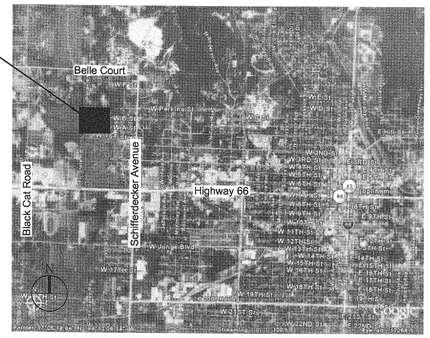
BID SET (PROJECT #20060924)



Joplin Sports Complex - Phase One
City of Joplin, Missouri
Parks and Recreation Department

Construction Documents

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N.I.C. = NOT IN CONTRACT, WITHHELD FROM BID SET

BWR Right In the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department
Joplin Sports Complex - Phase One

PROJECT NO. 20060924
DRAWN BY DATE
CHECKED BY DATE
DESIGNED BY DATE
REVISIONS DATE
ISSUE DATE 7-11-07

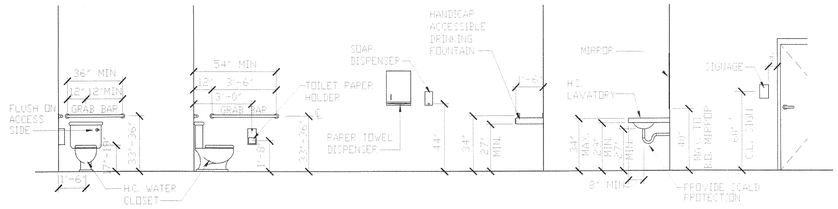
Title Sheet and Drawing Index

T0.0

SHEET 1 OF 74

Drawing Name: C:\Documents and Settings\donsark\My Documents\Project Files\Joplin Sports Center\A0.0.dwg Jul 12,2007 - 10:43am

TYPICAL MOUNTING HEIGHTS FOR HANDICAPPED ACCESSIBLE FIXTURES



CODE SUMMARY (TENNIS PROSHOP BUILDING)

APPLICABLE CODES:

2000 INTERNATIONAL BUILDING CODE
2000 INTERNATIONAL FIRE CODE
2000 INTERNATIONAL MECHANICAL CODE
2000 INTERNATIONAL PLUMBING CODE
2002 NATIONAL ELECTRICAL CODE

PROJECT CODE DATA:

OCCUPANCY GROUP: A-2 / B / M / S-1
NON-SEPARATED USE: A-2 MOST RESTRICTIVE (PER TABLE 503)
TYPE OF CONSTRUCTION: 5-B (PER TABLE 601)

BUILDING AREA:

ALLOWABLE AREA 10,500 SF
(PER TABLE 503 FOR A-2 / 5-B + FRONTAGE INCREASE)
AREA FIRST FLOOR 9,167 SF ACTUAL

BUILDING HEIGHT:

ALLOW HEIGHT (PER TABLE 503 FOR 5-B) 1 STORIES
1 STORY ACTUAL

PLUMBING FIXTURES:

	UNISEX	MEN	WOMEN
WATER CLOSETS	1	2	5
URINALS	0	2	0
LAVATORIES	1	2	2
SHOWERS	1	0	0

DRINKING FOUNTAINS (2 TOTAL) - SERVICE SINKS (1 TOTAL)

FIRE RATINGS: (PER TABLE 601)

STRUCTURAL FRAME	0 HR	0 HR ACTUAL
BEARING WALLS	0 HR	0 HR ACTUAL
NONBEARING WALLS EXTERIOR	0 HR	0 HR ACTUAL
NONBEARING WALLS INTERIOR	0 HR	0 HR ACTUAL
FLOOR CONSTRUCTION	0 HR	0 HR ACTUAL
ROOF CONSTRUCTION	0 HR	0 HR ACTUAL

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXT.
WALLS BASED ON FIRE SEPARATION DISTANCE: (PER TABLE 602)
FIRE SEPARATION DISTANCE = 30'-0" 0 HR 0 HR ACTUAL

MAXIMUM AREA OF EXTERIOR WALL OPENINGS (PER TABLE 704.8)
UNPROTECTED OPENINGS W/ FIRE SEPARATION DIST = 30'-0" NO LIMIT
PROTECTED OPENINGS W/ FIRE SEPARATION DIST = 30'-0" NO LIMIT

EGRESS:

OCCUPANT LOAD (PER TABLE 1003.2.2.2) 165 TOTAL
(Assembly = 1 PER 15 SQ. FT. NET FLOOR AREA)
(Business Areas = 1 PER 100 SQ. FT. GROSS FLOOR AREA)
(Kitchen = 1 PER 200 SQ. FT. GROSS FLOOR AREA)
(Mercantile = 1 PER 30 SQ. FT. GROSS FLOOR AREA)
(Storage / Mechanical = 1 PER 300 SQ. FT. GROSS FLOOR AREA)

EGRESS:

WIDTH REQUIRED (PER TABLE 1003.2.3)	33 IN.	48 IN. ACTUAL
EXITS REQUIRED (PER TABLE 1005.2.1)	2	7 ACTUAL
MAXIMUM TRAVEL DISTANCE (PER TABLE 1004.2.4)	200 FT.	60 FT. ACTUAL

CODE SUMMARY (CONCESSION BUILDING)

APPLICABLE CODES:

2000 INTERNATIONAL BUILDING CODE
2000 INTERNATIONAL FIRE CODE
2000 INTERNATIONAL MECHANICAL CODE
2000 INTERNATIONAL PLUMBING CODE
2002 NATIONAL ELECTRICAL CODE

PROJECT CODE DATA:

OCCUPANCY GROUP: A-2
INCIDENTAL USE AREA: UTILITY
TYPE OF CONSTRUCTION: 5-B (PER TABLE 601)

BUILDING AREA:

ALLOWABLE AREA 16,625 SF
(PER TABLE 503 FOR A-2 / 5-B + FRONTAGE INCREASE)
AREA FIRST FLOOR 1,092 SF ACTUAL

BUILDING HEIGHT:

ALLOW HEIGHT (PER TABLE 503 FOR 5-B) 1 STORIES
1 STORY ACTUAL

PLUMBING FIXTURES:

	UNISEX	MEN	WOMEN
WATER CLOSETS	1	3	5
URINALS	0	2	0
LAVATORIES	1	2	2
SHOWERS	1	0	0

CONCESSION INCLUDES (1) LAVATORY AND (1) SERVICE SINK

FIRE RATINGS: (PER TABLE 601)

STRUCTURAL FRAME	0 HR	0 HR ACTUAL
BEARING WALLS	0 HR	0 HR ACTUAL
NONBEARING WALLS EXTERIOR	0 HR	0 HR ACTUAL
NONBEARING WALLS INTERIOR	0 HR	0 HR ACTUAL
FLOOR CONSTRUCTION	0 HR	0 HR ACTUAL
ROOF CONSTRUCTION	0 HR	0 HR ACTUAL

FIRE-RESISTANCE RATING REQUIREMENTS FOR EXT.
WALLS BASED ON FIRE SEPARATION DISTANCE: (PER TABLE 602)
FIRE SEPARATION DISTANCE = 30'-0" 0 HR 0 HR ACTUAL

MAXIMUM AREA OF EXTERIOR WALL OPENINGS (PER TABLE 704.8)
UNPROTECTED OPENINGS W/ FIRE SEPARATION DIST = 30'-0" NO LIMIT
PROTECTED OPENINGS W/ FIRE SEPARATION DIST > 30'-0" NO LIMIT

EGRESS:

OCCUPANT LOAD (PER TABLE 1003.2.2.2) 16 TOTAL
(Concession = 1 PER 100 SQ. FT. GROSS FLOOR AREA)
(Toilets = 1 PER 50 SQ. FT. GROSS FLOOR AREA)
(Utility = 1 PER 300 SQ. FT. GROSS FLOOR AREA)

EGRESS:

WIDTH REQUIRED (PER TABLE 1003.2.3)	4 IN.	165 IN. ACTUAL
EXITS REQUIRED (PER TABLE 1005.2.1)	5	5 ACTUAL
MAXIMUM TRAVEL DISTANCE (PER TABLE 1004.2.4)	200 FT.	27 FT. ACTUAL

CONTACT INFORMATION

BWR CORPORATION
903 EAST 104TH STREET, SUITE 900
KANSAS CITY, MISSOURI 64131

816.363.2696 (P)
816.363.0027 (F)

PROJECT MANAGER: MIKE MALYN, F.A.S.L.A.
CIVIL: JOHN BAKKER, P.E.
ARCHITECTURE: DENNIS O'ROARK
MECHANICAL & PLUMBING: RICK SHEA, P.E.
ELECTRICAL: CRAIG BREWSTER, P.E.
SITE LIGHTING: CRAIG BREWSTER, P.E.
LANDSCAPE: GARY HARDEN, A.S.L.A.

BWR
Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

PROJECT NO. 20060924
DRAWN BY DATE
CHECKED BY DATE
DESIGNED BY DATE
REVISIONS DATE
ISSUE DATE 7-11-07

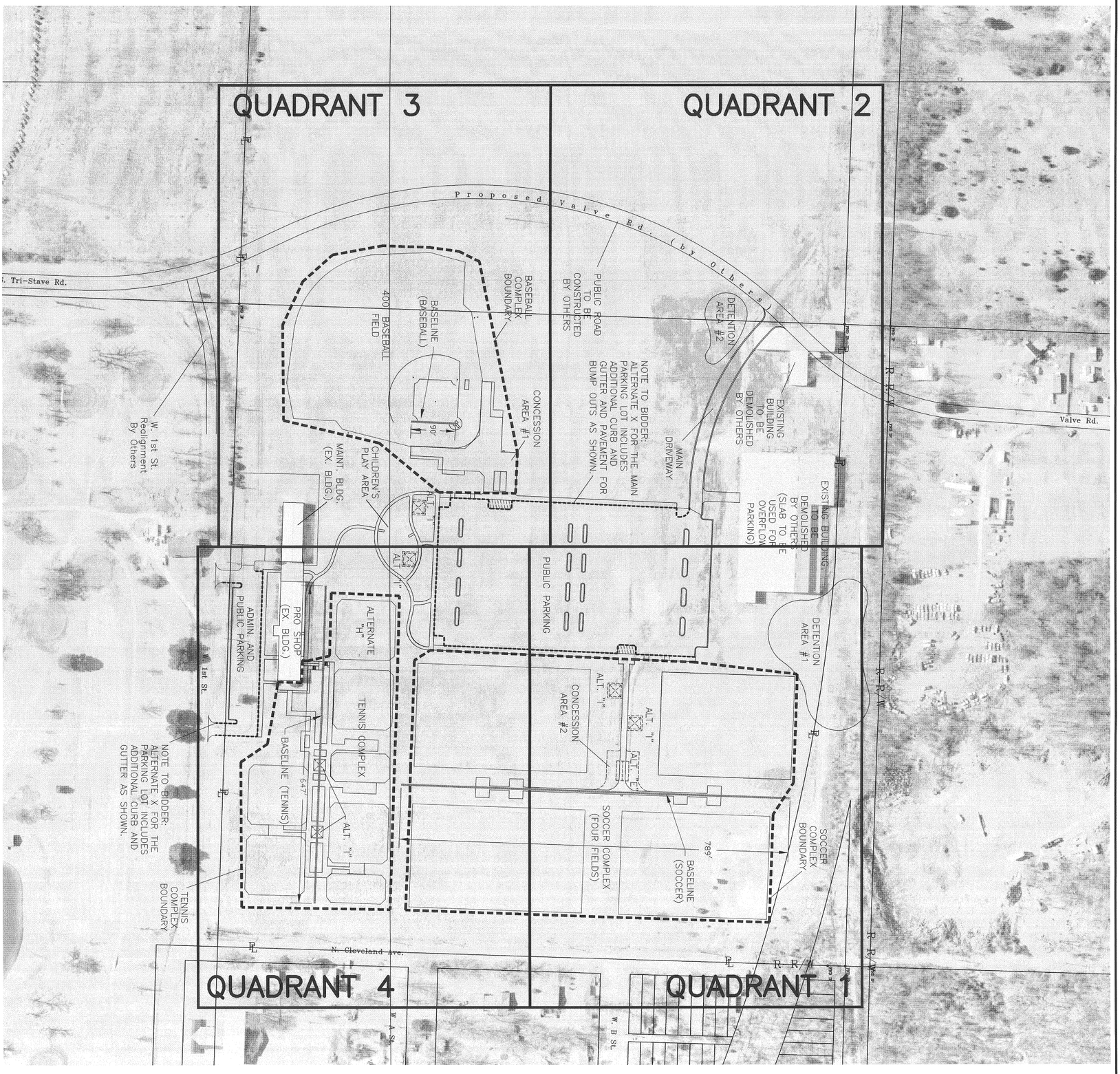
General Notes, Code Summary & General Information

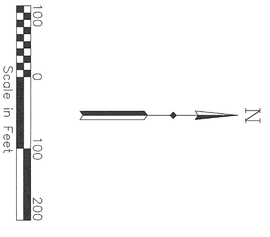
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SHEET 2 OF

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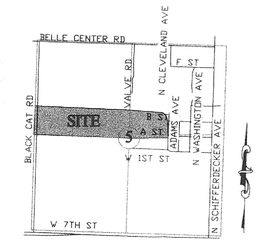


SHEET C0.1 OF		PROJECT NO.	20060924
		DRAWN BY	RCL DATE
		CHECKED BY	JBR DATE
		DESIGNED BY	JBR/TMP DATE
		REVISIONS	DATE
	ISSUE DATE		7-03-07
	General Site Layout		

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

BWR
Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027



LOCATION SKETCH

SECTION 5
T 27 N, R 33 W
SCALE: 1"=2000'

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

NOTES

1) BEARINGS BASED ON GRID NORTH OF THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE.

