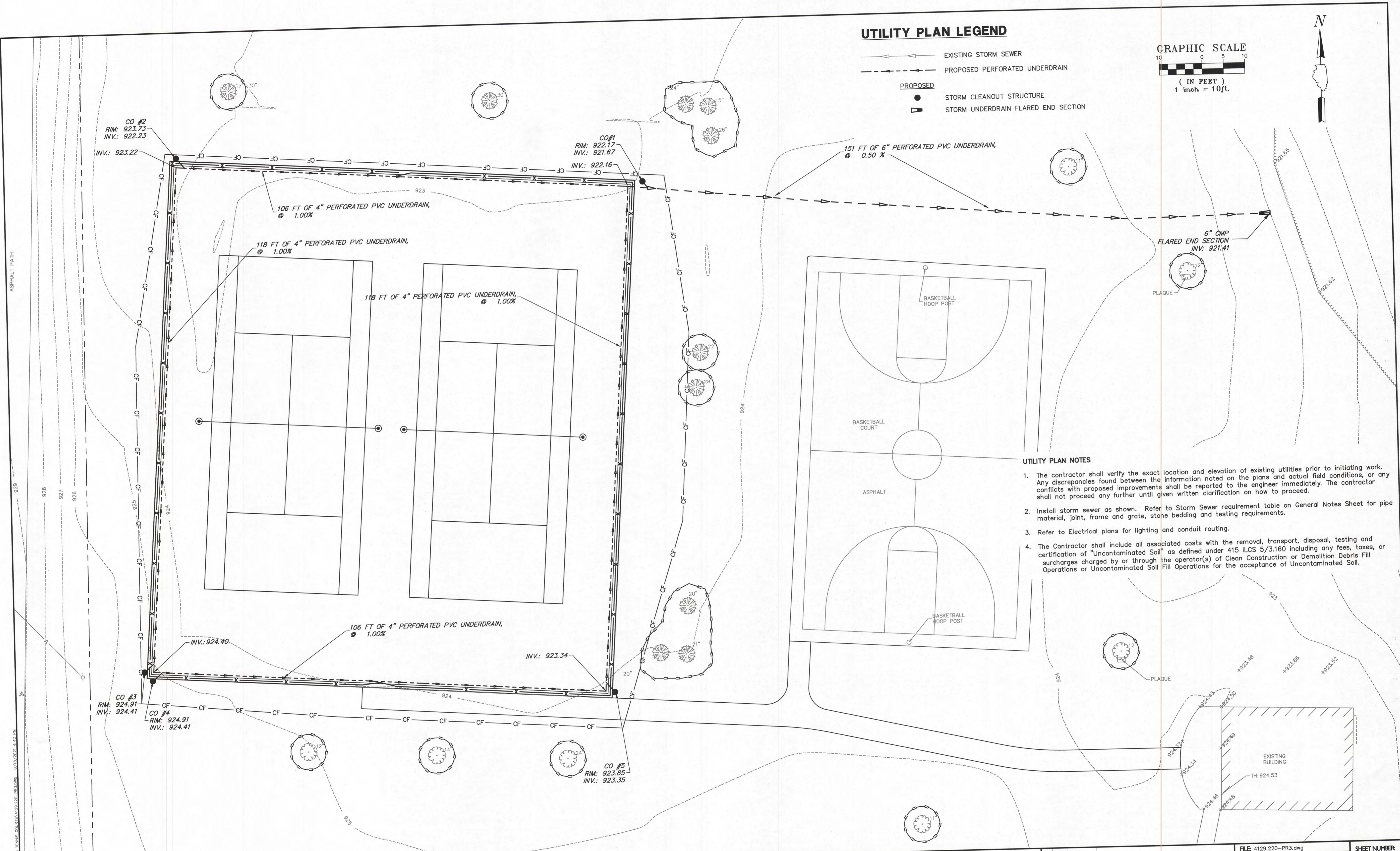
GEOMETRIC PLAN
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

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UTILITY PLAN LEGEND

- ▲—▲—▲— EXISTING STORM SEWER
- - - - - PROPOSED PERFORATED UNDERDRAIN
- PROPOSED STORM CLEANOUT STRUCTURE
- ▭ STORM UNDERDRAIN FLARED END SECTION

GRAPHIC SCALE
 10 0 5 10
 (IN FEET)
 1 inch = 10ft.



UTILITY PLAN NOTES

1. The contractor shall verify the exact location and elevation of existing utilities prior to initiating work. Any discrepancies found between the information noted on the plans and actual field conditions, or any conflicts with proposed improvements shall be reported to the engineer immediately. The contractor shall not proceed any further until given written clarification on how to proceed.
2. Install storm sewer as shown. Refer to Storm Sewer requirement table on General Notes Sheet for pipe material, joint, frame and grate, stone bedding and testing requirements.
3. Refer to Electrical plans for lighting and conduit routing.
4. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.

UTILITY PLAN

**CRYSTAL LAKE PARK DISTRICT
 VETERAN ACRES TENNIS COURT RECONSTRUCTION
 CRYSTAL LAKE, ILLINOIS**

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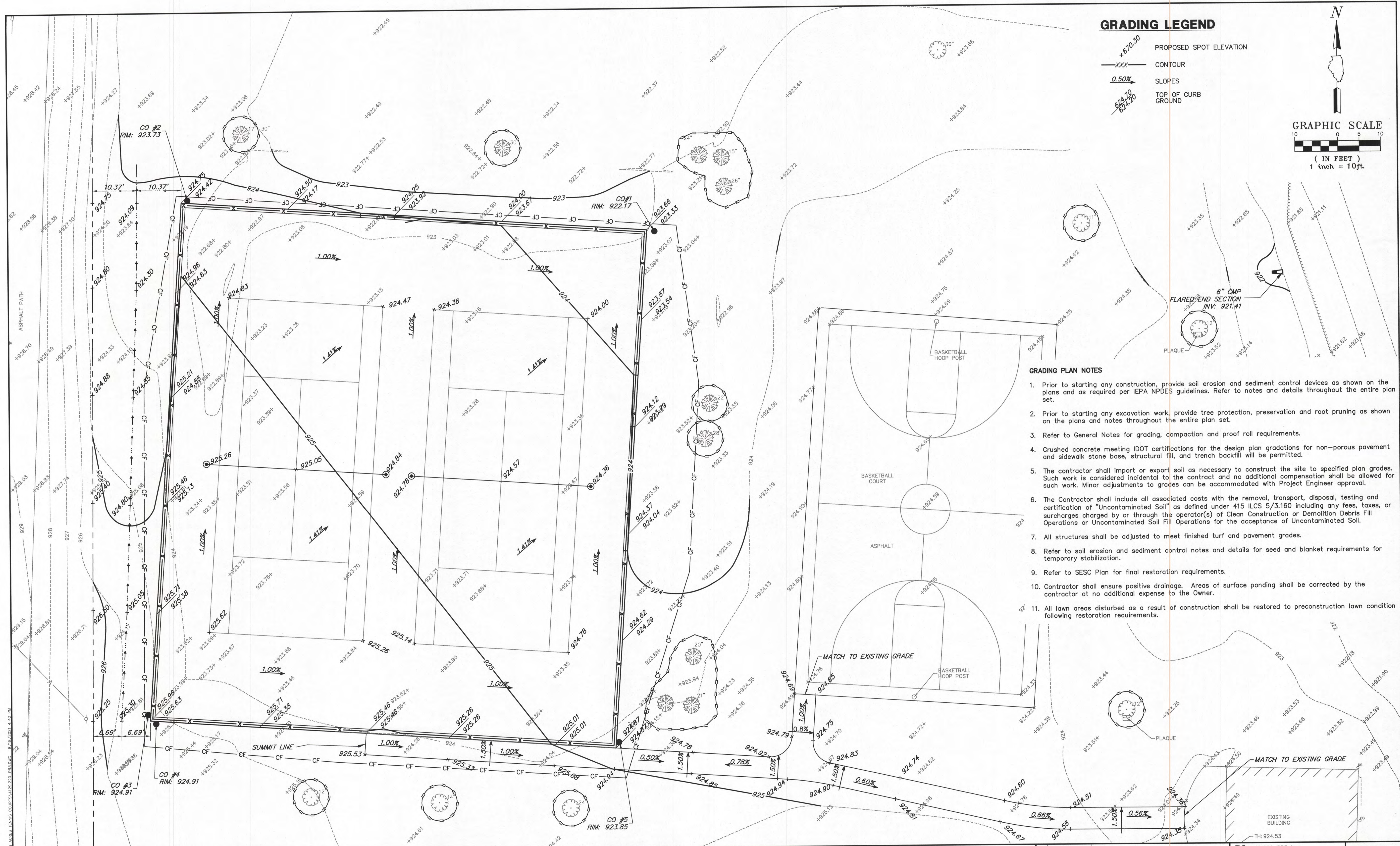
GHA GEWALT HAMILTON ASSOCIATES, INC.

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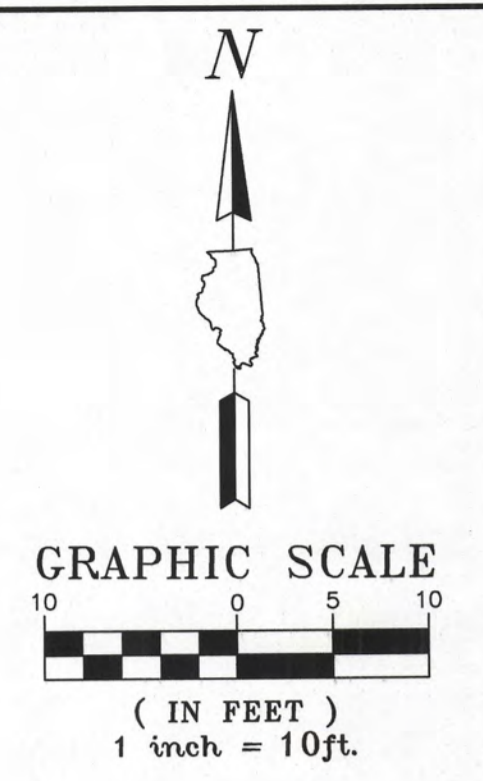
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DRAWN BY: JMB	GHA PROJECT #
DATE: 8/18/2021	4129.220
CHECKED BY: TAR	SCALE:
DATE: 8/18/2021	1"=10'

8
OF 11 SHEETS



GRADING LEGEND

- $+670.30$ PROPOSED SPOT ELEVATION
- XXX- CONTOUR
- 0.50% SLOPES
- $\frac{924.70}{924.70}$ TOP OF CURB
- GROUND



GRADING PLAN NOTES

1. Prior to starting any construction, provide soil erosion and sediment control devices as shown on the plans and as required per IEPA NPDES guidelines. Refer to notes and details throughout the entire plan set.
2. Prior to starting any excavation work, provide tree protection, preservation and root pruning as shown on the plans and notes throughout the entire plan set.
3. Refer to General Notes for grading, compaction and proof roll requirements.
4. Crushed concrete meeting IDOT certifications for the design plan gradations for non-porous pavement and sidewalk stone base, structural fill, and trench backfill will be permitted.
5. The contractor shall import or export soil as necessary to construct the site to specified plan grades. Such work is considered incidental to the contract and no additional compensation shall be allowed for such work. Minor adjustments to grades can be accommodated with Project Engineer approval.
6. The Contractor shall include all associated costs with the removal, transport, disposal, testing and certification of "Uncontaminated Soil" as defined under 415 ILCS 5/3.160 including any fees, taxes, or surcharges charged by or through the operator(s) of Clean Construction or Demolition Debris Fill Operations or Uncontaminated Soil Fill Operations for the acceptance of Uncontaminated Soil.
7. All structures shall be adjusted to meet finished turf and pavement grades.
8. Refer to soil erosion and sediment control notes and details for seed and blanket requirements for temporary stabilization.
9. Refer to SESC Plan for final restoration requirements.
10. Contractor shall ensure positive drainage. Areas of surface ponding shall be corrected by the contractor at no additional expense to the Owner.
11. All lawn areas disturbed as a result of construction shall be restored to preconstruction lawn condition following restoration requirements.

GRADING PLAN
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
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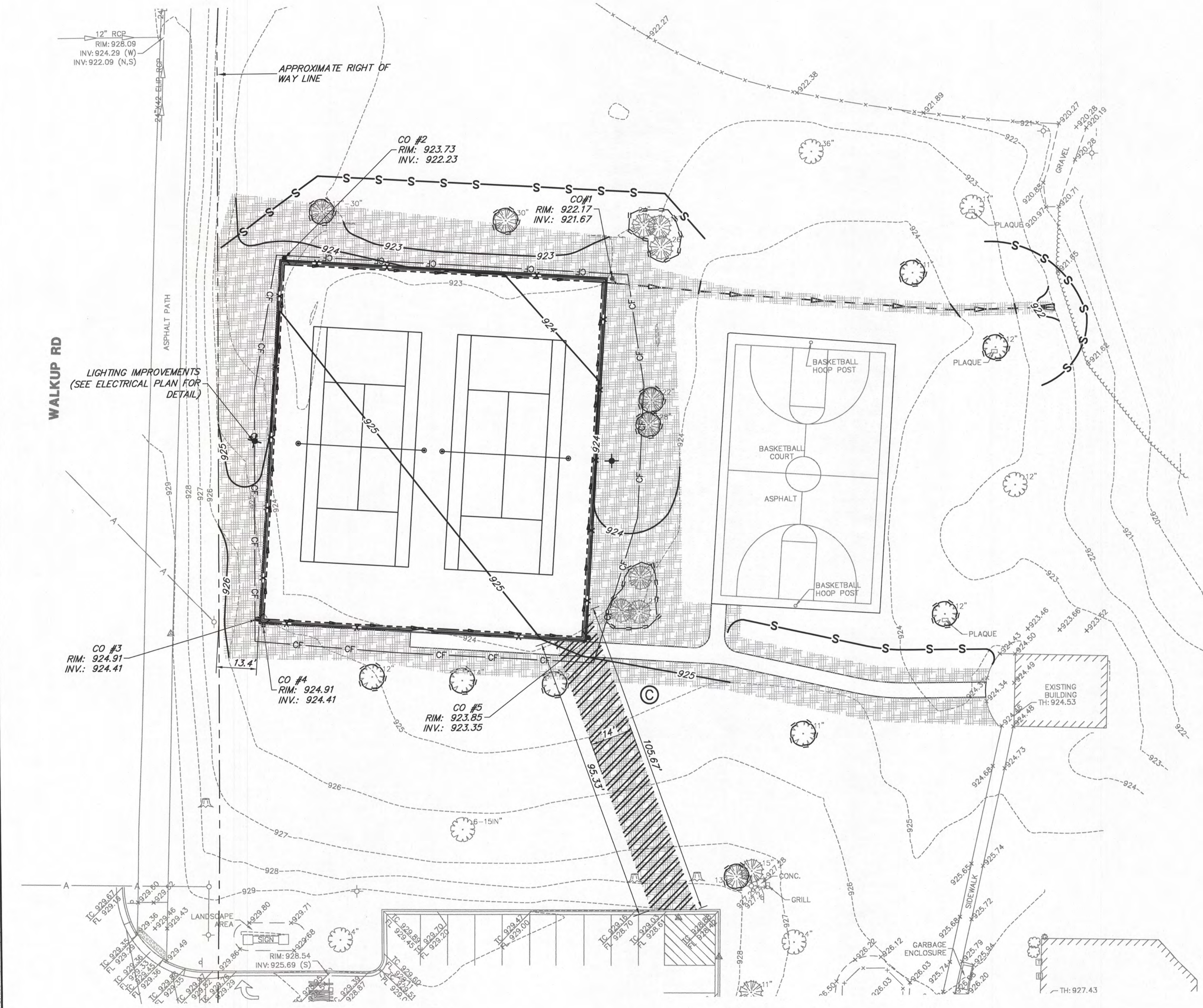
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CHECKED BY: TAR		SCALE		OF 11 SHEETS			
DATE 8/18/2021		1"=10'					



GRAPHIC SCALE
 20 0 10 20
 (IN FEET)
 1 inch = 20ft.

SEDIMENTATION AND EROSION CONTROL NOTES

- A. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED. WATER USE MUST NOT CAUSE ADDITIONAL EROSION.
- B. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- C. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
- D. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT, WASHING SHALL BE IMPLEMENTED AND PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- E. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED BY THE END OF THE DAY.
- F. ON-SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- G. ERODIBLE STOCKPILES MUST BE ENCLOSED WITH SILT FENCE BY THE END OF THE WORK DAY.
- H. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION.
- I. SOIL DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER AS TO MINIMIZE EROSION. SOIL STABILIZATION MEASURES SHALL CONSIDER THE TIME OF YEAR, SITE CONDITIONS AND THE USE OF TEMPORARY OR PERMANENT MEASURES.
- J. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF HYDROLOGIC DISTURBANCE OF UPLAND AREAS.
- K. DISTURBED AREAS SHALL BE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES WITHIN 7 CALENDAR DAYS OF THE END OF ACTIVE HYDROLOGIC DISTURBANCE OR REDISTURBANCE.
- L. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES MUST BE MAINTAINED AND REPAIRED AS NEEDED. THE PROPERTY OWNER SHALL ULTIMATELY BE RESPONSIBLE FOR MAINTENANCE AND REPAIR.
- M. THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER OR GOVERNING AGENCY.



SESC LEGEND

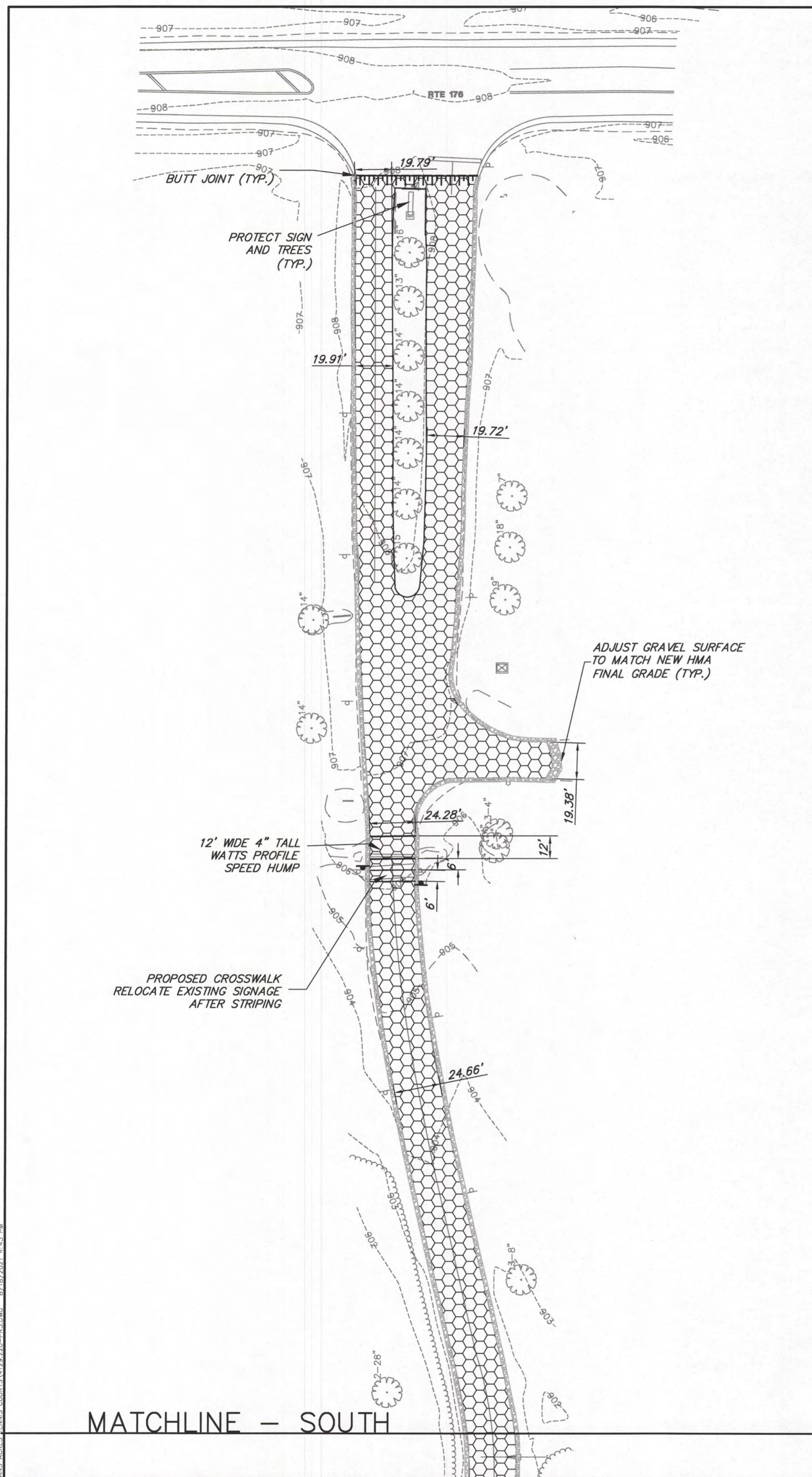
- TOPSOIL FURNISH AND PLACE, VARIABLE DEPTH, 6" MIN. SEEDING, TURF GRASS AT 8 LBS PER 1000 SF AND HYDROMULCH
- ROCK CONSTRUCTION ENTRANCE
- SILT FENCE INSTALLATION
- CONSTRUCTION FENCE INSTALLATION
- COIR LOG
- CONCRETE WASHOUT

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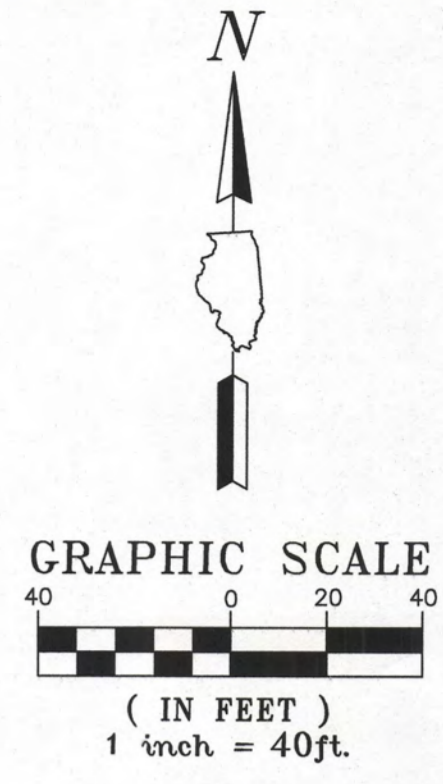
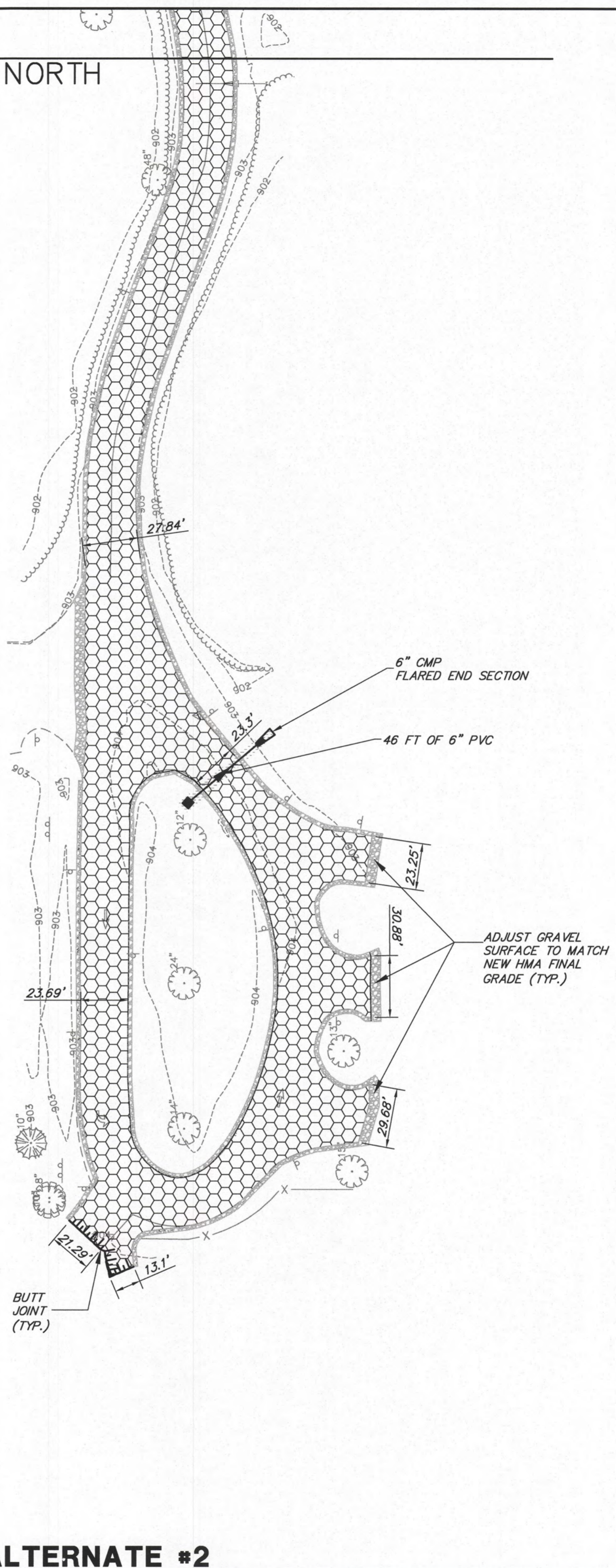
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SOIL EROSION & SEDIMENT CONTROL PLAN
CRYSTAL LAKE PARK DISTRICT
VETERAN ACRES TENNIS COURT RECONSTRUCTION
CRYSTAL LAKE, ILLINOIS