2) CONTOURS SHOWN ARE FROM AERIAL DATA FROM THE CITY OF JOPLIN 2002 FLIGHT.

BENCHMARKS

TBM–1
TBM IS A FLANGE NUT ON TOP OF A FIRE HYDRANT ON THE SOUTH RIGHT–OF–WAY OF FIRST STREET, WITH AN ELEVATION OF 1028.45.

TBM–2
TBM IS A SQUARE CUT IN THE SOUTHWEST CORNER OF A CONCRETE HEADWALL ON THE SOUTH RIGHT–OF–WAY OF FIRST STREET, WITH AN ELEVATION OF 1019.86.

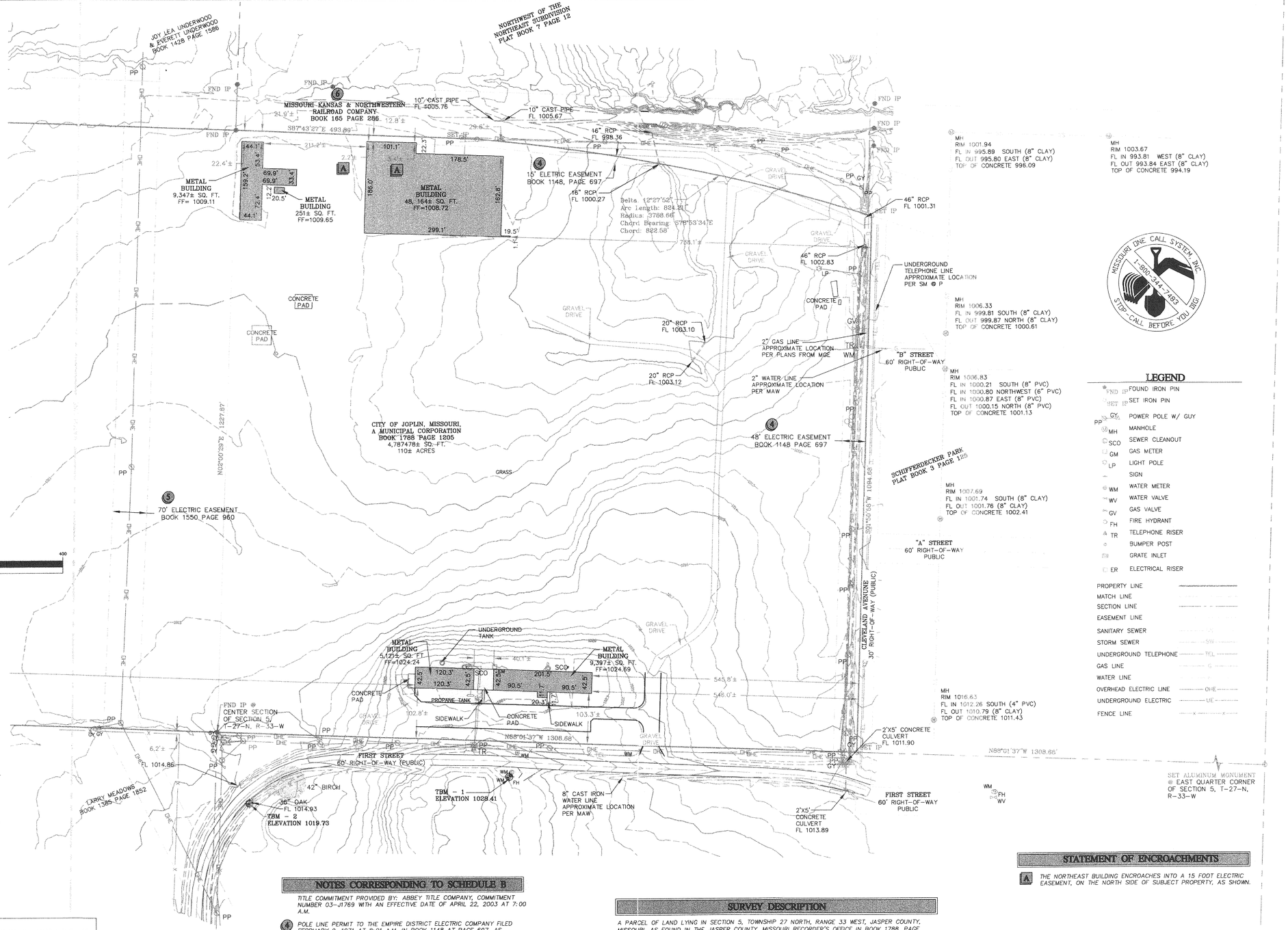
ELEVATIONS DERIVED FROM GPS OBSERVATION BEGINNING AT MISSOURI DNR GRS MONUMENT JS 008 WITH A PUBLISHED NAVD 88 ELEVATION OF 321.2 METERS OR 1053.80 FEET.

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0258D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0256D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

UTILITY NOTE

THIS SURVEY REFLECTS ABOVE GROUND INDICATIONS OF UTILITIES AND INFORMATION AVAILABLE FROM UTILITY COMPANIES. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANTY THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. LOCATE NO. 709.31596, 709.31660, 709.31596 AND 709.31660.



LEGEND

- FND IP — FOUND IRON PIN
- SET IP — SET IRON PIN
- GY — POWER POLE W/ GUY
- PP — POWER POLE
- MH — MANHOLE
- SCO — SEWER CLEANOUT
- GM — GAS METER
- LP — LIGHT POLE
- SIGN
- WM — WATER METER
- WV — WATER VALVE
- GV — GAS VALVE
- FH — FIRE HYDRANT
- TR — TELEPHONE RISER
- BUMPER POST
- GRATE INLET
- ER — ELECTRICAL RISER

PROPERTY LINE
MATCH LINE
SECTION LINE
EASEMENT LINE
SANITARY SEWER — SS
STORM SEWER — SW
UNDERGROUND TELEPHONE — TEL
GAS LINE — G
WATER LINE — W
OVERHEAD ELECTRIC LINE — OHE
UNDERGROUND ELECTRIC — UE
FENCE LINE — X — X

NOTES CORRESPONDING TO SCHEDULE B

TITLE COMMITMENT PROVIDED BY: ABBEY TITLE COMPANY, COMMITMENT NUMBER 03–J1769 WITH AN EFFECTIVE DATE OF APRIL 22, 2003 AT 7:00 A.M.

(4) POLE LINE PERMIT TO THE EMPIRE DISTRICT ELECTRIC COMPANY FILED FEBRUARY 9, 1971 AT 8:01 A.M. IN BOOK 1148 AT PAGE 697. AS SHOWN.

(5) RIGHTS OF THE EMPIRE DISTRICT ELECTRIC COMPANY AS SET FORTH IN REPORT OF COMMISSIONERS FILED JANUARY 13, 1998, AT 8:03 A.M. IN BOOK 1550 AT PAGE 960. AS SHOWN.

(6) DEED TO MISSOURI KANSAS AND NORTHWESTERN RAILWAY DATED NOVEMBER 26, 1901, RECORDED IN BOOK 165 AT PAGE 286. AS SHOWN.

SURVEYORS NOTE

WITH THIS SURVEY WE DO NOT GUARANTEE THAT OWNERSHIP IS TO THE SURVEY LINES DEPICTED HEREON. THIS SURVEY IS A GRAPHIC REPRESENTATION OF THE OPINION OF THE SURVEYOR AS TO THE LOCATION OF THE RECORD DESCRIPTION. NO OPINION AS TO THE VALIDITY OF TITLE IS GIVEN OR IMPLIED.

SURVEY DESCRIPTION

A PARCEL OF LAND LYING IN SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI. AS FOUND IN THE JASPER COUNTY, MISSOURI RECORDER'S OFFICE IN BOOK 1788, PAGE 1205, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON PIN AT THE WEST QUARTER CORNER OF SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI; THENCE ALONG THE WEST SECTION LINE, NORTH 01°44'55" EAST, 1222.32 FEET, TO A POINT ON THE SOUTH LINE OF THE MISSOURI KANSAS AND NORTHWESTERN RAILROAD COMPANY RIGHT–OF–WAY; THENCE ALONG SAID SOUTH RIGHT–OF–WAY LINE THE FOLLOWING THREE COURSES, SOUTH 88°08'31" EAST, 2635.79 FEET; THENCE SOUTH 87°43'27" EAST, 493.89 FEET; THENCE 824.21 FEET ALONG A 3788.66 FOOT RADIUS CURVE TO THE RIGHT WITH A CHORD BEARING SOUTH 78°53'34" EAST, A DISTANCE OF 822.58 FEET, TO THE WEST RIGHT–OF–WAY OF CLEVELAND AVENUE; THENCE ALONG SAID WEST RIGHT–OF–WAY, SOUTH 01°50'58" WEST, 1094.68 FEET, TO A POINT ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 5; THENCE ALONG SAID SOUTH LINE, NORTH 88°01'37" WEST, 1308.68 FEET, TO A FOUND IRON PIN AT THE CENTER OF SECTION 5; THENCE NORTH 88°01'09" WEST, 2630.72 FEET, TO THE POINT OF BEGINNING. ALL LYING IN SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI. CONTAINING 110 ACRES, MORE OR LESS. BEARINGS BASED ON GRID NORTH OF THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE. SUBJECT TO ALL EASEMENTS, COVENANTS, RESTRICTIONS AND RESERVATIONS OF RECORD. CONDITIONS AND MONUMENTS ARE AS SHOWN ON ANDERSON ENGINEERING, INC. DRAWING NUMBER JOP 100–1607.

STATEMENT OF ENCROACHMENTS

(A) THE NORTHEAST BUILDING ENCROACHES INTO A 15 FOOT ELECTRIC EASEMENT, ON THE NORTH SIDE OF SUBJECT PROPERTY, AS SHOWN.

SURVEYOR'S DECLARATION

I, THE UNDERSIGNED, DO HEREBY DECLARE THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY SHOWN HEREON WAS MADE UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE THE INFORMATION IS AS SHOWN AND IN ACCORDANCE WITH THE CURRENT MISSOURI MINIMUM STANDARDS FOR SUBURBAN PROPERTY SURVEYS.
LAST REVISION DATE MAY 14, 2007
ANDERSON ENGINEERING, INC. LC 62
BY:

JERROD L. HOGAN, P.L.S. 2004001333 — 5-14-07 DATE

ANDERSON ENGINEERING, INC
ENGINEERS • SURVEYORS • LABORATORIES • DRILLING
811 E. THIRD STREET • JOPLIN, MISSOURI 64801 • PHONE (417) 782-7393

CITY OF JOPLIN SPORTS COMPLEX

BOUNDARY AND TOPOGRAPHIC SURVEY

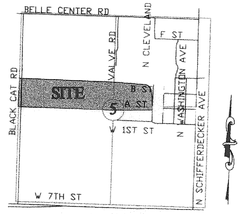
JOPLIN, MISSOURI

PROJECT NO.	J4563
DRAWN BY	SLM — DATE 5-14-07
CHECKED BY	JLH — DATE 5-14-07
DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-3-07

DRAWING NO.
JOP-100-1607

C0.2

SHEET 1 OF 3



LOCATION SKETCH

SECTION 5
T 27 N, R 33 W
SCALE: 1"=2000'

NOTES

1) BEARINGS BASED ON GRID NORTH OF THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE.