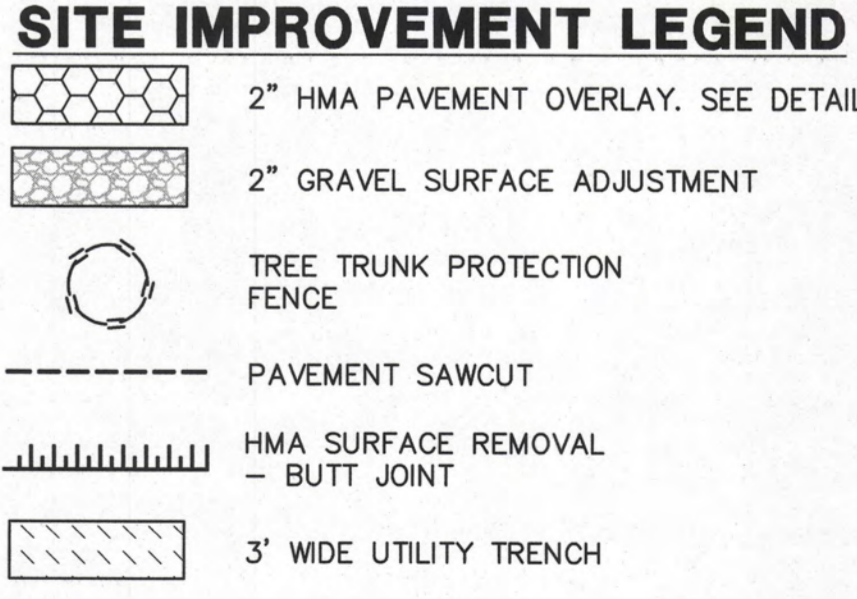
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								DRAWN BY: JMB	GHA PROJECT #
								DATE: 8/18/2021	4129.220
								CHECKED BY: TAR	SCALE
								DATE: 8/18/2021	1"=20'
								10	OF 11 SHEETS



MATCHLINE - NORTH



- GEOMETRIC AND PAVING PLAN**
- All pavement dimensions are to edge of pavement, unless otherwise noted.
 - Install bituminous pavement as shown. Refer to detail sheet for specific pavement sections and general note sheet for construction, testing and compaction requirements.



MATCHLINE - SOUTH

ALTERNATE #2

SITE IMPROVEMENT PLAN - LIPPOLD PARK

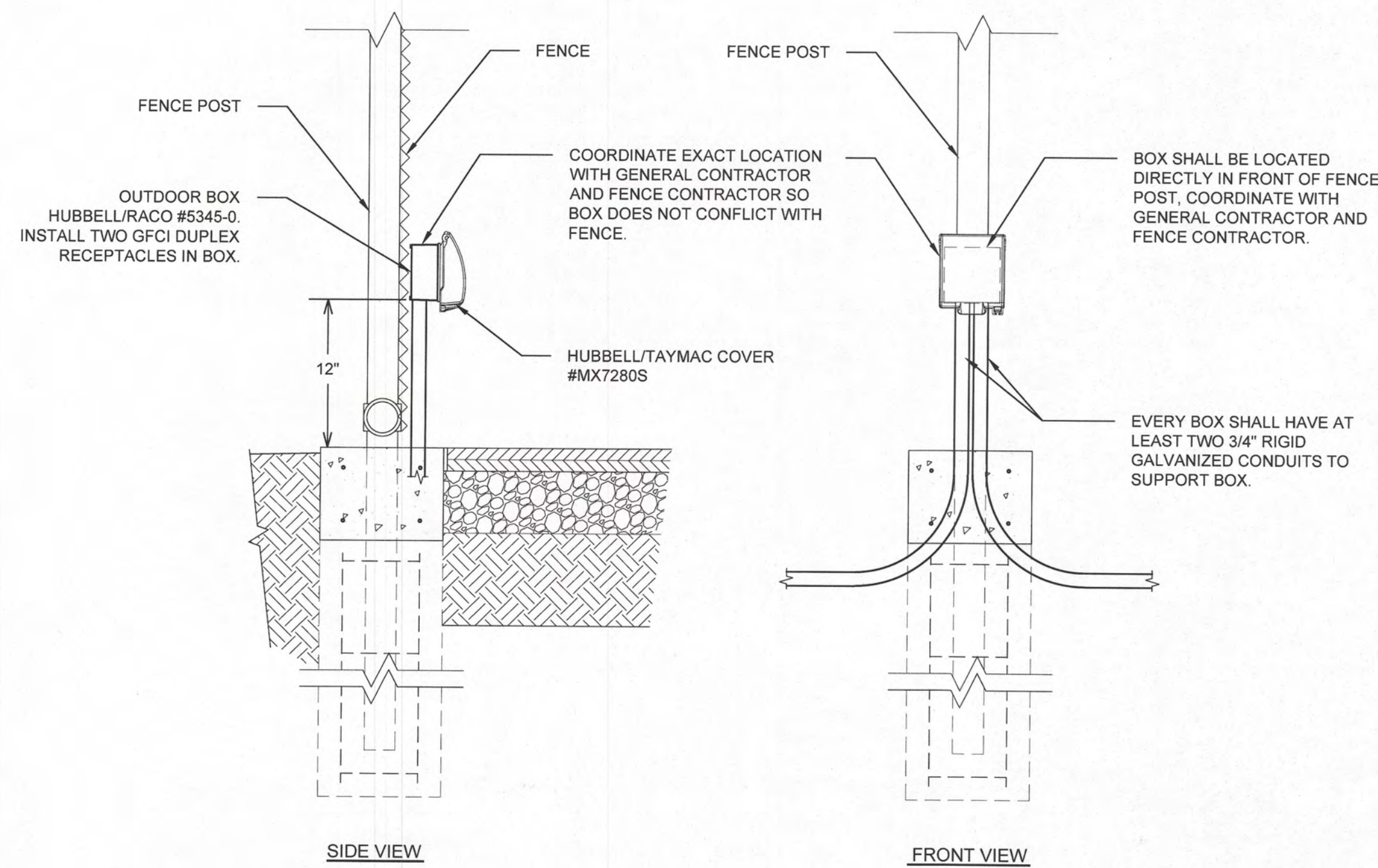
**CRYSTAL LAKE PARK DISTRICT
LIPPOLD PARK PAVEMENT MAINTENANCE
CRYSTAL LAKE, ILLINOIS**

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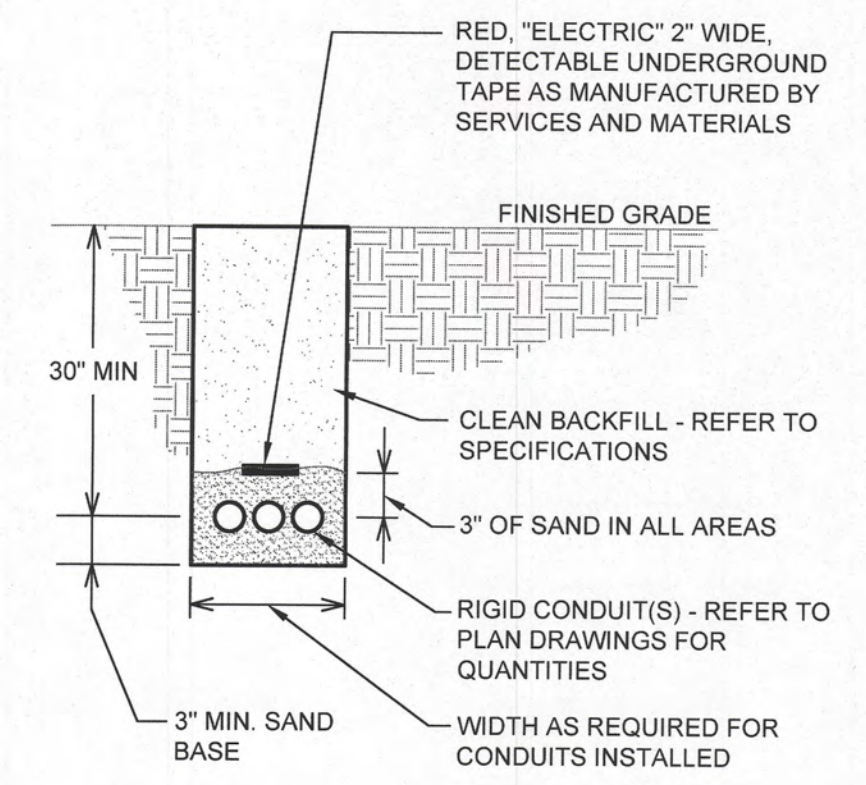
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								CHECKED BY: TAR DATE: 8/18/2021	SCALE: 1"=40'
									11 OF 11 SHEETS

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1 OUTLET DETAIL
SCALE: NONE



2 TYPICAL CONDUIT TRENCH DETAIL
SCALE: NONE

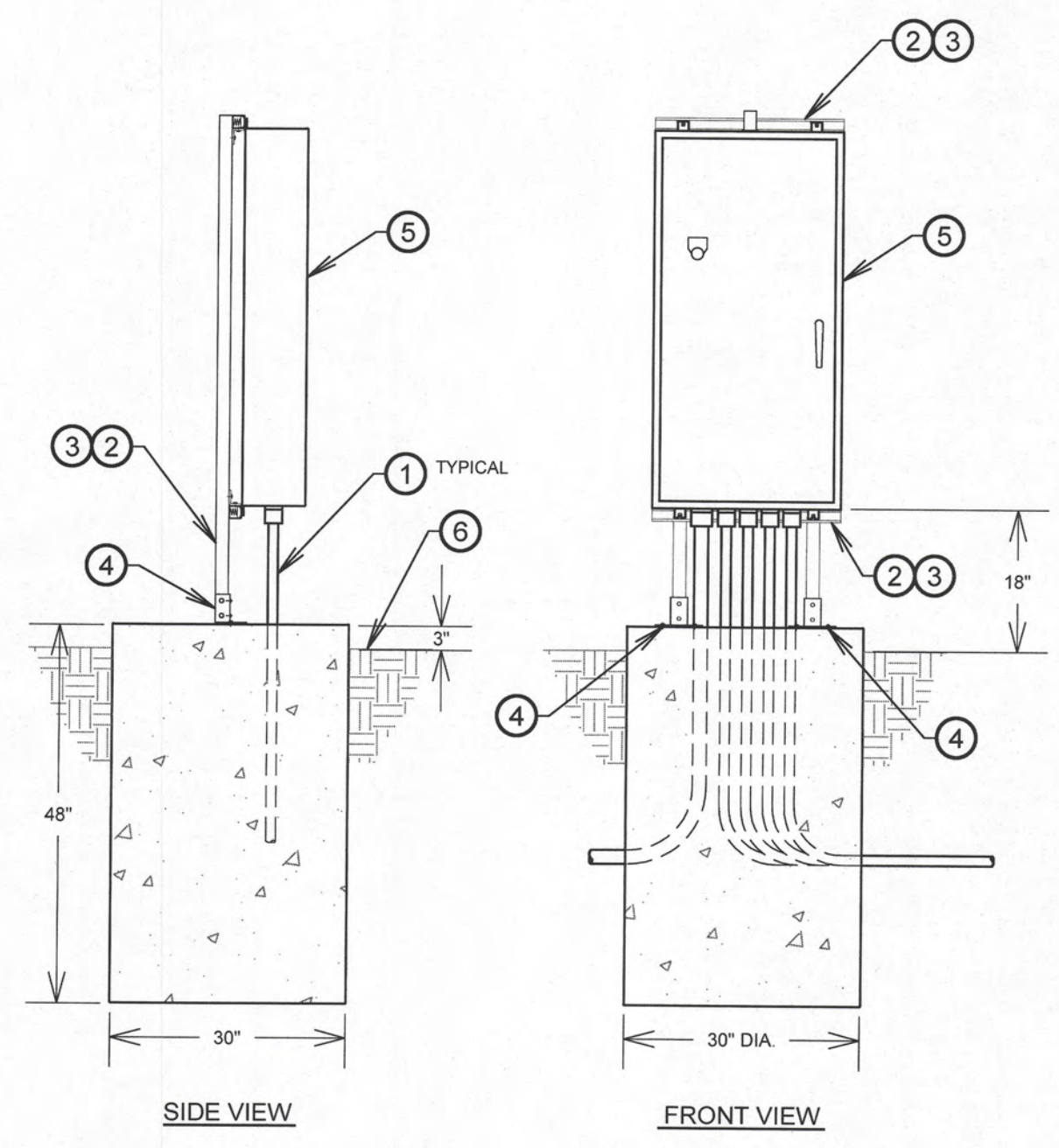
SYMBOL LIST	
	DUPLEX CONVENIENCE RECEPTACLE
	GFCI RECEPTACLE
	JUNCTION BOX
	PANELBOARD
	X DENOTES GROUND WIRE
	CONDUIT STUB UP
	CONDUIT STUB DOWN
	PHOTO CELL
	SINGLE POLE SWITCH

ABBREVIATIONS	
1P	ONE POLE
2P	TWO POLE
3P	THREE POLE
4P	FOUR POLE
1P1W	ONE POLE ONE WIRE
1P2W	ONE POLE TWO WIRE
2P2W	TWO POLE TWO WIRE
2P3W	TWO POLE THREE WIRE
3P3W	THREE POLE THREE WIRE
3P4W	THREE POLE FOUR WIRE
A	AMPERE
AC	ALTERNATING CURRENT
AFF	ABOVE FINISHED FLOOR
AIC	AMPERE INTERRUPTING CAPACITY
C	CONDUIT (GENERIC FOR RACEWAY)
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CU	COPPER
FLA	FULL LOAD AMPS
G	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HZ	HERTZ (CYCLE PER SEC)
KCMIL	THOUSAND CIRCULAR MILS
KVA	KILOVOLT AMPERE
KW	KILOWATT
MLO	MAIN LUGS ONLY
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
#	NUMBER
P	POLE
PH	PHASE
V	VOLT
W	WIRE
W/	WITH
WP	WEATHERPROOF

GENERAL WIRING NOTES:
12 WIRE SHALL BE THE MINIMUM SIZE WIRE.