2) CONTOURS SHOWN ARE FROM AERIAL DATA FROM THE CITY OF JOPLIN 2002 FLIGHT.

LEGEND

FND IP	FOUND IRON PIN
SET IP	SET IRON PIN
GY	POWER POLE W/ GUY
MH	MANHOLE
SCO	SEWER CLEANOUT
GM	GAS METER
LP	LIGHT POLE
	SIGN
WM	WATER METER
WV	WATER VALVE
GV	GAS VALVE
FH	FIRE HYDRANT
TR	TELEPHONE RISER
	BUMPER POST
	GRATE INLET
ER	ELECTRICAL RISER

PROPERTY LINE	
MATCH LINE	
SECTION LINE	
EASEMENT LINE	
SANITARY SEWER	SS
STORM SEWER	SW
UNDERGROUND TELEPHONE	TEL
GAS LINE	G
WATER LINE	W
OVERHEAD ELECTRIC LINE	OHE
UNDERGROUND ELECTRIC	UE
FENCE LINE	X

DEBRA WATSON & DARREL WATSON BOOK 1723 PAGE 1270

LEONARD E. MILLER & BEULAH MILLER BOOK 1147 PAGE 138

REX BOYKIN & BETTY BOYKIN BOOK 1637 PAGE 1347

DENNIS RAY KERSEY & SHANA L. KERSEY BOOK 1635 PAGE 1378

CHARLES F. HENSON & MARY HENSON BOOK 1070 PAGE 632

JOY LEA UNDERWOOD & EVERETT UNDERWOOD BOOK 1428 PAGE 1586

JOY LE & EVER BOOK

FND IP

MISSOURI KANSAS & NORTHWESTERN RAILROAD COMPANY BOOK 185 PAGE 286

S88°08'31"E 2635.79'

N01°44'55"E 1222.32'

CITY OF JOPLIN, MISSOURI, A MUNICIPAL CORPORATION BOOK 1788 PAGE 1205
4,787478± SQ. FT.
110± ACRES

GRASS

3031.8'±

FND IP

P.O.B. WEST QUARTER CORNER OF SECTION 5, T-27-N, R-33-W

N88°01'09"W 2630.72'

BEVERLY D. MARTIN REVOCABLE TRUST BOOK 1885, PAGE 1992

LARRY MEADOWS BOOK 1385 PAGE 1852

LARRY MEADOWS BOOK 1385 PAGE 1852

PP

GY GY

5.2'±

FL 1014.8

70' BOI

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0258D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0256D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

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NOTES CORRESPONDING TO SCHEDULE B

TITLE COMMITMENT PROVIDED BY: ABBEY TITLE COMPANY, COMMITMENT NUMBER 03-J1769 WITH AN EFFECTIVE DATE OF APRIL 22, 2003 AT 7:00 A.M.

4 POLE LINE PERMIT TO THE EMPIRE DISTRICT ELECTRIC COMPANY FILED FEBRUARY 9, 1971 AT 8:01 A.M. IN BOOK 1148 AT PAGE 697. AS SHOWN.

5 RIGHTS OF THE EMPIRE DISTRICT ELECTRIC COMPANY AS SET FORTH IN REPORT OF COMMISSIONERS FILED JANUARY 13, 1998, AT 8:03 A.M. IN BOOK 1550 AT PAGE 960. AS SHOWN.

6 DEED TO MISSOURI KANSAS AND NORTHWESTERN RAILWAY DATED NOVEMBER 26, 1901, RECORDED IN BOOK 165 AT PAGE 286. AS SHOWN.

SURVEY DESCRIPTION

A PARCEL OF LAND LYING IN SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI. AS FOUND IN THE JASPER COUNTY, MISSOURI RECORDER'S OFFICE IN BOOK 1788, PAGE 1205, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A FOUND IRON PIN AT THE WEST QUARTER CORNER OF SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI; THENCE ALONG THE WEST SECTION LINE, NORTH 01°44'55" EAST, 1222.32 FEET, TO A POINT ON THE SOUTH LINE OF THE MISSOURI KANSAS AND NORTHWESTERN RAILROAD COMPANY RIGHT-OF-WAY; THENCE ALONG SAID SOUTH RIGHT-OF-WAY LINE THE FOLLOWING THREE COURSES, SOUTH 88°08'31" EAST, 2635.79 FEET; THENCE SOUTH 87°43'27" EAST, 493.89 FEET; THENCE 824.21 FEET ALONG A 3788.66 FOOT RADIUS CURVE TO THE RIGHT WITH A CHORD BEARING SOUTH 78°53'34" EAST, A DISTANCE OF 822.58 FEET, TO THE WEST RIGHT-OF-WAY OF CLEVELAND AVENUE; THENCE ALONG SAID WEST RIGHT-OF-WAY, SOUTH 01°50'58" WEST, 1094.68 FEET, TO A POINT ON THE SOUTH LINE OF THE NORTHEAST QUARTER OF SAID SECTION 5; THENCE ALONG SAID SOUTH LINE, NORTH 88°01'37" WEST, 1308.68 FEET, TO A FOUND IRON PIN AT THE CENTER OF SECTION 5; THENCE NORTH 88°01'09" WEST, 2630.72 FEET, TO THE POINT OF BEGINNING. ALL LYING IN SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI. CONTAINING 110 ACRES, MORE OR LESS. BEARINGS BASED ON GRID NORTH OF THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE. SUBJECT TO ALL EASEMENTS, COVENANTS, RESTRICTIONS AND RESERVATIONS OF RECORD. CONDITIONS AND MONUMENTS ARE AS SHOWN ON ANDERSON ENGINEERING, INC. DRAWING NUMBER JOP 100-1607.

SURVEYORS NOTE

WITH THIS SURVEY WE DO NOT GUARANTEE THAT OWNERSHIP IS TO THE SURVEY LINES DEPICTED HEREON. THIS SURVEY IS A GRAPHIC REPRESENTATION OF THE OPINION OF THE SURVEYOR AS TO THE LOCATION OF THE RECORD DESCRIPTION. NO OPINION AS TO THE VALIDITY OF TITLE IS GIVEN OR IMPLIED.

SURVEYOR'S DECLARATION

I, THE UNDERSIGNED, DO HEREBY DECLARE THAT THE BOUNDARY AND TOPOGRAPHIC SURVEY SHOWN HEREON WAS MADE UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE THE INFORMATION IS AS SHOWN AND IN ACCORDANCE WITH THE CURRENT MISSOURI MINIMUM STANDARDS FOR SUBURBAN PROPERTY SURVEYS.
LAST REVISION DATE MAY 14, 2007
ANDERSON ENGINEERING, INC. LC 62
BY:

JERROD L. HOGAN, P.L.S. 2004001333

5-14-07
DATE

ANDERSON ENGINEERING, INC
ENGINEERS • SURVEYORS • LABORATORIES • DRILLING
811 E THIRD STREET • JOPLIN, MISSOURI 64801 • PHONE (417) 782-7399

CITY OF JOPLIN
SPORTS COMPLEX

BOUNDARY AND TOPOGRAPHIC SURVEY

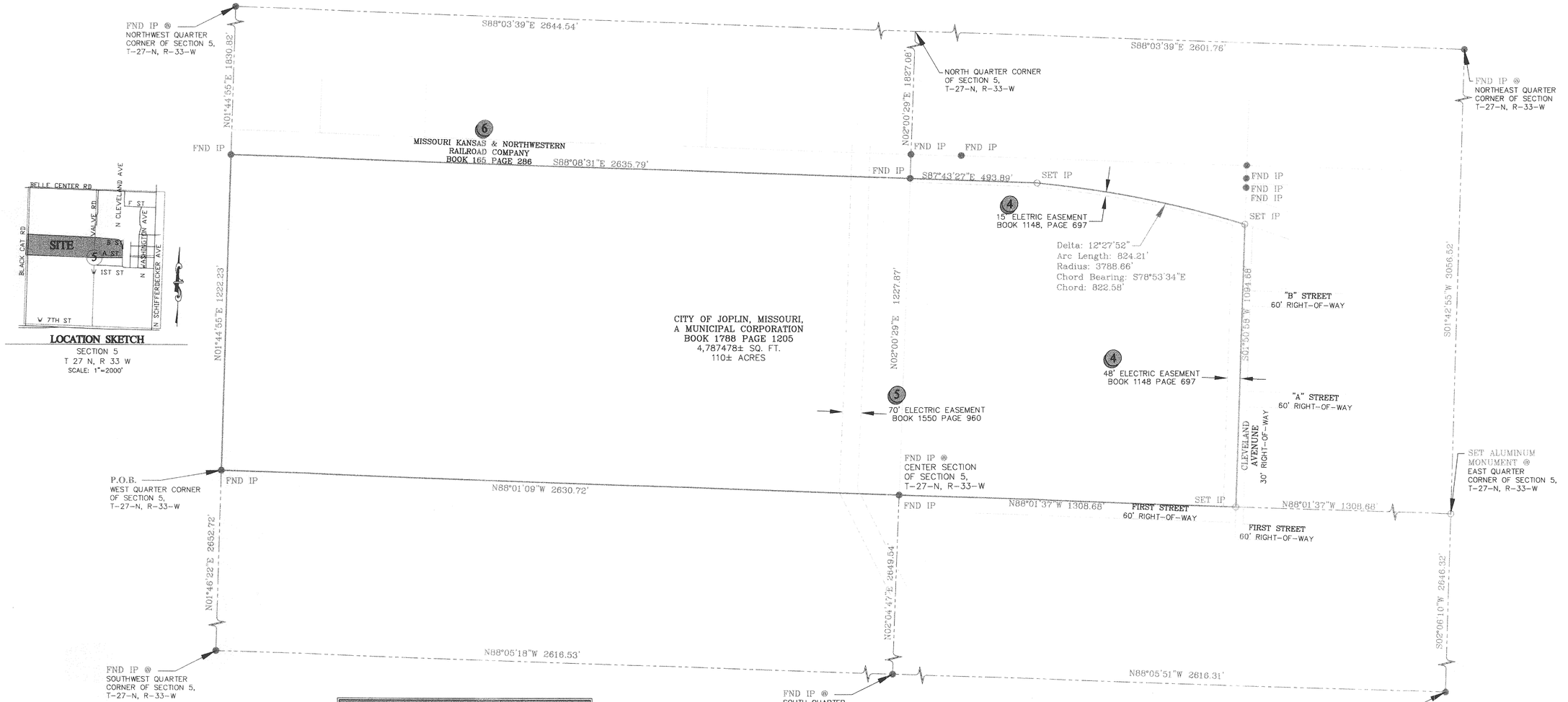
JOPLIN, MISSOURI

PROJECT NO	04563
DRAWN BY	DATE
SLM	5-14-07
CHECKED BY	DATE
JLH	5-14-07
DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-3-07

DRAWING NO.
JOP 100-1607

C0.3

SHEET 2 OF 3



GRID

GRAPHIC SCALE

200 0 100 200 400 800

(IN FEET)

1 inch = 200 ft.

NOTES CORRESPONDING TO SCHEDULE B

TITLE COMMITMENT PROVIDED BY: ABBEY TITLE COMPANY, COMMITMENT NUMBER 03-J1769 WITH AN EFFECTIVE DATE OF APRIL 22, 2003 AT 7:00 A.M.

4. POLE LINE PERMIT TO THE EMPIRE DISTRICT ELECTRIC COMPANY FILED FEBRUARY 9, 1971 AT 8:01 A.M. IN BOOK 1148 AT PAGE 697. AS SHOWN.

5. RIGHTS OF THE EMPIRE DISTRICT ELECTRIC COMPANY AS SET FORTH IN REPORT OF COMMISSIONERS FILED JANUARY 13, 1998, AT 8:03 A.M. IN BOOK 1550 AT PAGE 960. AS SHOWN.