20 AMP, 120 VOLT, SINGLE PHASE CIRCUITS SHALL BE SIZED AS FOLLOWS:
BRANCH CIRCUITS LESS THAN 75 FEET SHALL BE A MINIMUM OF # 12 WIRE.
BRANCH CIRCUITS GREATER THAN 75 FEET SHALL BE A MINIMUM OF # 10 WIRE.
BRANCH CIRCUITS GREATER THAN 125 FEET SHALL BE A MINIMUM OF # 8 WIRE.
BRANCH CIRCUITS GREATER THAN 175 FEET SHALL BE A MINIMUM OF # 6 WIRE.

OTHER BRANCH CIRCUITS AND FEEDERS:
OTHER BRANCH CIRCUITS, FEEDERS AND VOLTAGE COMBINATIONS, SHALL BE SIZED TO COMPLY WITH THE NATIONAL ELECTRICAL CODE AND AS INDICATED ON THE DRAWINGS.



2 CONTROL PANEL MOUNTING DETAIL
SCALE: NONE

DRAWING NOTES

- 1 ALL ABOVE GROUND CONDUIT TO BE GALVANIZED RIGID STEEL.
- 2 UNISTRUT STRUCTURE WITH FLOOR POST BASE, CONNECTORS, BOLTS, NUTS, ANGLE FITTINGS, WASHERS AND ALL MISCELLANEOUS HARDWARE AS REQUIRED. UNISTRUT TO BE GALVANIZED. UNISTRUT TO BE # P1000 SERIES GALVANIZED. ALL CUT EDGES OF UNISTRUT SHALL BE PAINTED WITH GALVANIZING REPAIR PAINT.
- 3 INSTALL P2859-10-GY FRAME CAPS ON END OF UNISTRUT.
- 4 POST BASE, UNISTRUT # P2941 GALVANIZED. FASTEN P1000 TO POST BASE WITH TWO BOLTS, LOCK WASHERS AND TWO NUTS MINIMUM. USE TWO EXPANSION BOLTS TO FASTEN EACH POST BASE TO CONCRETE FOUNDATION.
- 5 MUSCO CONTROL PANEL.
- 6 FINISHED GRADE.
- 7 POURED CONCRETE BASE.

ELECTRICAL GENERAL NOTES

- 1 THE CONTRACTOR SHALL VISIT THE SITE & BECOME FULLY ACQUAINTED WITH THE EXISTING CONDITIONS AND DIFFICULTY OF THE WORK INVOLVED. FAILURE TO DO SO WILL IN NO WAY RELIEVE THE CONTRACTOR FROM FURNISHING ALL NECESSARY MATERIALS & LABOR FOR A COMPLETE INSTALLATION AT NO ADDITIONAL COST TO THE OWNER.
- 2 DRAWINGS SHOW EXISTING CONDITIONS IN DIAGRAMMATIC FORM. ALL EXISTING SIZES, LOCATIONS AND CONDITIONS ARE TO BE VERIFIED IN THE FIELD. CONTRACTOR IS TO COORDINATE ACTUAL ROUTING OF CONDUIT TO MISS ALL EXISTING PIPING, CONDUIT, DUCTWORK AND STRUCTURE ETC. IN THE FIELD. PROVIDE ALL NECESSARY ADDITIONAL FITTINGS, CONDUIT, LABOR ETC. AS REQUIRED TO COMPLETE THE PROJECT INCLUDING RELOCATION OF EXISTING CONDUIT IF NECESSARY TO INSTALL WORK.
- 3 COORDINATE WITH THE GENERAL CONTRACTOR TO MINIMIZE INTERFERENCE WITH THE OWNER'S USE OF THE FACILITY. THE GENERAL CONTRACTOR MAY REQUIRE WORK INTERRUPTIONS DURING THE DAY AND MAY REQUIRE CERTAIN WORK TO BE PERFORMED ON PREMIUM TIME AT NIGHT OR ON WEEKENDS.
- 4 CIRCUITING TICK MARKS ARE DIAGRAMMATIC AND ARE TO BE USED AS A GUIDE. THE ELECTRICAL CONTRACTORS SHALL INSTALL THE QUANTITY REQUIRED BY THE DEVICES THE CIRCUITS SERVE AND ALSO BASED ON THE ROUTING OF CONDUIT. PROVIDE ADDITIONAL WIRES AS NEEDED BY DEVICES, SWITCHES, SWITCH LEGS, ETC. REFER TO GENERAL WIRING NOTES ON THIS SHEET FOR ADDITIONAL INFORMATION.
- 5 ALL EXCAVATIONS MUST BE FREE OF WATER, LOOSE SOIL AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND CONCRETE BACKFILL PLACEMENT. TEMPORARY CASINGS OR DRILLERS SLURRY MAY BE USED TO STABILIZE THE EXCAVATION DURING INSTALLATION. CASINGS MUST BE REMOVED DURING CONCRETE BACKFILL PLACEMENT. CONCRETE BACKFILL MUST BE PLACED WITH A TREMIE WHEN SLURRY OR WATER IS PRESENT WITHIN THE EXCAVATION OR WHEN THE FREE DROP EXCEEDS 6'-0\"/>
- 6 FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0\"/>
- 7 POLES, FIXTURES, PRECAST BASES, ELECTRICAL ITEMS AND INSTALLATION PER MUSCO LIGHTING.

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SYMBOLS, DETAILS AND ONE-LINE DIAGRAM

**CLPD VETERANS ACRES TENNIS COURTS
CRYSTAL LAKE PARK DISTRICT
CRYSTAL LAKE, ILLINOIS**

NO.		BY		DATE		REVISION		NO.		BY		DATE		REVISION	
FILE: E1.dwg		DRAWN BY: GV		DATE: 08.19.21		GHA PROJECT #		4129.220		SHEET NUMBER:		E1		OF 4E SHEETS	
CHECKED BY: CAE		DATE: 08.19.21		SCALE:		1"=20'									

LIGHT FIXTURE SCHEDULE

CALLOUT	SYMBOL	LAMP	DESCRIPTION	BALLAST	MOUNTING	MODEL	VOLTS	NOTE 1
T1		(2) LED, 5700K, 65600 & 46500 LUMENS EACH	MINIMUM SPILL SPORTS LIGHT FIXTURE, 40' POLE, VISOR, DIE CAST HOUSING	ELECTRONIC	POLE BASE, REFER TO MUSCO FOUNDATION SCHEDULE.	MUSCO # TLC-LED-400 & TLC-LED-600, 2 FIXTURES, WITH PRE-CAST BASE, GALVANIZED STEEL POLE, CONTROL LINK CONTROL, AND MONITORING.	208V 2P 2W	SEE NOTE #1.
T2		(2) LED, 5700K, 65600 & 46500 LUMENS EACH	MINIMUM SPILL SPORTS LIGHT FIXTURE, 40' POLE, VISOR, DIE CAST HOUSING	ELECTRONIC	POLE BASE, REFER TO MUSCO FOUNDATION SCHEDULE.	MUSCO # TLC-LED-400 & TLC-LED-600, 2 FIXTURES, WITH PRE-CAST BASE, GALVANIZED STEEL POLE, CONTROL LINK CONTROL, AND MONITORING.	208V 2P 2W	SEE NOTE #1.
T3		(2) LED, 5700K, 65600 & 46500 LUMENS EACH	MINIMUM SPILL SPORTS LIGHT FIXTURE, 40' POLE, VISOR, DIE CAST HOUSING	ELECTRONIC	POLE BASE, REFER TO MUSCO FOUNDATION SCHEDULE.	MUSCO # TLC-LED-400 & TLC-LED-600, 2 FIXTURES, WITH PRE-CAST BASE, GALVANIZED STEEL POLE, CONTROL LINK CONTROL, AND MONITORING.	208V 2P 2W	SEE NOTE #1.
T4		(2) LED, 5700K, 65600 & 46500 LUMENS EACH	MINIMUM SPILL SPORTS LIGHT FIXTURE, 40' POLE, VISOR, DIE CAST HOUSING	ELECTRONIC	POLE BASE, REFER TO MUSCO FOUNDATION SCHEDULE.	MUSCO # TLC-LED-400 & TLC-LED-600, 2 FIXTURES, WITH PRE-CAST BASE, GALVANIZED STEEL POLE, CONTROL LINK CONTROL, AND MONITORING.	208V 2P 2W	SEE NOTE #1.

NOTE:
1. REFER TO MUSCO LIGHTING POLE AND FOUNDATION DRAWING.

POLE FOUNDATION ELEVATION
SCALE: NOT TO SCALE

SOIL BACKFILL NOTE:
THE TOP TWO FEET OF ANNULUS SHALL BE BACKFILLED WITH SOIL WITH A CLASSIFICATION OF CLASS 5 (TABLE 1806.2) OR BETTER. COMPACTION, 95% FOR COHESIVE SOIL AND 98% FOR A COHESIONLESS SOIL BASED UPON STANDARD PROCTOR TESTING (ASTM D698).

POLE DESIGNATION	FORCES (1)			DRILLED PIER			
	MOMENT (M) FT-LBS	SHEAR (V) LBS	VERTICAL (P) LBS	DIAMETER INCHES	EMBEDMENT DEPTH	SUSPENSION "Y" (2)	CONCRETE BACKFILL YD ³ (3)
T1 - T4	12,372	486	481	30	10'-0"	2'-0"	1.4

1. ASD LOAD COMBINATION D + 0.6W.
VERTICAL FORCE IS WEIGHT OF DRESSED POLE (DOES NOT INCLUDE PRECAST BASE WEIGHT)

2. SUSPEND PRECAST BASE "Y" OFF THE BOTTOM OF THE EXCAVATION DURING MONOLITHIC CONCRETE BACKFILL PLACEMENT AND CURING. NA = NOT APPLICABLE, SUSPENSION NOT REQUIRED.

3. MINIMUM CONCRETE BACKFILL VOLUME, SITE CONDITIONS MAY REQUIRE ADDITIONAL BACKFILL.

DESIGN NOTES

DESIGN PARAMETERS:
WIND: $V_{10} = 115$ MPH; $V_{30} = 89$ MPH (EXPOSURE C, RISK CATEGORY II) PER INTERNATIONAL BUILDING CODE, 2015 EDITION (ASCE 7-10). DESIGN WIND PARAMETERS ARE AS NOTED. ACTUAL EXPOSURE MUST BE VERIFIED FOR THE SITE BY THE PROPER GOVERNING OFFICIAL.

GEOTECHNICAL PARAMETERS:
ALLOWABLE END BEARING SOIL PRESSURE: 3,000 PSF
ALLOWABLE LATERAL SOIL BEARING PRESSURE:
(1) PSF/FT (GRADE TO -4'-0"); 260 PSF/FT (-4'-0" TO -6'-6"); 271 PSF/FT (BELOW -6'-6") IN ACCORDANCE WITH THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE, CHAPTER 16.

DESIGN SOIL PARAMETERS ARE AS NOTED. ACTUAL ALLOWABLE SOIL PARAMETERS MUST BE VERIFIED ON SITE. REFERENCE SOILS AND FOUNDATION REPORT, NO. 26001, PREPARED BY SOIL AND MATERIALS CONSULTANTS, INC., ARLINGTON HEIGHTS, IL.

A GEOTECHNICAL ENGINEER OR REPRESENTATIVE OF IS RECOMMENDED (NOT REQUIRED) TO BE AVAILABLE AT THE TIME OF THE FOUNDATION INSTALLATION TO VERIFY THE SOIL DESIGN PARAMETERS AND TO PROVIDE ASSISTANCE IF ANY PROBLEMS ARISE IN FOUNDATION INSTALLATION.

ENCOUNTERING SOIL FORMATIONS THAT WILL REQUIRE SPECIAL DESIGN CONSIDERATIONS OR EXCAVATION PROCEDURES MAY OCCUR. POLE FOUNDATIONS WILL NEED TO BE ANALYZED ACCORDING TO THE SOIL CONDITIONS THAT EXIST. IF ANY DISCREPANCIES OR INCONSISTENCIES ARISE, NOTIFY THE ENGINEER OF SUCH DISCREPANCIES. FOUNDATIONS WILL THEN BE REVISED ACCORDINGLY. REVISIONS WILL BE ANALYZED PER RECOMMENDATIONS DIRECTED BY A REGISTERED ENGINEER.

ALL EXCAVATIONS MUST BE FREE OF LOOSE SOIL AND DEBRIS PRIOR TO FOUNDATION INSTALLATION AND CONCRETE BACKFILL PLACEMENT. TEMPORARY CASINGS OR DRILLERS SLURRY MAY BE USED TO STABILIZE THE EXCAVATION DURING INSTALLATION. CASINGS MUST BE REMOVED DURING CONCRETE BACKFILL PLACEMENT. CONCRETE BACKFILL MUST BE PLACED WITH A TREMIE WHEN SLURRY OR WATER IS PRESENT WITHIN THE EXCAVATION OR WHEN THE FREE DROP EXCEEDS 6'-0".

CONTRACTOR MUST BE FAMILIAR WITH THE COMPLETE SOIL INVESTIGATION REPORT AND BORINGS, AND CONTACT THE GEOTECHNICAL FIRM (IF NECESSARY) TO UNDERSTAND THE SOIL CONDITIONS AND THE POSSIBILITY OF GROUND WATER PUMPING AND EXCAVATION STABILIZATION OR BRACING DURING PRECAST BASE INSTALLATION AND PLACEMENT OF CONCRETE BACKFILL.

CONCRETE:
CONCRETE SHALL BE AIR-ENTRAINED AND HAVE A MINIMUM COMPRESSIVE DESIGN STRENGTH AT 28 DAYS OF 3,000 PSI. 3,000 PSI CONCRETE SPECIFIED FOR EARLY POLE ERECTION. ACTUAL REQUIRED MINIMUM ALLOWABLE CONCRETE STRENGTH IS 1,000 PSI. ALL PIERS AND CONCRETE BACKFILL MUST BEAR ON AND AGAINST FIRM UNDISTURBED SOIL.

GENERAL NOTES:
FIXTURES MUST BE LOCATED TO MAINTAIN 10'-0" MINIMUM HORIZONTAL CLEARANCE FROM ANY OBSTRUCTION. ENGINEER MUST BE NOTIFIED IF FOUNDATIONS ARE NEAR ANY RETAINING WALLS OR WITHIN / NEAR ANY SLOPES STEEPER THAN 3H : 1V. POLES, FIXTURES, PRECAST BASES, ELECTRICAL ITEMS AND INSTALLATION PER MUSCO LIGHTING.

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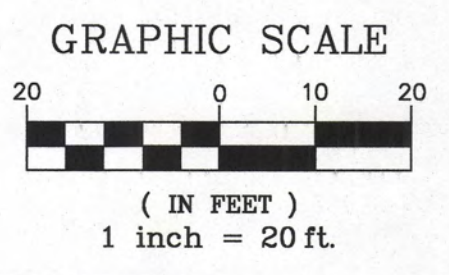
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SCHEDULES & POLE FOUNDATIONS
CLPD VETERANS ACRES TENNIS COURTS
CRYSTAL LAKE PARK DISTRICT
CRYSTAL LAKE, ILLINOIS

FILE: E2.dwg	SHEET NUMBER:
DRAWN BY: GV, DN	GHA PROJECT #
DATE: 08.19.21	4129.220
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DATE: 08.19.21	AS NOTED
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OF 4E SHEETS

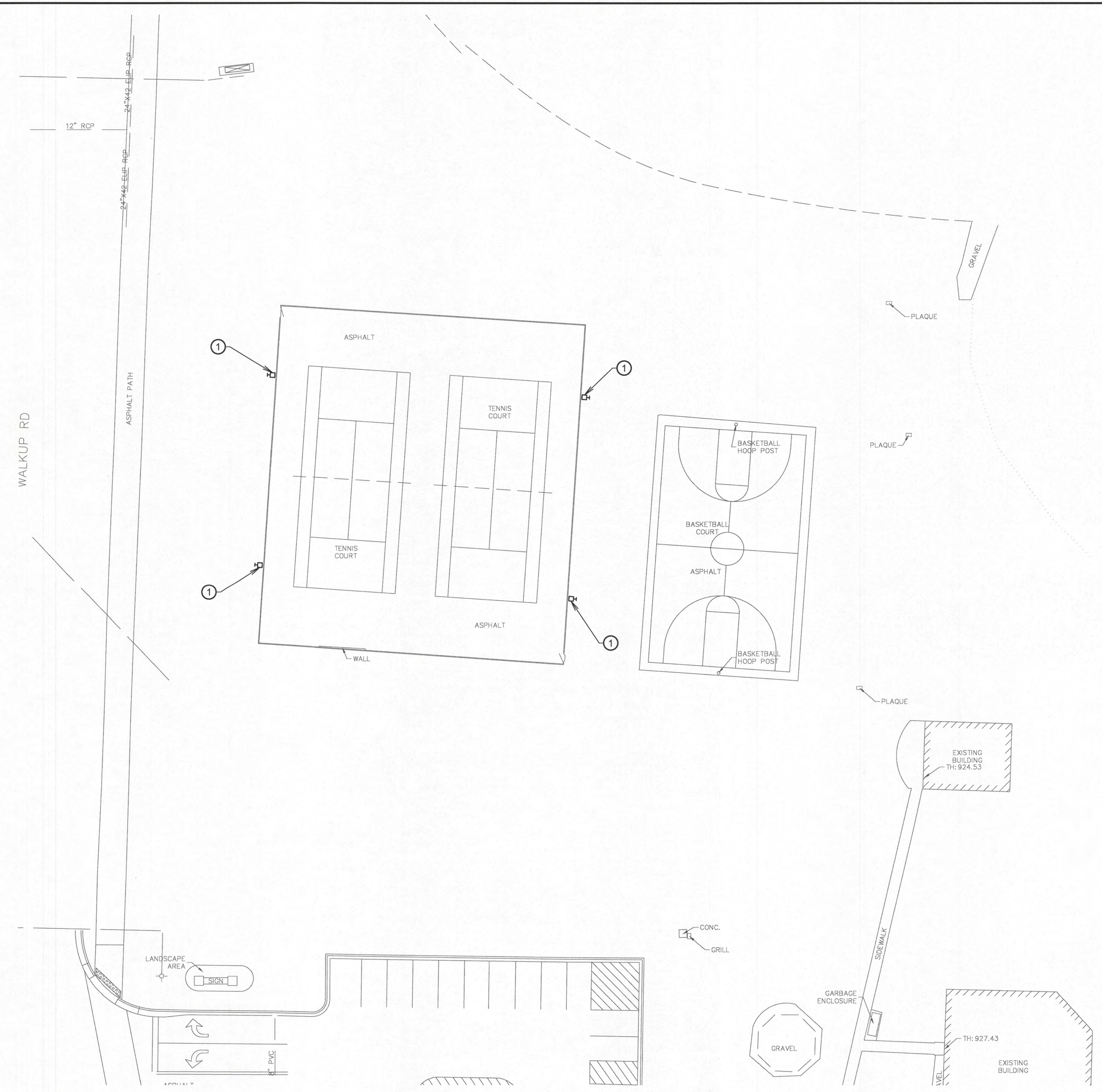


GENERAL DEMOLITION NOTES

- ① FOR THE PURPOSE OF CLARIFICATION SOME OF THE REQUIRED DEMOLITION WORK HAS BEEN SHOWN ON THIS SHEET. THE WORK SHOWN ON THIS SHEET IS NOT THE ENTIRE EXTENT OF DEMOLITION AND SHOULD BE USED IN CONJUNCTION WITH THE OTHER DRAWINGS INCLUDING OTHER TRADES AND FIELD VERIFICATION TO DETERMINE THE ACTUAL SCOPE OF DEMOLITION.
- ② MAINTAIN AND RESTORE, IF INTERRUPTED, ALL CONDUITS AND FEEDERS PASSING THRU RENOVATED AREAS AND SERVICING UNDISTURBED AREAS. THE EXACT METHOD OF RE-ROUTING NEW CONDUIT AND WIRE TO EQUIPMENT REMAINING SHALL BE COORDINATED WITH WORK OF OTHER TRADES PRIOR TO ANY INSTALLATION.
- ③ MAINTAIN AND RESTORE, IF INTERRUPTED, ALL LOW VOLTAGE CABLING, FIRE ALARM CABLING, BRANCH CIRCUITS AND ASSOCIATED RACEWAY SYSTEMS PASSING THRU RENOVATED AREAS AND SERVICING UNDISTURBED AREAS. THE EXACT METHOD OF RE-ROUTING NEW RACEWAYS AND CABLE TO EQUIPMENT REMAINING SHALL BE COORDINATED WITH WORK OF OTHER TRADES PRIOR TO ANY INSTALLATION.
- ④ ALL ELECTRICAL EQUIPMENT BEING REMOVED OR RELOCATED BY DEMOLITION SHALL BE ELECTRICALLY DISCONNECTED BACK AT PANELBOARD WHICH SERVICED THE EQUIPMENT. REMOVE AND DISPOSE OF EQUIPMENT (OR RELOCATE IF NOTED) UNLESS NOTED OTHERWISE. AFTER TESTING TO DETERMINE THAT ELECTRICITY HAS BEEN TURNED OFF.
- ⑤ LEGALLY DISPOSE OF ALL LIGHT FIXTURES, LAMPS AND BALLASTS BEING REMOVED. THIS CONTRACTOR SHALL VERIFY THE EXISTENCE OF PCB'S, DEHP'S, MERCURY AND OTHER HAZARDOUS MATERIALS AND DISPOSE OR RECYCLE OF THEM PER THE ILLINOIS EPA AND THE FEDERAL GOVERNMENT.
- ⑥ THIS CONTRACTOR SHALL PROVIDE TEMPORARY LIGHTING AND POWER DURING AND AFTER DEMOLITION AND DURING CONSTRUCTION. TEMPORARY SERVICES SHALL BE TAKEN FROM EXISTING PANELBOARDS AND EXISTING EQUIPMENT MAY BE UTILIZED WHERE FEASIBLE. COORDINATE TEMPORARY SERVICES WITH OWNER TO VERIFY THAT SERVICES WILL NOT ADVERSELY AFFECT EMERGENCY OR STANDBY POWER SYSTEMS.
- ⑦ RE-ROUTE EXISTING CONDUIT AND WIRE INTERFERING WITH THE NEW WORK. RE-ROUTED CONDUIT AND WIRE SHALL BE CONCEALED IN THE NEW CONSTRUCTION, UNLESS NOTED OTHERWISE.
- ⑧ EXISTING ELECTRICAL EQUIPMENT REQUIRED TO BE REMOVED AND/OR RELOCATED, BUT NOT SHOWN ON THE DRAWINGS, SHALL BE INCLUDED IN THE SCOPE OF WORK.
- ⑨ VISIT AND EXAMINE THE BUILDING ELECTRICAL SYSTEMS AND EXISTING CONSTRUCTION SO AS TO BECOME FAMILIAR WITH EXISTING CONDITIONS AND DIFFICULTIES THAT WILL BE ENCOUNTERED AS PART OF THE PROJECT, BEFORE SUBMITTING PROPOSALS. SUBMISSIONS OF PROPOSAL WILL BE EVIDENCE THAT SUCH EXAMINATION HAS BEEN MADE AND LATER CLAIMS FOR LABOR, EQUIPMENT OR MATERIALS WILL NOT BE RECOGNIZED.
- ⑩ ALL CONDUIT AND WIRE REMOVED, SHALL BE REMOVED COMPLETELY BACK TO THE SOURCE, AND THE BRANCH OVER CURRENT DEVICE PROPERLY LABELED SPARE.
- ⑪ SHUTDOWN OF ANY SERVICE TO EQUIPMENT REMAINING SHALL ONLY BE FOR THE TIME AGREED UPON BY THE OWNER'S REPRESENTATIVE. ALL SHUTDOWNS AGREEMENTS SHALL BE IN WRITING WITH COPIES TO THE OWNER, GENERAL CONTRACTOR AND CONSULTANTS.