6. DEED TO MISSOURI KANSAS AND NORTHWESTERN RAILWAY DATED NOVEMBER 26, 1901, RECORDED IN BOOK 165 AT PAGE 286. AS SHOWN.

NOTES

1) BEARINGS BASED ON GRID NORTH OF THE MISSOURI COORDINATE SYSTEM OF 1983, WEST ZONE.

2) CONTOURS SHOWN ARE FROM AERIAL DATA FROM THE CITY OF JOPLIN 2002 FLIGHT.

LEGEND

- FND IP FOUND IRON PIN
- SET IP SET IRON PIN
- PROPERTY LINE
- SECTION LINE
- EASEMENT LINE

FLOOD NOTE

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE X OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0258D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 29097C0256D, WHICH BEARS AN EFFECTIVE DATE OF MARCH 16, 2006 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA. NO FIELD SURVEYING WAS PERFORMED TO DETERMINE THIS ZONE.

UTILITY NOTE

THIS SURVEY REFLECTS ABOVE GROUND INDICATIONS OF UTILITIES AND INFORMATION AVAILABLE FROM UTILITY COMPANIES. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANTY THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. LOCATE NO. 709.31596, 709.31660, 709.31596 AND 709.31660.

SURVEY DESCRIPTION

A PARCEL OF LAND LYING IN SECTION 5, TOWNSHIP 27 NORTH, RANGE 33 WEST, JASPER COUNTY, MISSOURI. AS FOUND IN THE JASPER COUNTY, MISSOURI RECORDER'S OFFICE IN BOOK 1788, PAGE 1205, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

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LAST REVISION DATE MAY 14, 2007
ANDERSON ENGINEERING, INC. LC 62
BY:

JERROD L. HOGAN, P.L.S. 2004001333 — *5-14-07 DATE*

ANDERSON ENGINEERING, INC
ENGINEERS • SURVEYORS • LABORATORIES • DRILLING
811 E THIRD STREET • JOPLIN, MISSOURI 64801 • PHONE (417) 782-7999

CITY OF JOPLIN SPORTS COMPLEX

BOUNDARY AND TOPOGRAPHIC SURVEY

JOPLIN, MISSOURI

PROJECT NO.	24563
DRAWN BY	DATE
SLM	5-14-07
CHECKED BY	DATE
JLH	5-14-07
DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-3-07

DRAWING NO.
JOP-100-1607

C0.4

SHEET 3 OF 3



NOTE TO BIDDERS:
THE BASE BID REQUIRES THE CONSTRUCTION OF ONLY THE CONCRETE CURB AND GUTTER SHOWN ON THIS PLAN. ALTERNATE "X" INCLUDES THE ADDITION CURB AND GUTTER INDICATED ON SHEET C0.1. THIS INCLUDES THE ADDITION OF ADA COMPLIANT SIDEWALKS AND PARKING, AND ASSOCIATED GRADING ADJUSTMENTS. ELEVATIONS SHOWN WILL THEN BE TO TOP OF CURB AND THE PAVEMENT SURFACE WILL BE LOWERED ACCORDINGLY.

N

100 0 100 200
Scale in Feet

BWR
Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060924
DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	DATE
ISSUE DATE	7-03-07

Site Layout Overall

C1.0

SHEET OF

Drawing Name: Q:\2006-092401-1st\Project\Civil\ACAD\C1.0.dwg, Jul 13,2007 - 8:49am

DETENTION BASIN

EXISTING BUILDING
(BUILDING TO BE DEMOLISHED BY OTHERS, SLAB TO REMAIN)

BASE LINE
N 338040.86
E 2772907.12

PROPOSED SOCCER FIELD#1

PROPOSED SOCCER FIELD#2

PROPOSED SOCCER FIELD#3 (210'x300')

PROPOSED SOCCER FIELD#4 (210'x300')

SEATING AREA TYPICAL

39.4'
101.2'
27.7'
TYP.
40.0'
27.7'
33.1'
210'
38.1'
38.1'
210'

50.7'
30'
30'
30'
30'
55'
29'
30'
6' (TYP.)
5'R
22.5' (TYP.)
70.2'
25'R
2.3'
30'
SIDEWALK
CONS. BLDG.
5'R
25'R
25'R
72.7'
10'
25'
8'

SIDEWALK
SIDEWALK
SIDEWALK

PUBLIC PARKING
SEE SHT C1.5 FOR LAYOUT

N

30 0 30 60
Scale in Feet

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C1.1 to C1.4 SITE LAYOUT.dwg Jul 12,2007 - 10:01am

BWR
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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060924
DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	DATE
ISSUE DATE	7-03-07

Site Layout Quadrant 1

C1.1

SHEET OF

N

30 0 30 60
Scale in Feet

SECURITY GATE TO BE CENTERED ACROSS ROAD AT STA. 0+35

STA 0+39.41 BEGIN MAIN DRIVEWAY CONSTRUCTION

EXISTING BUILDING (TO BE DEMOLISHED BY OTHERS)

EXISTING BUILDING TO BE DEMOLISHED BY OTHERS (EXISTING SLAB WILL BE USED FOR OVERFLOW PARKING)

N 338018.39
E 2771919.16

N 338018.31
E 2771966.54

20'R

PC = 0+43.66

N 337988.46
E 2771950.80

NOTE TO CONTRACTOR:
PROPOSED VALVE ROAD AND TRANSITION TO THE ACCESS ROAD ARE TO BE CONSTRUCTED UNDER SEPARATE CONTRACT. REFERENCE CITY PLANS FOR MORE INFORMATION. LOCATIONS SHOWN ARE APPROXIMATE.

20'R

N 337977.09
E 2771921.96

32'

DETENTION BASIN

N 338351.67
E 2772294.42

500'R

ACCESS TO BUILDING SLAB FOR OVERFLOW PARKING. USE ASPHALT WALKWAY SECTION.

20'

PT = 3+99.47

10'R

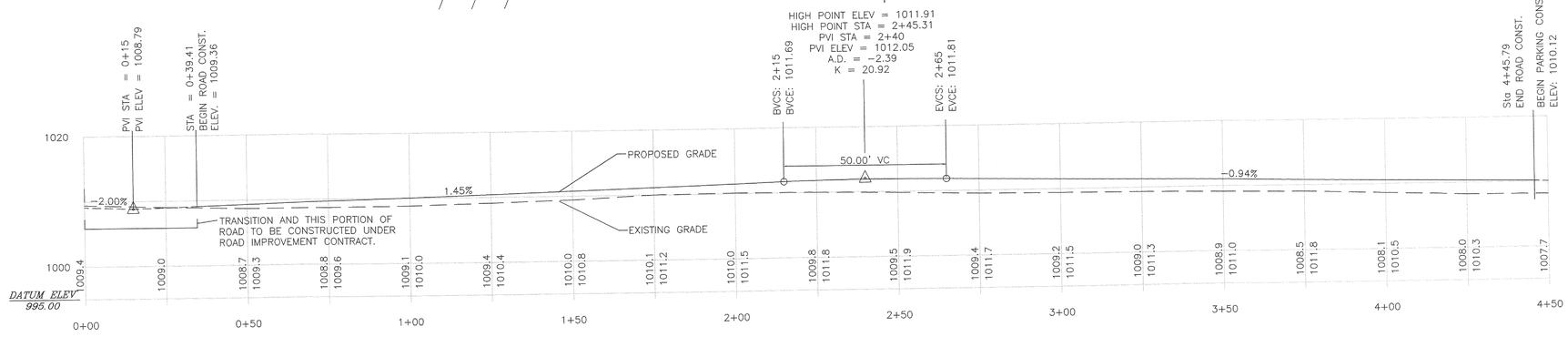
STA 4+45.79
END MAIN DRIVEWAY CONSTRUCTION
N 337850.05
E 2772318.27

N 337852.20
E 2772271.50

900'R

N 337267.71
E 2772552.06

PUBLIC PARKING
SEE SHT C1.5 FOR LAYOUT



MAIN DRIVEWAY PROFILE

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060824
DRAWN BY	RCL
DATE	
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DATE	
REVISIONS	DATE
ISSUE DATE	7-03-07

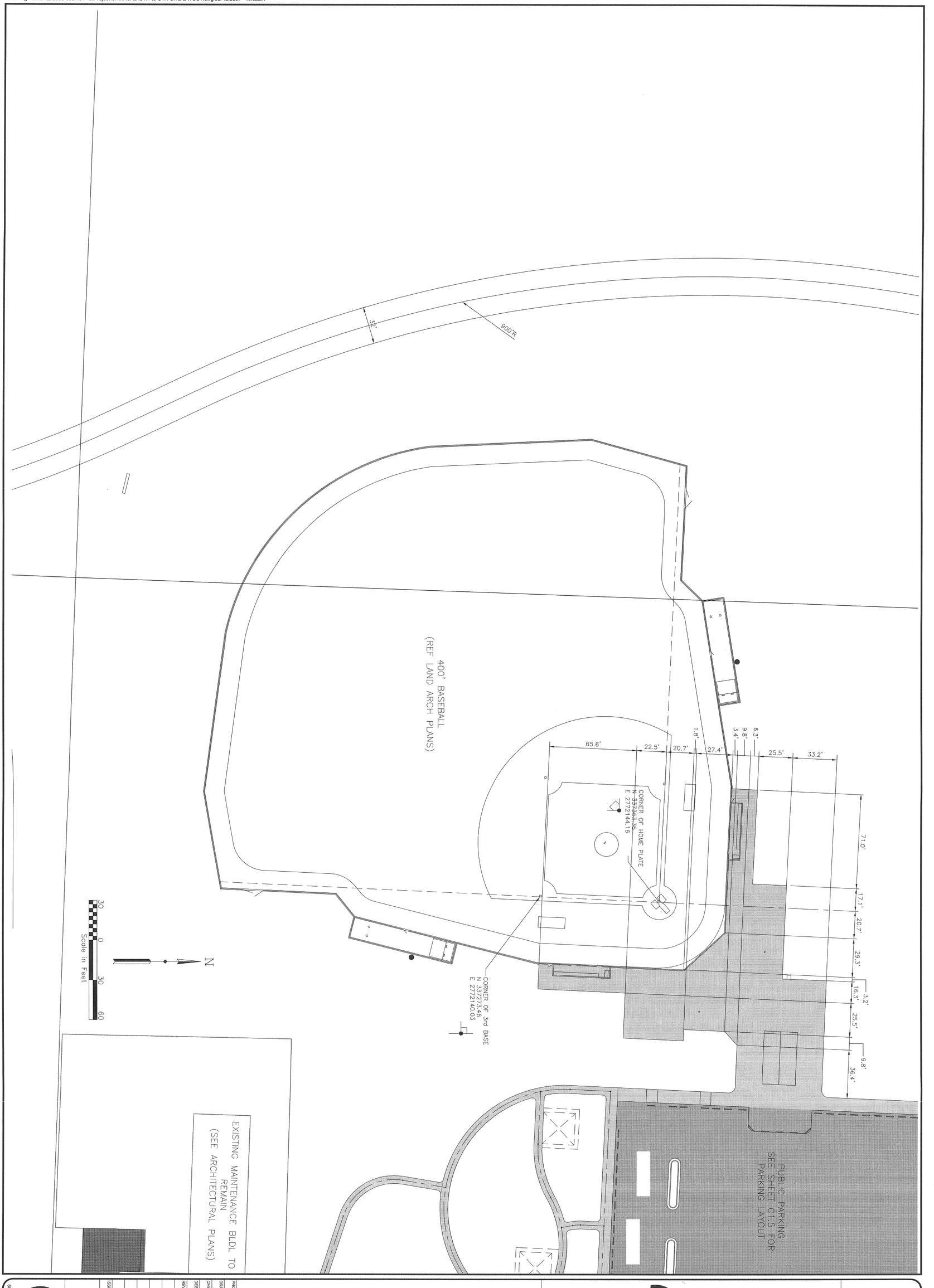
Site Layout Quadrant 2

C1.2

SHEET OF

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C1.1 to C1.4 SITE LAYOUT.dwg Jul 13,2007 - 2:41pm

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C1.1 to C1.4 SITE LAYOUT.dwg Jul 12,2007 - 10:02am



SHEET C1.3 OF

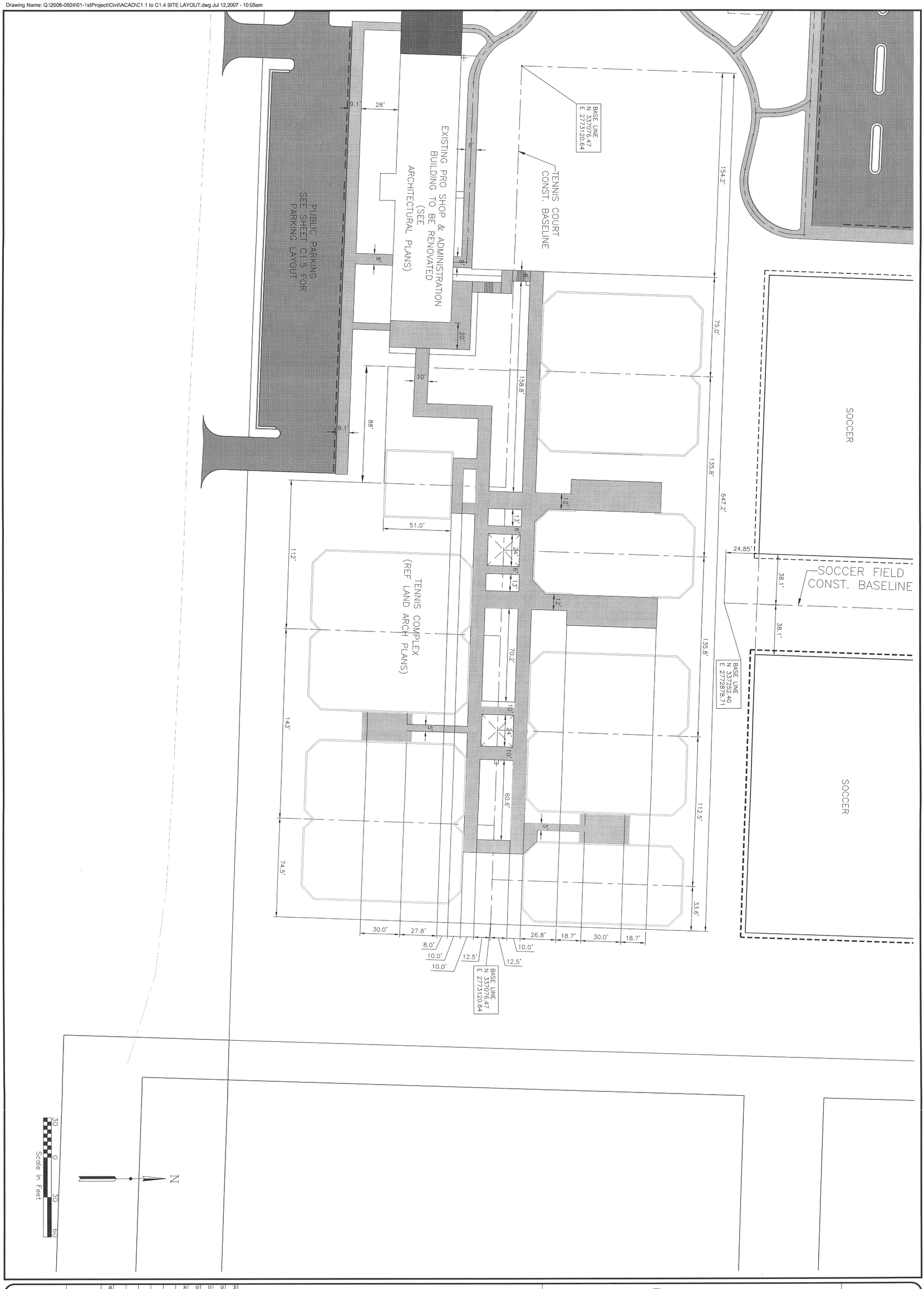
ISSUE DATE	7-03-07
	Site Layout Quadrant 3
REVISIONS	
DESIGNED BY	JBB/TMP
CHECKED BY	JBB
DRAWN BY	RCL
PROJECT NO.	20060924

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

BWR
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Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C1.1 to C1.4 SITE LAYOUT.dwg Jul 12,2007 - 10:05am



SHEET C1.4 OF

Site Layout
Quadrant 4

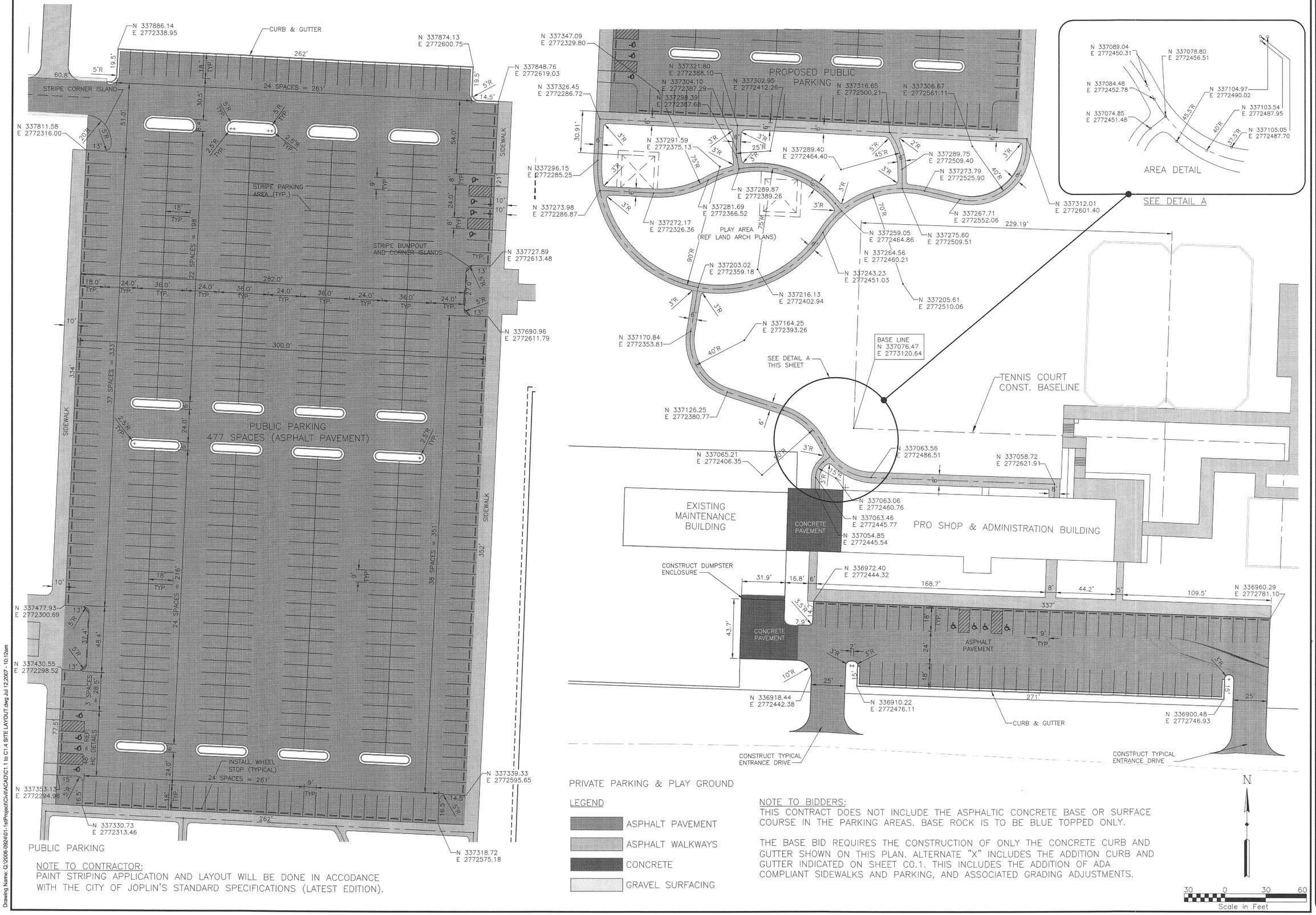
ISSUE DATE 7-03-07

REVISIONS		DATE
DESIGNED BY	JBB/TMP	DATE
CHECKED BY	JBB	DATE
DRAWN BY	RCL	DATE
PROJECT NO.	20060924	

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

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NOTE TO CONTRACTOR:
PAINT STRIPING APPLICATION AND LAYOUT WILL BE DONE IN ACCODANCE WITH THE CITY OF JOPLIN'S STANDARD SPECIFICATIONS (LATEST EDITION).

PRIVATE PARKING & PLAY GROUND

LEGEND

- ASPHALT PAVEMENT
- ASPHALT WALKWAYS
- CONCRETE
- GRAVEL SURFACING

NOTE TO BIDDERS:
THIS CONTRACT DOES NOT INCLUDE THE ASPHALTIC CONCRETE BASE OR SURFACE COURSE IN THE PARKING AREAS. BASE ROCK IS TO BE BLUE TOPPED ONLY.

THE BASE BID REQUIRES THE CONSTRUCTION OF ONLY THE CONCRETE CURB AND GUTTER SHOWN ON THIS PLAN. ALTERNATE "X" INCLUDES THE ADDITION CURB AND GUTTER INDICATED ON SHEET CO.1. THIS INCLUDES THE ADDITION OF ADA COMPLIANT SIDEWALKS AND PARKING, AND ASSOCIATED GRADING ADJUSTMENTS.

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P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060924
DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	DATE
ISSUE DATE	7-03-07

Site Layout
Parking Layouts

C1.5

SHEET OF

Drawing Name: Q:\2006-0924\01-1st\Project\Civil\ACAD\C1.1 to C1.4 SITE LAYOUT.dwg Jul 12,2007 - 10:12am



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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060924
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ISSUE DATE	7-03-07

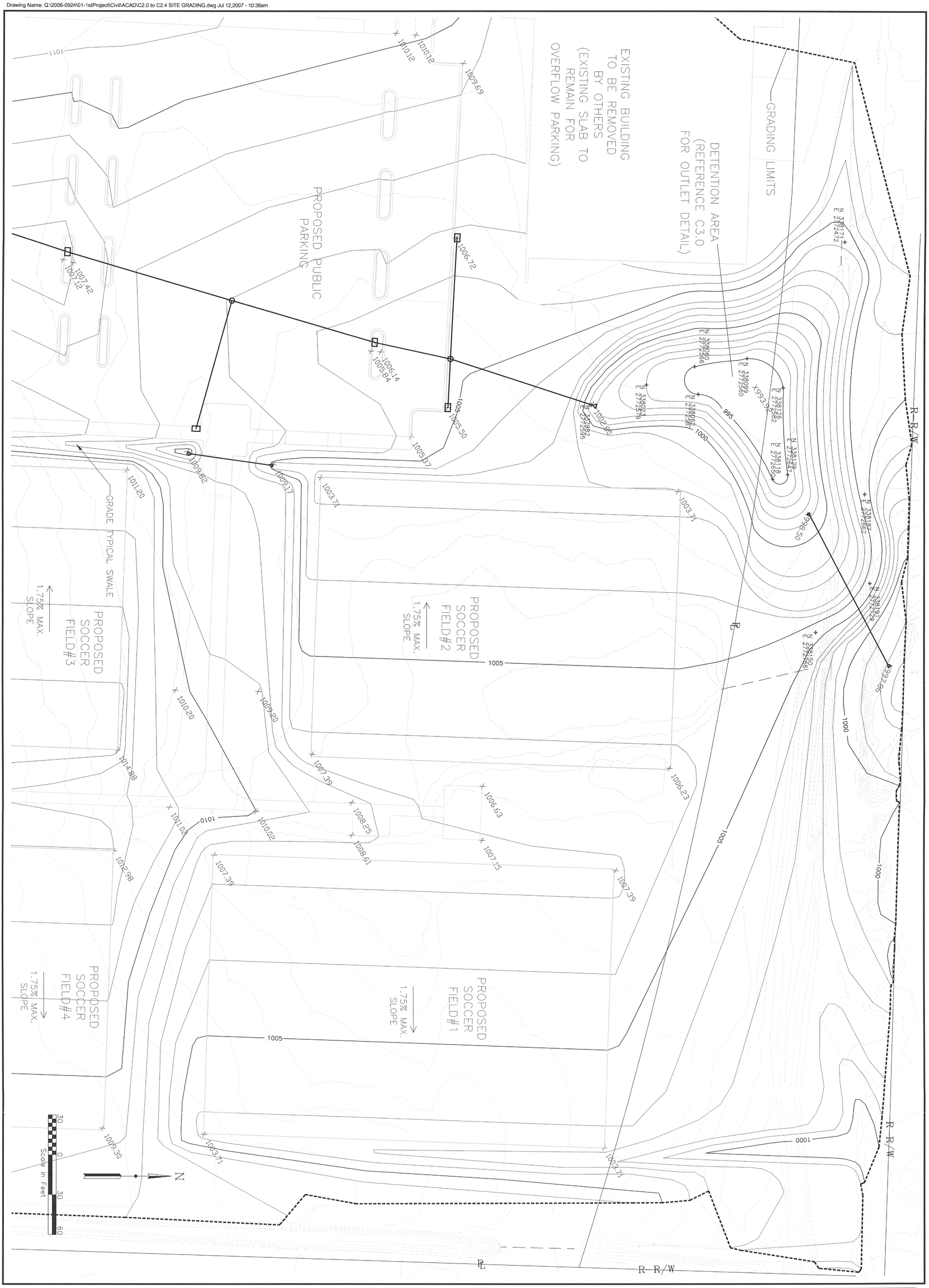
FENCING LAYOUT

C1.6

SHEET OF

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C1.6 FENCING LAYOUT.dwg Jul 12,2007 - 11:23am

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C2.0 to C2.4 SITE GRADING.dwg Jul 12,2007 - 10:38am



City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

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PROJECT NO.	20060924
DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	
DATE	
ISSUE DATE	7-03-07

Site Grading
Quadrant 1

SHEET **C2.1** OF

PROPOSED ROAD GRADING IS APPROXIMATE AND SUPPLIED FOR REFERENCE ONLY. COORDINATE WITH CITY PLANS PRIOR TO CONSTRUCTION.