SHEET NOTES

- ① EXISTING LIGHT FIXTURE TO BE DISCONNECTED AND REMOVED. REMOVE ASSOCIATED CONCRETE FOUNDATION, CONDUIT AND WIRING.



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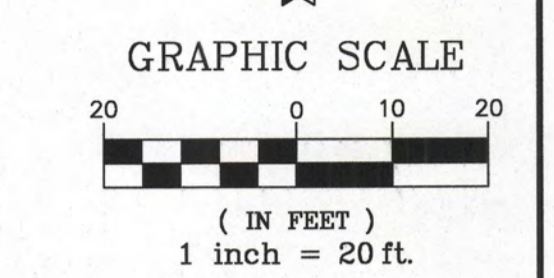
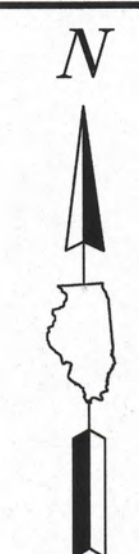
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ELECTRICAL DEMOLITION SITE PLAN
CLPD VETERANS ACRES TENNIS COURTS
CRYSTAL LAKE PARK DISTRICT
CRYSTAL LAKE, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: E3.dwg	SHEET NUMBER: E3
DRAWN BY: GY DATE: 08.19.21	GHA PROJECT # 4129.220
CHECKED BY: CAE DATE: 08.19.21	SCALE: 1"=20'
OF 4E SHEETS	

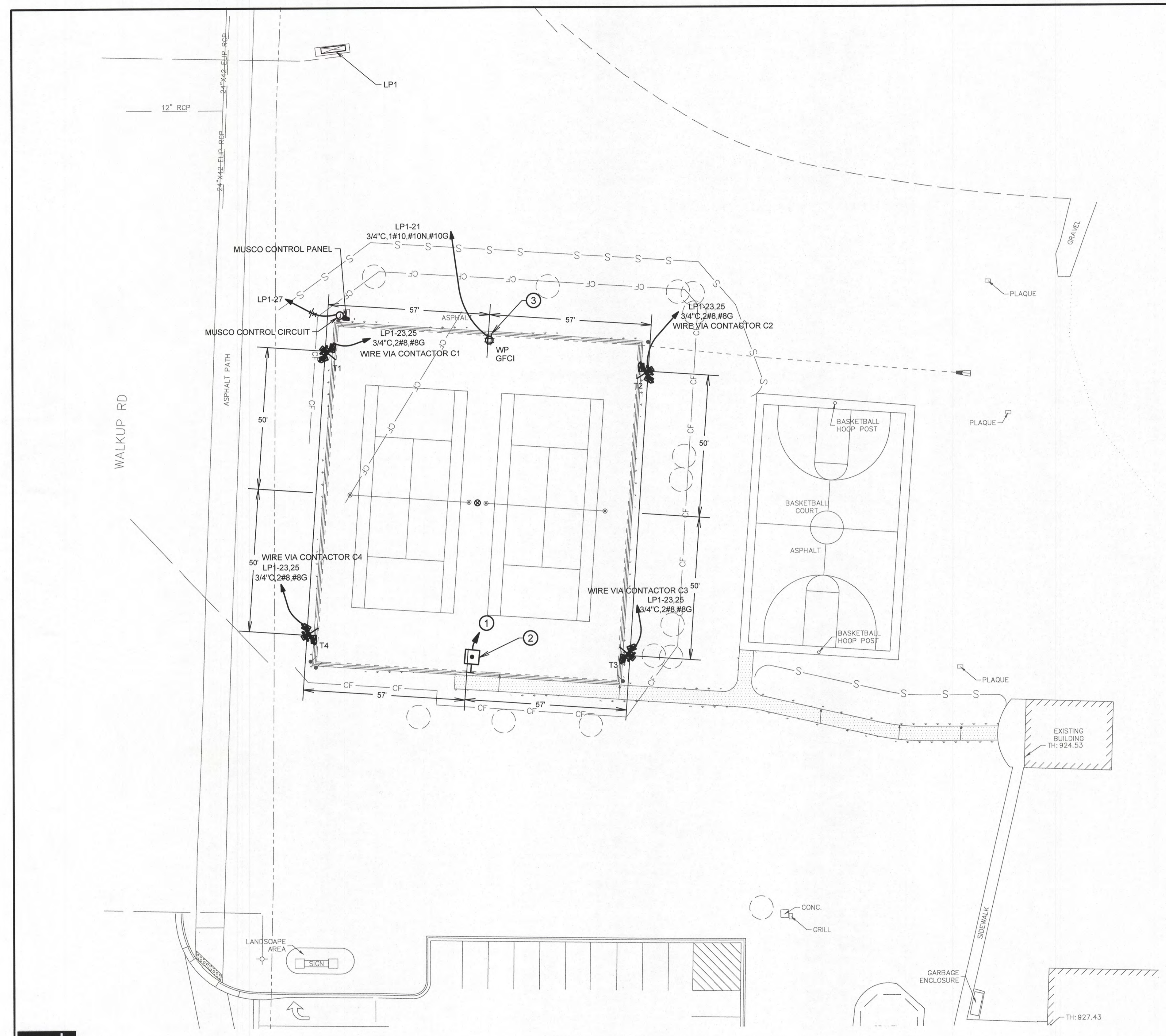


GENERAL SITE PLAN NOTES

- ① VERIFY EXACT LOCATIONS OF ALL OUTDOOR LIGHTING STANDARDS WITH GENERAL CONTRACTOR.
- ② COORDINATE EXACT ROUTING OF OUTDOOR LIGHTING BRANCH CIRCUITS AND POWER BRANCH CIRCUITS WITH GENERAL CONTRACTOR.
- ③ COORDINATE SITE WORK OF OTHER TRADES AND REVIEW CIVIL UTILITY PLANS FOR LOCATIONS OF EXISTING UTILITIES.
- ④ CUTTING AND/OR DAMAGE TO EXISTING UTILITIES CAUSED BY THE INSTALLATION OF THE WORK, SHALL BE REPAIRED BY THIS CONTRACTOR AT NO ADDITIONAL EXPENSE.
- ⑤ INCLUDE WORK TO LOCATE AND MARK EXISTING UNDERGROUND UTILITIES WHERE UNDERGROUND WORK IS INDICATED, PRIOR TO ANY CONSTRUCTION. CALL J.U.L.I.E. AT 1-800-892-0123 FOR LOCATING PUBLIC UTILITIES.
- ⑥ COORDINATE THE EXACT ROUTING OF COMED PRIMARY AND LOCATION OF COMED TRANSFORMERS WITH COMED REPRESENTATIVE AND GENERAL CONTRACTOR.
- ⑦ COORDINATE EXACT ROUTING OF SECONDARY SERVICE WITH GENERAL CONTRACTOR.
- ⑧ COORDINATE THE EXACT ROUTING OF COMMUNICATION CONDUITS WITH TELEPHONE SERVICE PROVIDER AND GENERAL CONTRACTOR.
- ⑨ INCLUDE WORK TO LOCATE AND MARK EXISTING UNDERGROUND ELECTRICAL, BRANCH CIRCUITS, COMMUNICATION SYSTEMS, AND SITE UTILITIES WHERE UNDERGROUND WORK IS INDICATED, PRIOR TO ANY CONSTRUCTION.
- ⑩ CUTTING AND/OR DAMAGE TO EXISTING BRANCH CIRCUITS, ELECTRICAL, COMMUNICATION SYSTEMS, WATER, SEWER, GAS UTILITIES, AND LOW VOLTAGE SYSTEMS CAUSED BY THE TRENCHING, CUTTING AND INSTALLATION OF THE WORK, SHALL BE REPAIRED BY THIS CONTRACTOR AT NO ADDITIONAL EXPENSE.

SHEET NOTES

- ① 1" C. AND CONTROL WIRES TO MUSCO PANEL, INSTALL CONTROL WIRES PER MUSCO.
- ② INSTALL ON FENCE POST NORTH OF THE GATE.
- ③ INSTALL RECEPTACLE CENTERED BETWEEN COURTS AND IN FRONT OF NEAREST FENCE POST, REFER TO DETAIL # 3 ON SHEET E1.
- ④ INSTALL NEW CIRCUIT BREAKERS IN PANEL FOR NEW WORK.



LP1											
ROOM		VOLTS 208Y/120V 3P 4W				AIC 22,000					
MOUNTING SURFACE		BUS AMPS 400				MAIN BKR 400					
FED FROM UTILITY		NEUTRAL 100%				LUGS STANDARD					
NOTE											
CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD			CKT #	CKT BKR	CIRCUIT DESCRIPTION	KVA LOAD		
1	60/2	SPARE	0	0	0	2	20/1	SPARE	0	0	0
3			0	0	0	4	20/1	SPARE	0	0	0
5	100/2	LEFT FIELD	0	0	0	6	20/1	SPARE	0	0	0
7			0	0	0	8	20/1	SPARE	0	0	0
9	100/2	RIGHT FIELD	0	0	0	10	20/1	SPARE	0	0	0
11			0	0	0	12	20/1	SPARE	0	0	0
13	100/3	BATHROOM PANEL	0	0	0	14	20/1	SPARE	0	0	0
15			0	0	0	16	20/1	SPARE	0	0	0
17			0	0	0	18	20/1	SPARE	0	0	0
19	15/1	TC CONTROL CIRCUIT	0	0	0	20	20/1	SPARE	0	0	0
21	20/1	RECEPTACLE	0	0	0.36	22	20/1	SPARE	0	0	0
23	30/2	LIGHTING	1.96	0	1.96	24	20/1	SPARE	0	0	0
25			0	0	0	26	20/1	SPARE	0	0	0
27	20/1	MUSCO CONTROL CIRCUIT J.BOX	0	0	0	28	20/1	SPARE	0	0	0
29	20/1	SPACE	0	0	0	30	20/1	SPARE	0	0	0
31	20/1	SPACE	0	0	0	32	20/1	SPARE	0	0	0
33	20/1	SPACE	0	0	0	34	20/1	SPACE	0	0	0
35	20/1	SPACE	0	0	0	36	20/1	SPACE	0	0	0
37	20/1	SPACE	0	0	0	38	20/1	SPACE	0	0	0
39	20/1	SPACE	0	0	0	40	20/1	SPACE	0	0	0
41	20/1	SPACE	0	0	0	42	20/1	SPACE	0	0	0
TOTAL CONNECTED KVA BY PHASE									1.96	0.36	1.96
			CONN KVA		CALC KVA		CALC KVA				
LIGHTING			3.92	4.9	(125%)	TOTAL LOAD			5.26		
RECEPTACLES			0.36	0.36	(50%>10)	BALANCED 3-PHASE LOAD			14.6 A		

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 plumbing 847-352-4815 Fax
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ELECTRICAL SITE PLAN
CLPD VETERANS ACRES TENNIS COURTS
CRYSTAL LAKE PARK DISTRICT
CRYSTAL LAKE, ILLINOIS

NO.	BY	DATE	REVISION	NO.	BY	DATE	REVISION

FILE: E4.dwg
 DRAWN BY: GV, DN
 DATE: 08.19.21
 GHA PROJECT # 4129.220
 CHECKED BY: CAE
 DATE: 08.19.21
 SCALE: 1"=20'
 SHEET NUMBER: **E4**
 OF 4E SHEETS

Veterans Acres Park Tennis

Crystal Lake, IL

Lighting System

Pole / Fixture Summary						
Pole ID	Pole Height	Mtg Height	Fixture Qty	Luminaire Type	Load	Circuit
T1-T4	40'	40'	1	TLC-LED-400	0.40 kW	A
		40'	1	TLC-LED-600	0.58 kW	A
4			8		3.92 kW	

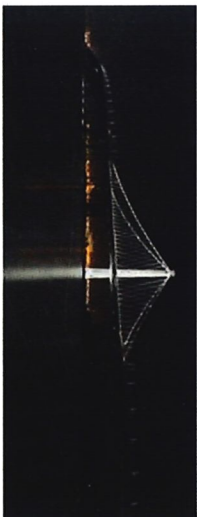
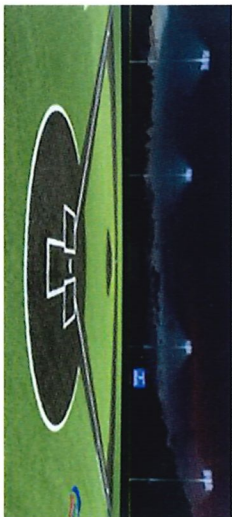
Circuit Summary		
Circuit	Description	Load
A	Tennis	3.92 kW
		Fixture Qty 8