EXISTING BUILDING TO BE REMOVED BY OTHERS

EXISTING BUILDING TO BE REMOVED BY OTHERS

X 1008.52

1010

X 1011.91

1010

X 1009.69

X 1010.12

X 1010.12

DETENTION POND (TO BE COORDINATED WITH PUBLIC ROAD PLANS)

PROPOSED PUBLIC PARKING

GRADING LIMITS

X 1012.32

1011

1010

N

30 0 30 60

Scale in Feet

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C2.0 to C2.4 SITE GRADING.dwg Jul 12,2007 - 10:45am

BWR
Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

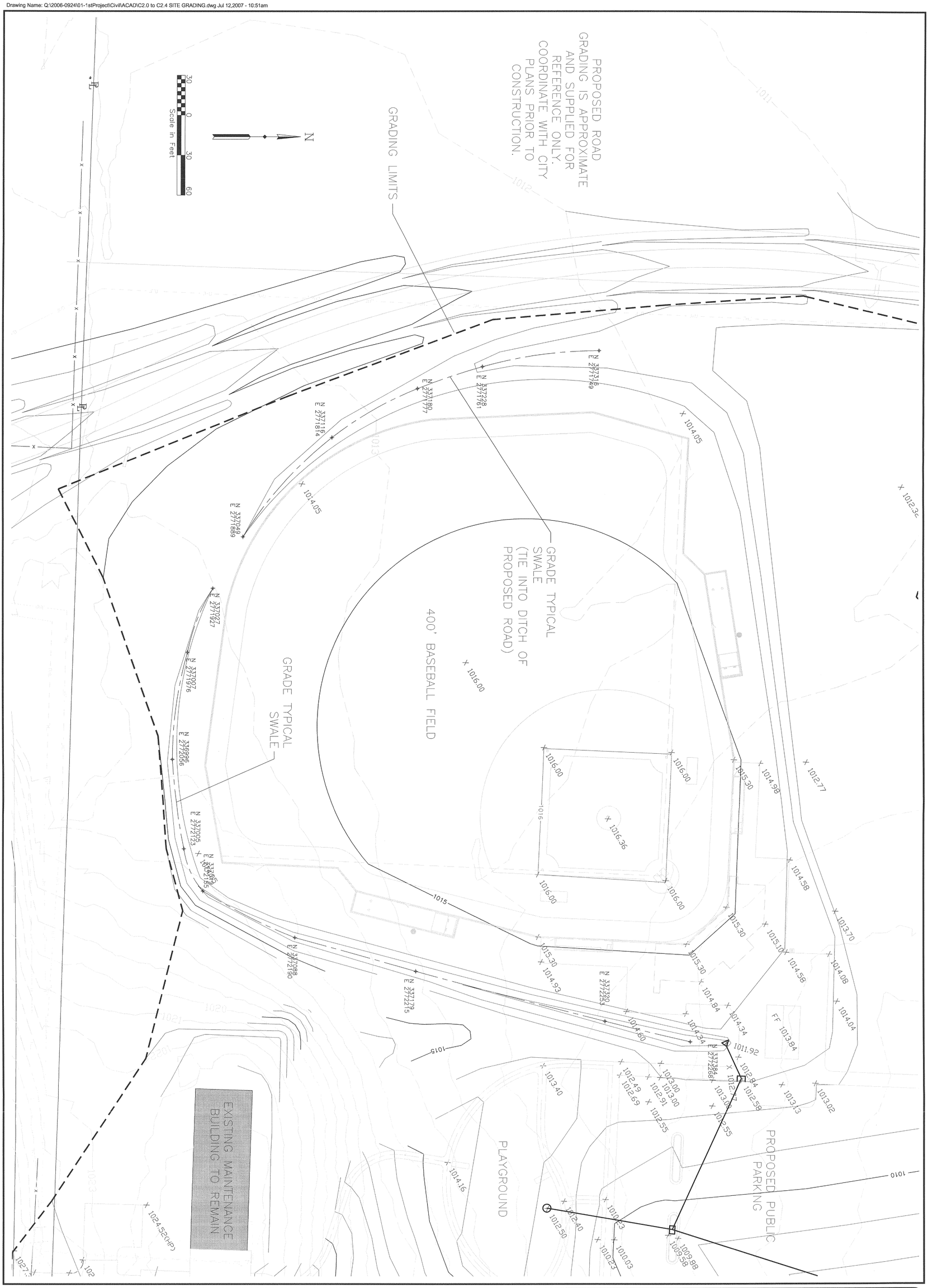
PROJECT NO.	20060924
DRAWN BY / DATE	RCL
CHECKED BY / DATE	JBB
DESIGNED BY / DATE	JBB/TMP
REVISIONS / DATE	
ISSUE DATE	7-03-07

Site Grading Quadrant 2

C2.2

SHEET OF

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C2.0 to C2.4 SITE GRADING.dwg Jul 12,2007 - 10:51am



SHEET	C2.3		
OF			
ISSUE DATE	7-03-07	Site Grading Quadrant 3	
DESIGNED BY	JBB/TMP	DATE	
REVISIONS		DATE	
CHECKED BY	JBB	DATE	
DRAWN BY	RCL	DATE	
PROJECT NO.	20060924		

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

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Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C2.0 to C2.4 SITE GRADING.dwg Jul 12,2007 - 11:01am



C2.4

SHEET OF

Site Grading
Quadrant 4

ISSUE DATE 7-03-07

PROJECT NO.	20060924	
DRAWN BY	RCL	DATE
CHECKED BY	JBB	DATE
DESIGNED BY	JBB/TMP	DATE
REVISIONS		DATE

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

BWR
Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

GENERAL EROSION CONTROL NOTES:

1. The contractor shall implement the Storm Water Pollution Prevention Plan (SWPPP) prior to the commencement of grading. A copy of the SWPPP shall be available on site at all times.

2. The erosion control features, notes, and specifications in this PPP represent the minimum requirements acceptable. Locations are typical and may vary according to contractors staging and limits of construction. The contractor shall adjust, modify and add to this plan as necessary to control erosion, siltation and pollution.

3. It shall be each contractor's responsibility to control erosion and prevent pollution for all work which they are directly involved.

4. Erosion control devices along the down slope side of the project shall be in place prior to the commencement of any grading work.

5. When possible, without adversely affecting construction operations, the contractor shall: minimize the amount of surface area which is exposed at one time, leave graded areas with a rough texture, construct temporary terraces during grading operations, and limit unnecessary vehicle traffic in graded areas.

6. The spillage of debris, including the tracking of soil, outside of the construction limits shall be avoided. Therefore the contractor shall provide stabilized drives at all access locations as necessary.

7. Silt fences shall be placed on a contour elevation along the downhill side and for the full extent of the disturbed areas within the construction limits. The last five feet on each end of run of silt fence shall be placed facing uphill at 90 degrees to the contour line.

8. The contractor shall prevent silt and sediment from entering the storm sewer system. Proper BMP's shall be placed around all storm sewer inlets except during construction operations which require their temporary removal.

9. Each contractor shall inspect their erosion control devices every 7 days or within 24 hours of a storm of 0.5 inches or more in depth. The operator shall repair damage, clean out sediment and add additional control devices as needed as soon as practicle after inspection. Deficiencies must be corrected within 24 hours of inspection.

10. All areas upon reaching final grade shall be brought to final plan condition (paved, mulched and seeded, sodded, or other) as soon as possible. Erosion control devices shall remain in place until all soil disturbing activities are complete and a uniform perennial cover with a density of 70% (minimum) for unpaved areas is established.

11. Where graded areas drain onto paved areas, silt fence shall be placed at the edge to prevent silt from entering the paved areas. When these erosion control devices are not placed on the contour, they shall be installed at 50' intervals a with 5' length placed at 90 degrees to the main length.

LEGEND

INDICATES INSTALLATION OF EROSION CONTROL DEVICE (SILT FENCE AND/OR ROCK DITCH CHECKS)

EXISTING TOPO CONTOUR
CONTOUR INTERVALS = 2.00 FOOT)

920 — PROPOSED TOPO CONTOUR (CONTOUR INTERVAL = 2.00 FOOT)

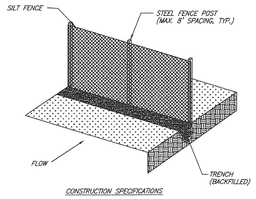
INLET PROTECTION
SEE SPEC. NOTE 8

N

100 0 100 200
Scale in Feet



NOTES:
1. INSTALL AS SOON AS POSSIBLE AFTER START OF GRADING.
2. USE 2 TO 3 INCH AGGREGATE STONE.
3. DRIVE MUST BE AT LEAST 20 FEET WIDE AND 50 FEET LONG OR THE DISTANCE TO THE FOUNDATION, WHICHEVER IS LESS.
4. REPLACE AS NEEDED TO MAINTAIN 6 INCH DEPTH.



CONSTRUCTION SPECIFICATIONS

1. Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source.
2. Silt Fence shall be trenched in with a spade or mechanical trencher so that the downslope face of the trench is flat and perpendicular to the line of flow.
3. The trench should be a minimum of 6" deep and 3-4" wide to allow for the silt fence to be laid in the ground and backfilled.
4. Silt Fence should be securely fastened to each steel, support post or to woven wire which is in turn attached to the steel fence posts.
5. Inspection shall be frequent and repair or replacement shall be made promptly as needed.
6. Silt Fence shall be removed when it has served its usefulness so as not to block or impede storm flow or drainage.
7. Sediment trapped by this practice shall be uniformly distributed on the source area prior to topsoiling.
8. The Erosion Control shown shall be Silt Fence. Additional Erosion Control provided by contractor may be Straw Bale Dike.

SILT FENCE

BWR Right in the Center
903 East 104th Street | Suite 900 | Kansas City, Missouri 64131-3451
P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO.	20060924
DRAWN BY	DATE
RCL	
CHECKED BY	DATE
JBB	
DESIGNED BY	DATE
JBB/TMP	
REVISIONS	DATE
ISSUE DATE	7-03-07

Erosion Control Plan

C2.5

SHEET OF

Drawing Name: Q:\2006-0924\01 - 1st Project\Civil\ACAD\C2.5 Erosion Control Plan.dwg Jul 12,2007 - 11:38am

LEGEND

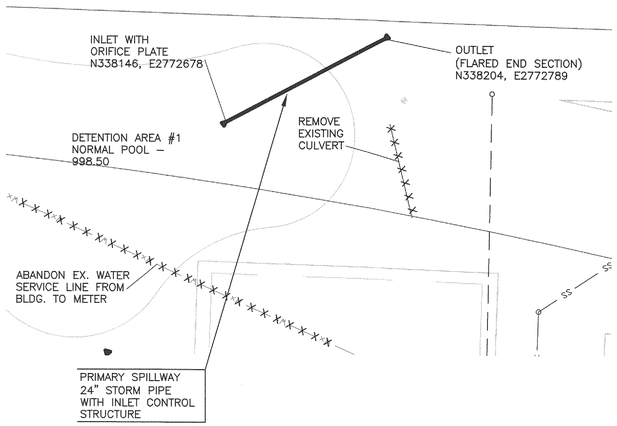
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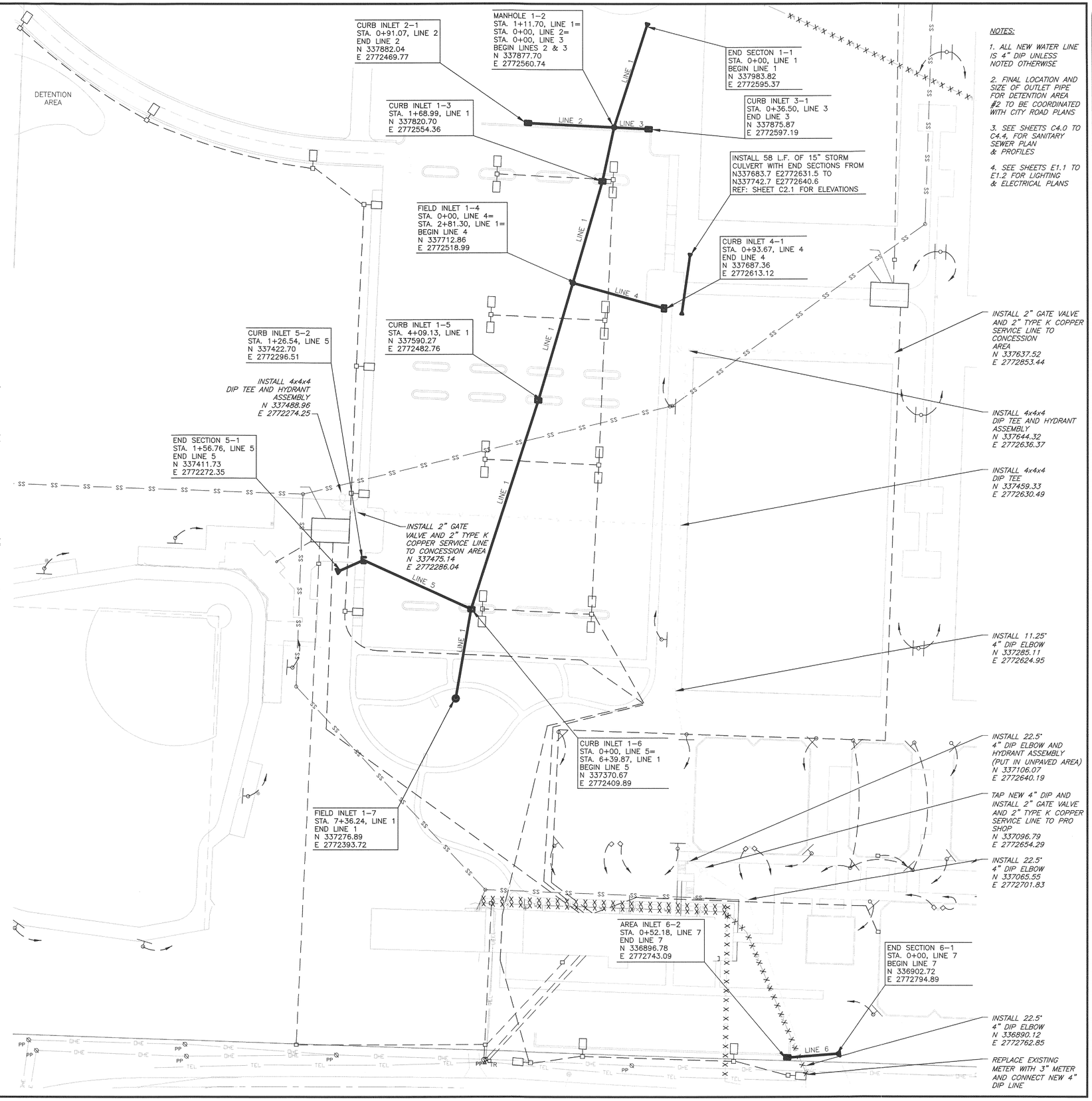
- Wx — WATERLINE
- SSx — SANITARY SEWER
- OHE — ELECTRIC LINE (OVERHEAD)
- Ex — ELECTRIC LINE (UNDERGROUND)
- Gx — GAS LINE
- TEL — TELEPHONE

PROPOSED

- W — WATERLINE
- SS — SANITARY SEWER
- ELECTRIC LINE (UNDERGROUND)
- APPROX. CONDUIT LOCATION
- LIGHT POLES
- DEMOLISHED OR ABANDONED

DETENTION AREA TO NORTH





NOTES:

1. ALL NEW WATER LINE IS 4" DIP UNLESS NOTED OTHERWISE
2. FINAL LOCATION AND SIZE OF OUTLET PIPE FOR DETENTION AREA #2 TO BE COORDINATED WITH CITY ROAD PLANS
3. SEE SHEETS C4.0 TO C4.4, FOR SANITARY SEWER PLAN & PROFILES
4. SEE SHEETS E1.1 TO E1.2 FOR LIGHTING & ELECTRICAL PLANS

BWR
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P 816.363.2696 | F 816.363.0027

City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
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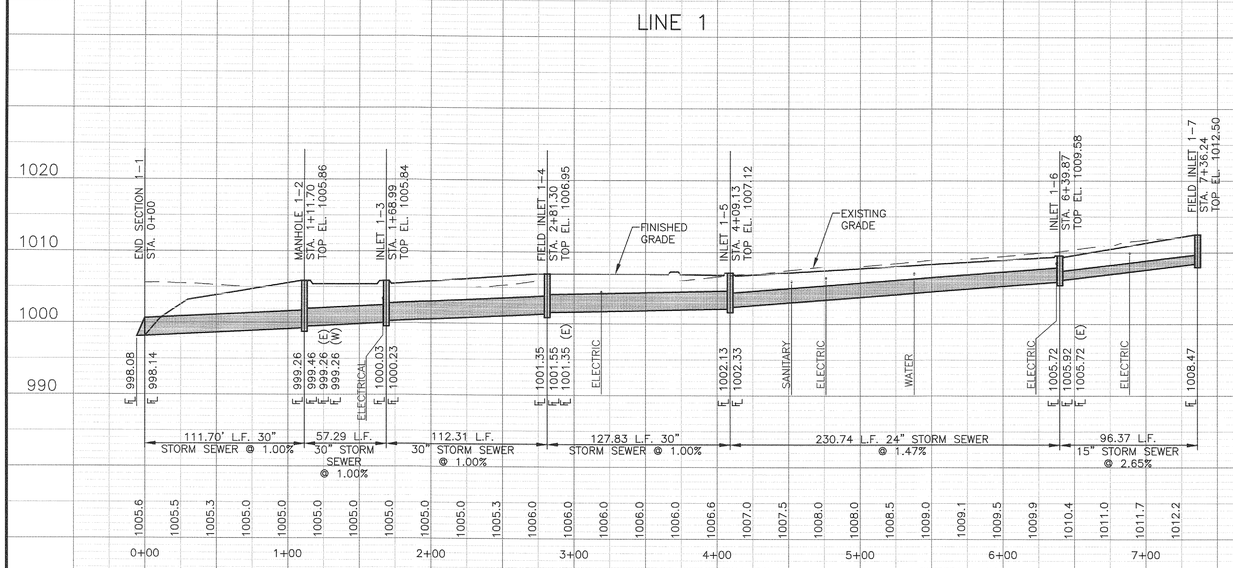
Utility Plan

C3.0

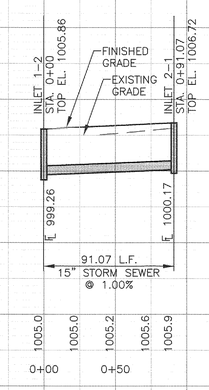
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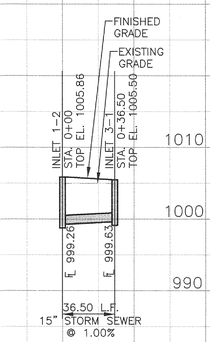
LINE 1



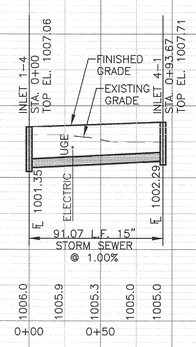
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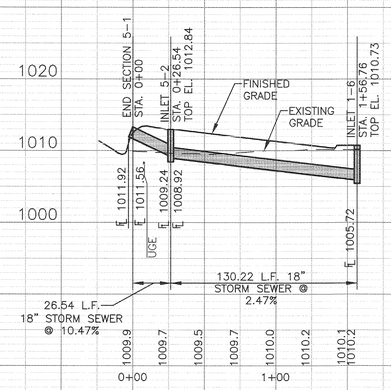
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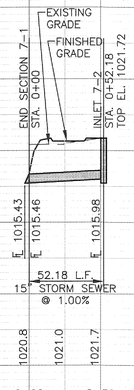
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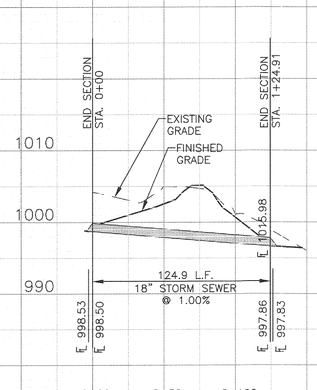
LINE 5



LINE 6



OUTLET STRUCTURE (DET. AREA 1)



HORIZONTAL
50 0 50 100
Scale in Feet

VERTICAL
10 0 10 20
Scale in Feet

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
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JBB/TMP	7-03-07
REVISIONS	DATE

ISSUE DATE

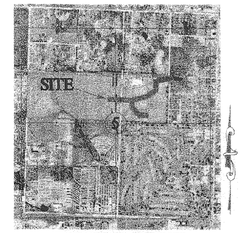
STORM SEWER PROFILES

C3.1

SHEET OF

Drawing Name: Q:\2006-0924\01-1stProject\Civil\ACAD\C3.1 STORM PROFILES.dwg Jul 12,2007 - 11:06am





LOCATION SKETCH

SECTION 5
T 27 N, R 33 W
SCALE: 1"=2000'

NOTE: CONTOUR ELEVATIONS SHOWN ON THIS SET OF PLANS ARE PRE-DEVELOPED ELEVATIONS.

SHEET INDEX

C4.0. OVERALL PLAN
C4.1. STA 0+00 TO STA 7+00
C4.2. STA 6+00 TO 17+00
C4.3. STA 16+00 TO 23+00
C4.4. SANITARY SEWER ALTERNATE

ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITY OF JOPLIN DATED 12/28/2004

THE FOLLOWING SECTIONS SHALL BE APPLICABLE TO THIS PROJECT:

DIVISION 1000 EARTHWORK

SECTION 1700 TRENCHING

DIVISION 3000 CONCRETE WORK

SECTION 3100 PORTLAND CEMENT CONCRETE

DIVISION 4000 SEWER

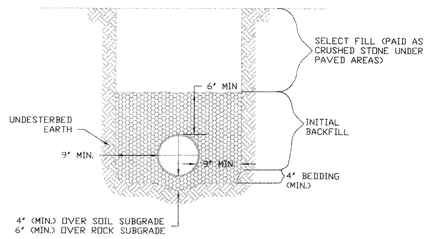
SECTION 4100 SANITARY SEWER MAIN
SECTION 4300 CONCRETE MANHOLES

COPIES OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED IN THEIR ENTIRETY ON-LINE AT THE FOLLOWING ADDRESS:

http://www.joplinmo.org/downloads/PW/CityStandards/StandardSpecs/writspecs.pdf

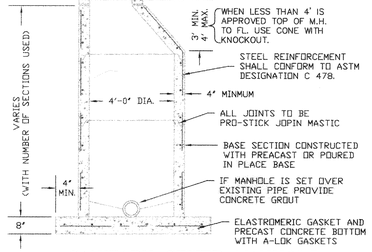
TRENCHING AND BEDDING NOTES:

1. BEDDING AND INITIAL BACKFILL SHALL BE WELL GRADED CRUSHED STONE 3/4" TO 1/4" WITH LESS THAN 5% PASSING THE #4 SIEVE.
2. BEDDING AND INITIAL BACKFILL SHALL BE COMPACTED TO 95% STANDARD PROCTOR (ASTM D 698) IN 8" LOOSE LIFTS.
3. SELECT FILL MAY BE EARTH BACKFILL FREE OF LARGE STONE AND ORGANIC MATERIAL IF NOT UNDER TRAFFIC AREAS
4. IN TRAFFIC AREAS TRENCHES SHALL BE COMPLETELY BACKFILLED WITH CRUSHED STONE TO FINISHED SUB- GRADE AND COMPACTED TO 95% STANDARD PROCTOR (ASTM D 698)
5. TRENCHES GREATER THAN 5 FEET IN DEPTH SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED PER OSHA AND LOCAL ORDINANCES.