Fixture Type Summary									
Type	Source	Wattage	Lumens	L90	L80	L70	Quantity		
TLC-LED-600	LED 5700K - 75 CRI	580W	65,600	>120,000	>120,000	>120,000	4		
TLC-LED-400	LED 5700K - 75 CRI	400W	46,500	>120,000	>120,000	>120,000	4		

Light Level Summary

Calculation Grid Summary									
Grid Name	Calculation Metric	Ave	Min	Max	Max/Min	Ave/Min	Circuits	Fixture Qty	
Blanket Grid	Horizontal Illuminance	8.32	0	38	127,449.40		A	8	
Highway Spill	Horizontal	0	0	0	0.00		A	8	
Property Line	Horizontal	0.44	0	1.92	0.00		A	8	
Tennis	Horizontal Illuminance	30.9	28	35	1.25	1.10	A	8	

From Hometown to Professional



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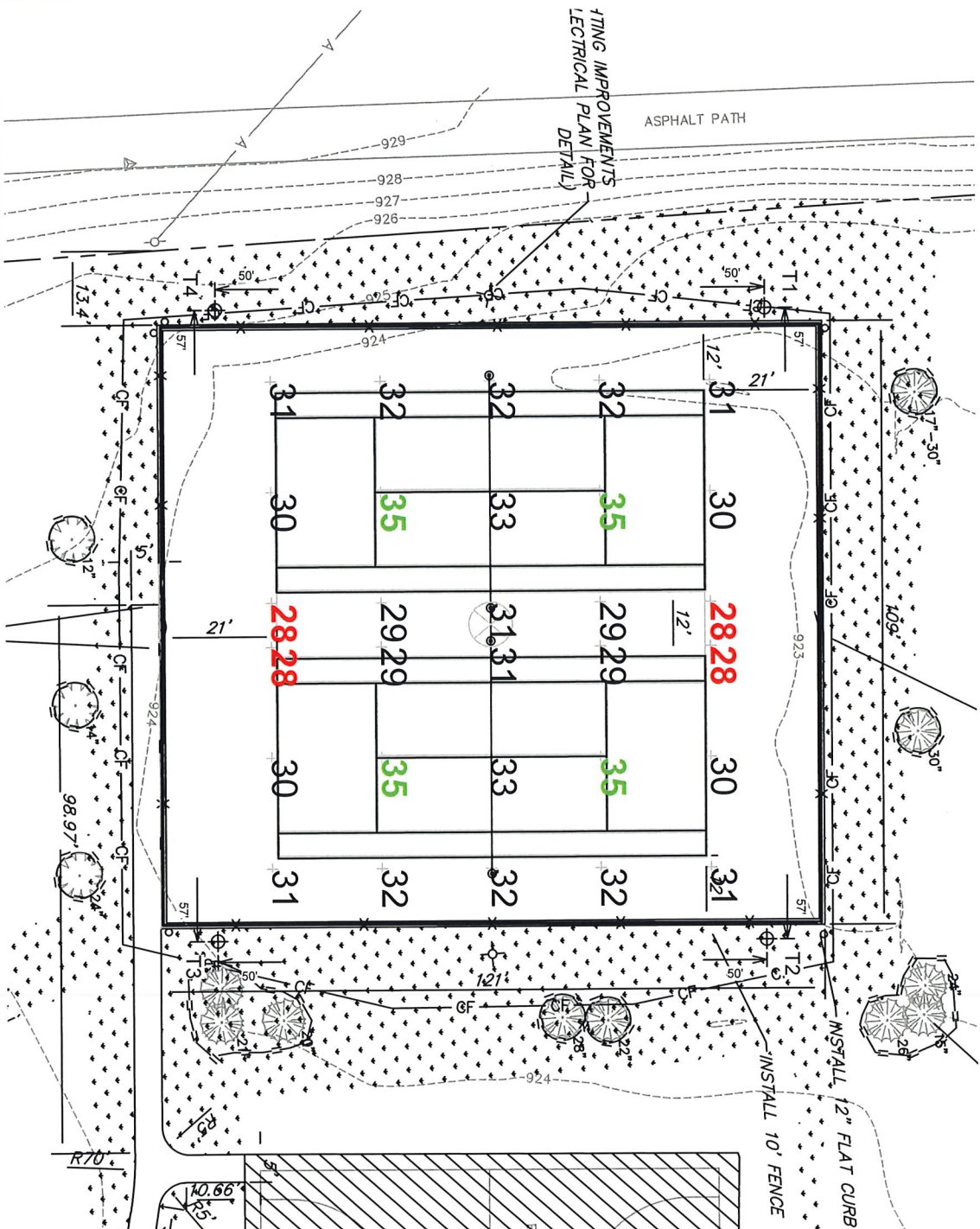
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PROJECT SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	Luminaires			
					LUMINAIRE TYPE	QTY/ POLE	THIS GRID	OTHER GRIDS
4	T1-T4	40'		40'	TLC-LED-400	1	1	0
					TLC-LED-600	1	1	0
TOTALS						8	8	0



Veterans Acres Park Tennis
Crystal Lake, IL

GRID SUMMARY	
Name:	Tennis
Size:	2 Court - 12' Spacing
Spacing:	20.0' x 20.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES	
Entire Grid	
Guaranteed Average:	30
Scan Average:	30.93
Maximum:	35
Minimum:	28
Avg / Min:	1.12
Guaranteed Max / Min:	2.5
Max / Min:	1.25
UG (adjacent pts):	0.00
CU:	0.86
No. of Points:	30
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	8
Total Load:	3.92 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



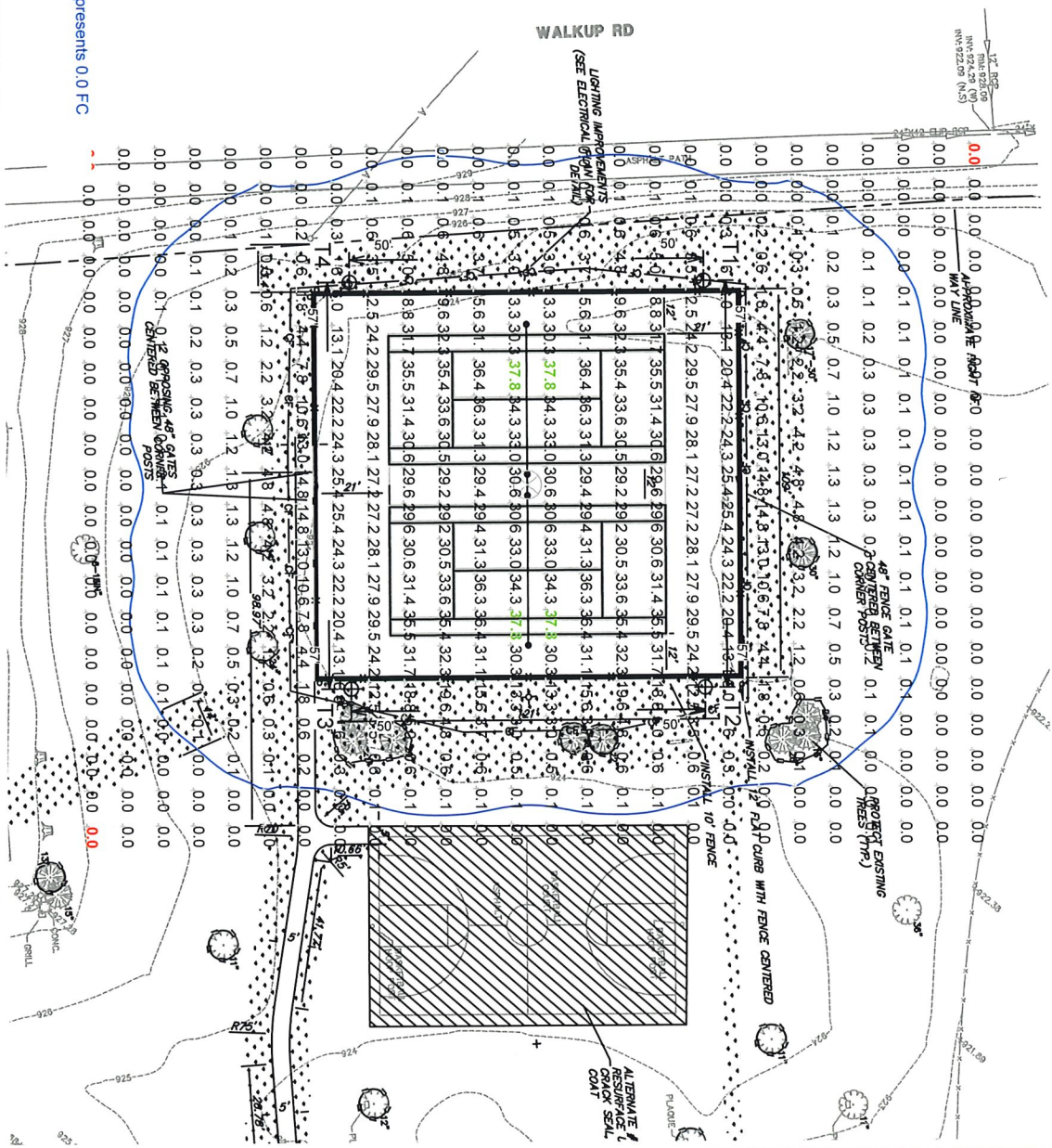
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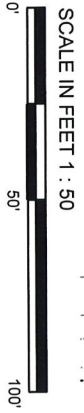
ILLUMINATION SUMMARY

EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY / POLE	THIS GRID	OTHER GRIDS
4	T1-T4	40'		40'	T1C-LED-400 T1C-LED-600	1 1	1 1	0 0
TOTALS						8	8	0



NOTES: The blue line represents 0.0 FFC horizontal.



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Veterans Acres Park Tennis
Crystal Lake, IL

GRID SUMMARY

Name: Blanket Grid
Spacing: 10.0' x 10.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

MAINTAINED HORIZONTAL FOOTCANDLES

Scan Average: 8.32
Maximum: 38
Minimum: 0
Avg / Min: 28050.91
Max / Min: 127449.38
UG (adjacent pts): 14.18
CU: 1.00
No. of Points: 520

LUMINAIRE INFORMATION
Applied Circuits: A
No. of Luminaires: 8
Total Load: 3.92 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document and includes a 0.95 dirt depreciation factor.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



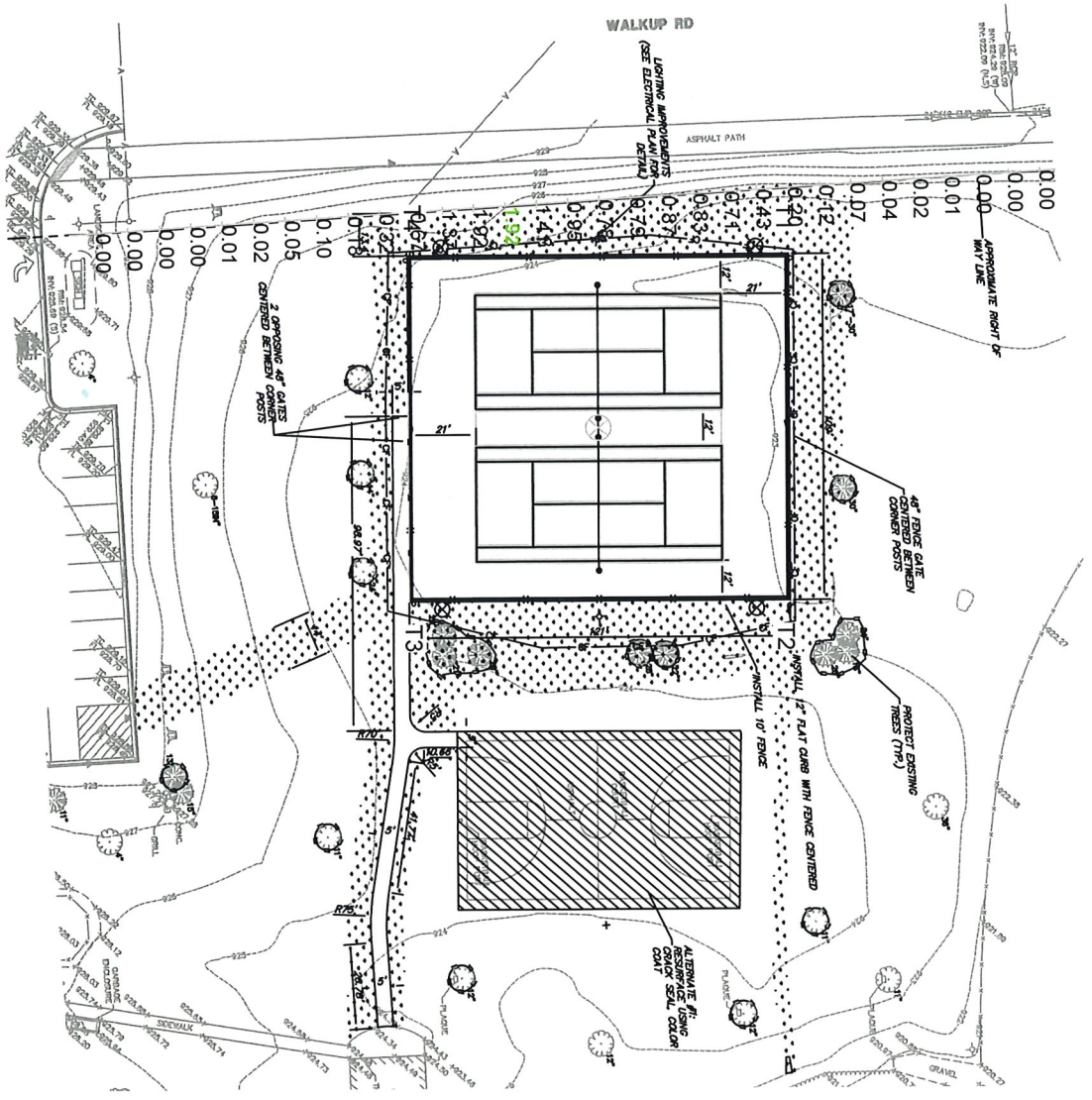
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ILLUMINATION SUMMARY

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EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	Pole SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/ POLE	THIS GRID	OTHER GRIDS
4	T1-14	40'	-	40'	TLC-LED-400	1	1	0
					TLC-LED-600	1	1	0
TOTALS						8	8	0



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Veterans Acres Park Tennis
Crystal Lake, IL

GRID SUMMARY	
Name:	Property Line
Spacing:	10.0'
Height:	3.0' above grade

ILLUMINATION SUMMARY	
HORIZONTAL FOOTCANDLES	
Scan Average:	0.4447
Maximum:	1.92
Minimum:	0.00
No. of Points:	31
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	8
Total Load:	3.92 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume $\pm 3\%$ nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



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ILLUMINATION SUMMARY

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EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	Pole SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	Luminaires		
						QTY / POLE	THIS GRID	OTHER GRIDS
4	T1-T4	40'	-	40'	TLC-LED-400	1	1	0
					TLC-LED-600	1	1	0
TOTALS						8	8	0

Veterans Acres Park Tennis

Crystal Lake, IL

GRID SUMMARY

Name: Highway Spill
Spacing: 30.0'
Height: 3.0' above grade

ILLUMINATION SUMMARY

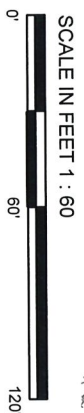
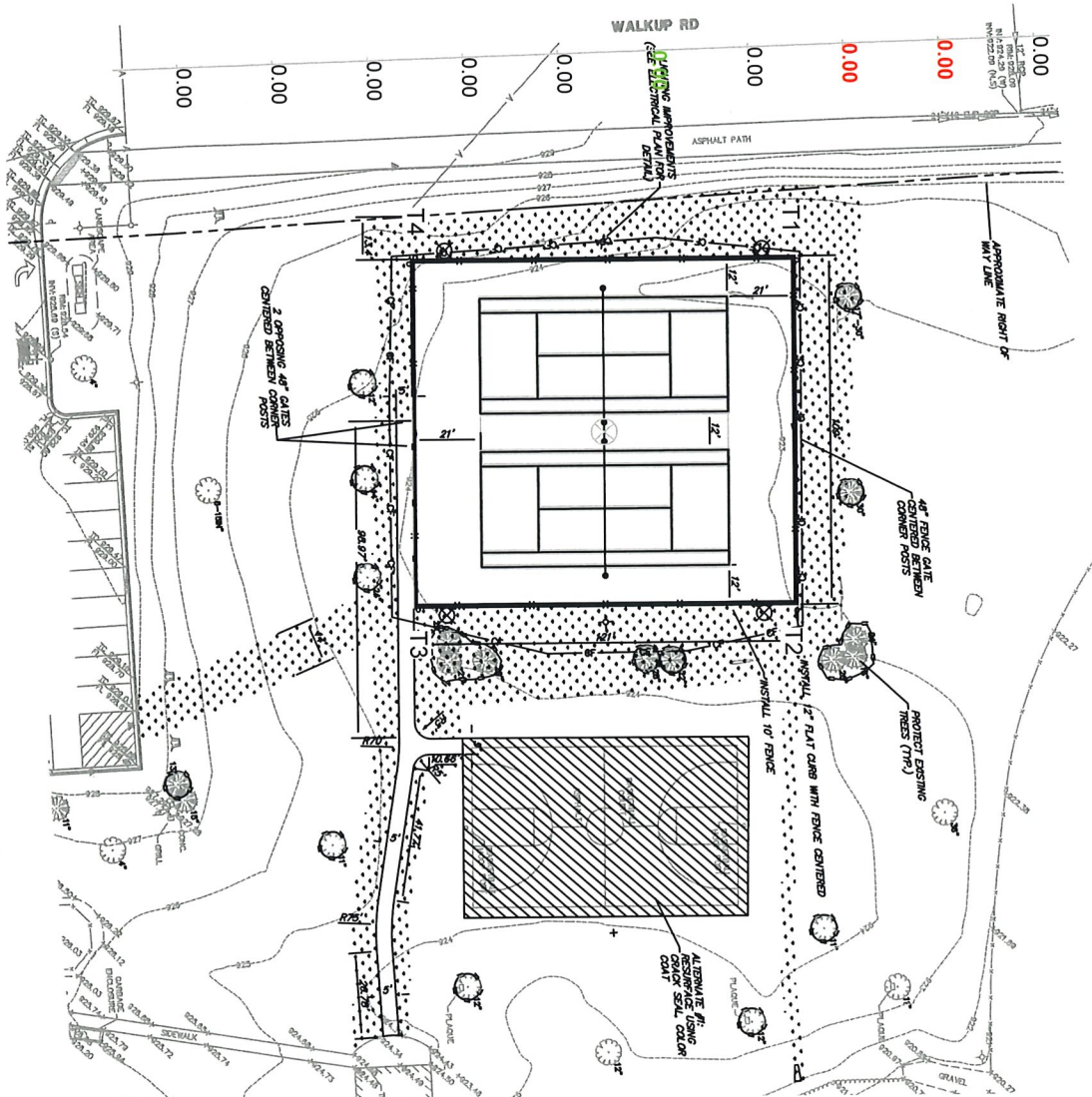
HORIZONTAL FOOTCANDLES	
Entire Grid	0.0001
Scan Average:	0.0001
Maximum:	0.00
Minimum:	0.00
No. of Points:	10
LUMINAIRE INFORMATION	
Applied Circuits:	A
No. of Luminaires:	8
Total Load:	3.92 kW

Guaranteed Performance: The ILLUMINATION described above is guaranteed per your Musco Warranty document.

Field Measurements: Individual field measurements may vary from computer-calculated predictions and should be taken in accordance with IESNA RP-6-15.

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.



Pole location(s) + dimensions are relative to 0.0' reference point(s) ○

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ILLUMINATION SUMMARY

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Veterans Acres Park Tennis

Crystal Lake, IL

EQUIPMENT LAYOUT

INCLUDES:

- Blanket Grid
- Tennis

Electrical System Requirements: Refer to Amperage Draw Chart and/or the "Musco Control System Summary" for electrical sizing.

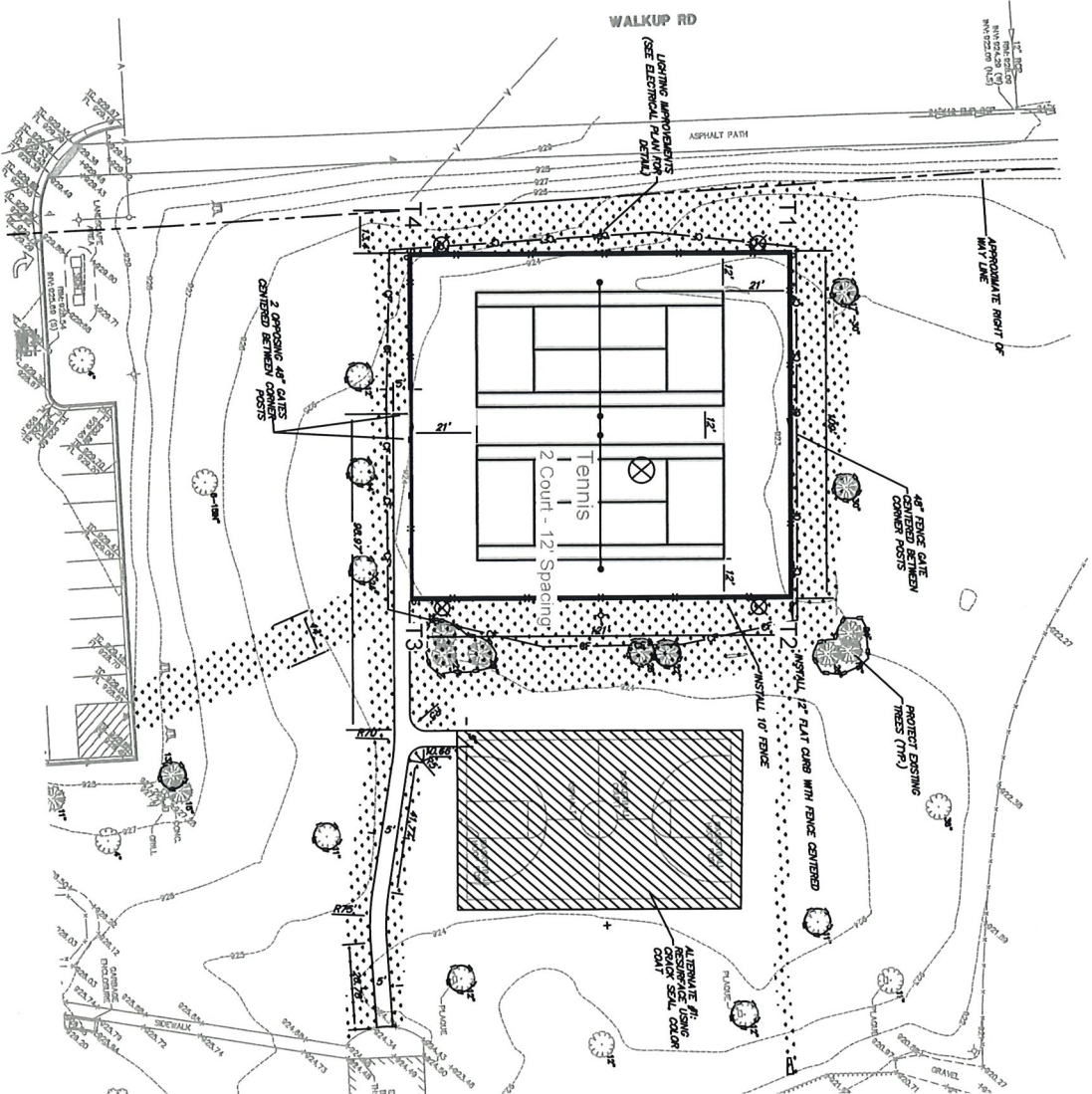
Installation Requirements: Results assume ± 3% nominal voltage at line side of the driver and structures located within 3 feet (1m) of design locations.

EQUIPMENT LIST FOR AREAS SHOWN

QTY	LOCATION	POLE SIZE	GRADE ELEVATION	MOUNTING HEIGHT	LUMINAIRE TYPE	QTY/POLE
4	T1-T4	40'	-	40'	T1C-LED-400 T1C-LED-600	1 1
TOTALS						8

SINGLE LUMINAIRE AMPERAGE DRAW CHART

Ballast Specifications (90 min power factor)	Line Amperage Per Luminaire (max draw)						
Single Phase Voltage	208	220	240	277	347	380	480
T1C-LED-600	(60)	(60)	(60)	(60)	(60)	(60)	(60)
T1C-LED-400	3.4	3.2	3.0	2.6	2.0	1.9	1.5
	2.3	2.2	2.0	1.7	1.4	1.3	1.0



SCALE IN FEET 1 : 60



Pole location(s) + dimensions are relative to 0,0 reference point(s) ○

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EQUIPMENT LAYOUT