SANITARY SEWER TRENCHING AND BEDDING
NOT TO SCALE

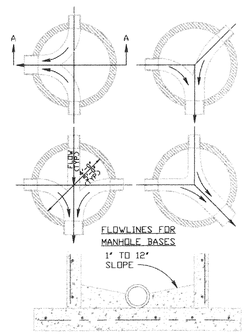
NOTE:
USE AN "A-LOK" GASKETED FLEXIBLE WATERTIGHT CONNECTION FOR ALL INLET AND OUTLET PIPES, OR APPROVED EQUAL.



SANITARY SEWER MANHOLE
NOT TO SCALE

GRAPHIC SCALE

100 0 50 100 200 400
(IN FEET)
1 inch = 100 ft.



INVERT DETAIL



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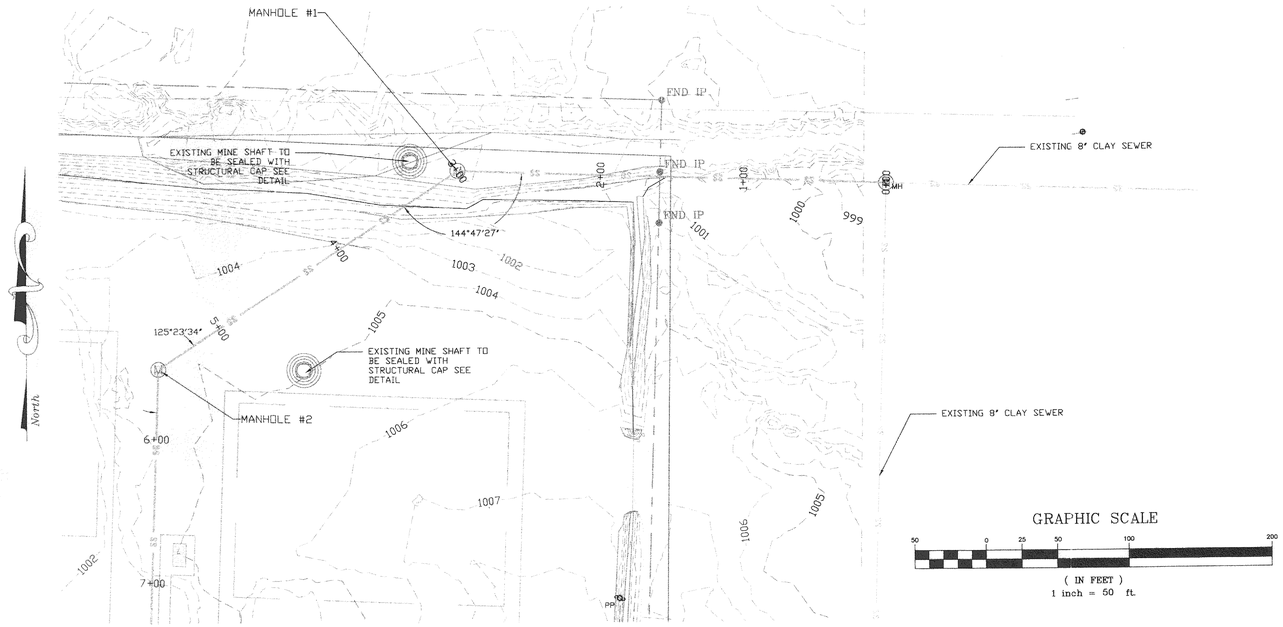
JOPLIN SPORTS COMPLEX

SANITARY SEWER OVERALL PLAN

JOPLIN, MISSOURI

DRAWING NO. JOP-100-1637

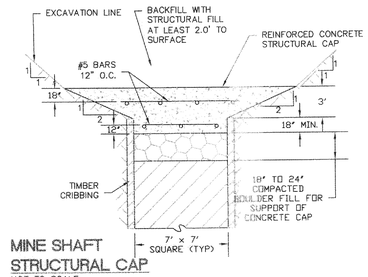
SHEET NUMBER C4.0 OF 4.4



GRAPHIC SCALE

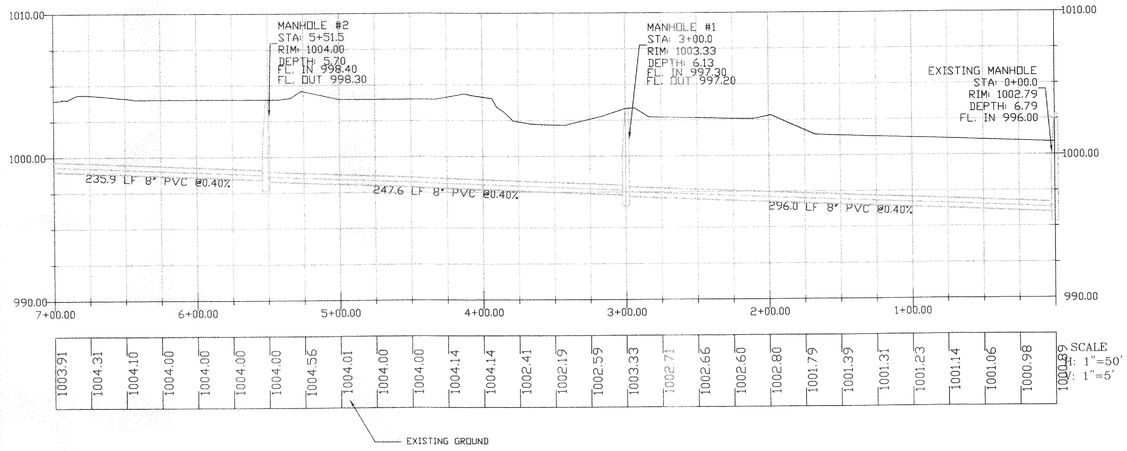
50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



MINE SHAFT STRUCTURAL CAP
NOT TO SCALE

NOTE:
1) MINE SHAFTS SHALL BE EXCAVATED TO THE TOP OF THE CRIBBING PRIOR TO CONSTRUCTING STRUCTURAL CAP.
2) PAYMENT FOR EXCAVATION AND BACKFILL SHALL BE BASED ON A UNIT PRICE COST, PER CUBIC YARD FOR EXCAVATION, PER CUBIC YARD FOR STRUCTURAL FILL. EXCAVATED SLOPES SHALL BE 1 HORIZONTAL FOR 1 VERTICAL TO THE TOP OF THE STRUCTURAL CAP.
3) THE APPROXIMATE LOCATION OF THE MINE SHAFTS CAN BE SEEN AT THE SITE BY OBSERVING AREAS WITH SOFTER SURFACE MATERIALS. THE OWNER MAY ELECT TO HAVE A REPRESENTATIVE DRILL APPROXIMATE LOCATION OF MINE SHAFT TO DETERMINE THE EXACT LOCATION.



STA 0+00 TO 7+00



ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS OF THE CITY OF JOPLIN DATED 12/28/2004

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DIVISION 1000 EARTHWORK

SECTION 1700 TRENCHING

DIVISION 3000 CONCRETE WORK

SECTION 3100 PORTLAND CEMENT CONCRETE

DIVISION 4000 SEWER

SECTION 4100 SANITARY SEWER MAIN
SECTION 4300 CONCRETE MANHOLES

COPIES OF THE STANDARD SPECIFICATIONS MAY BE OBTAINED IN THEIR ENTIRETY ON-LINE AT THE FOLLOWING ADDRESS:

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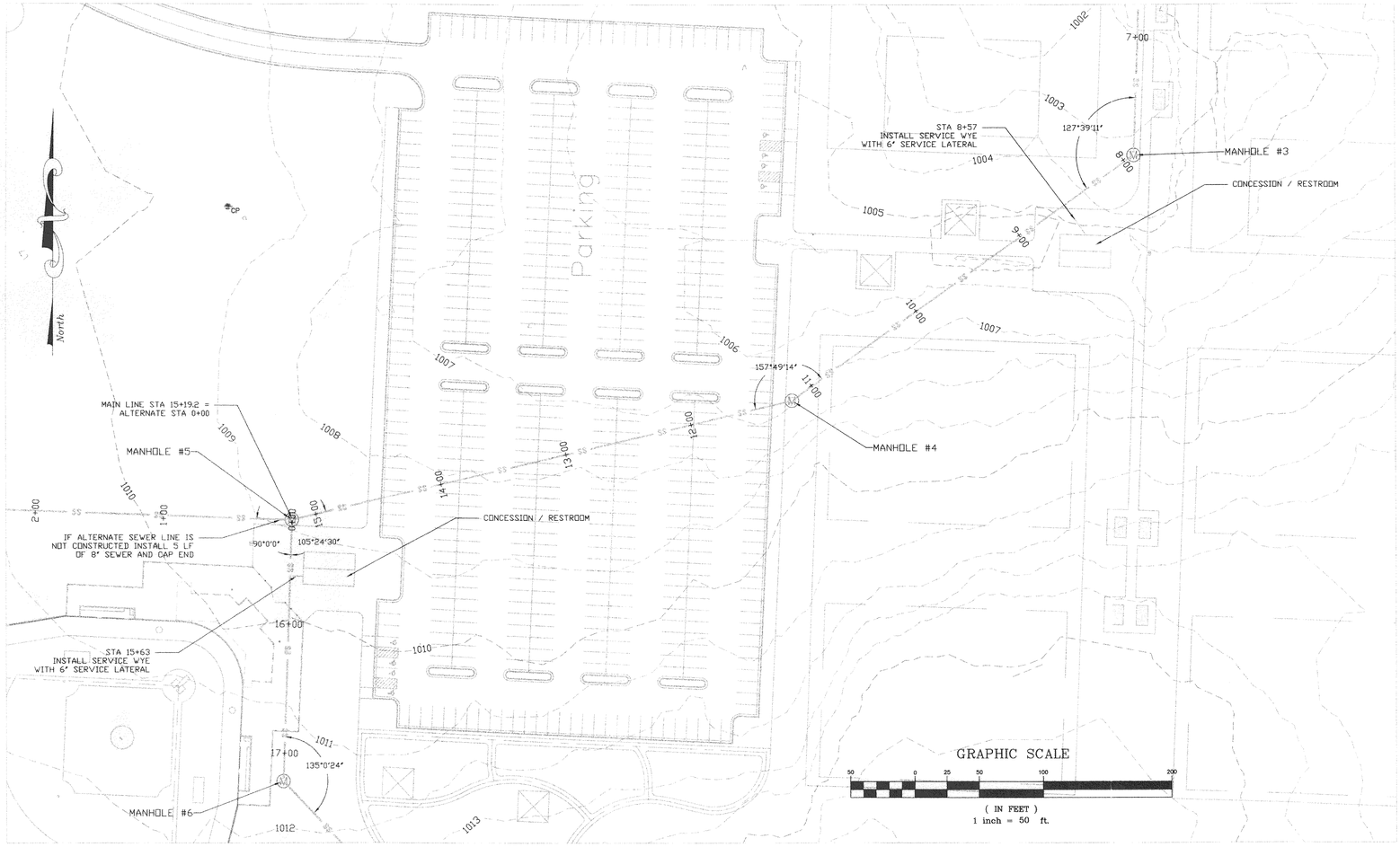
JOPLIN SPORTS COMPLEX

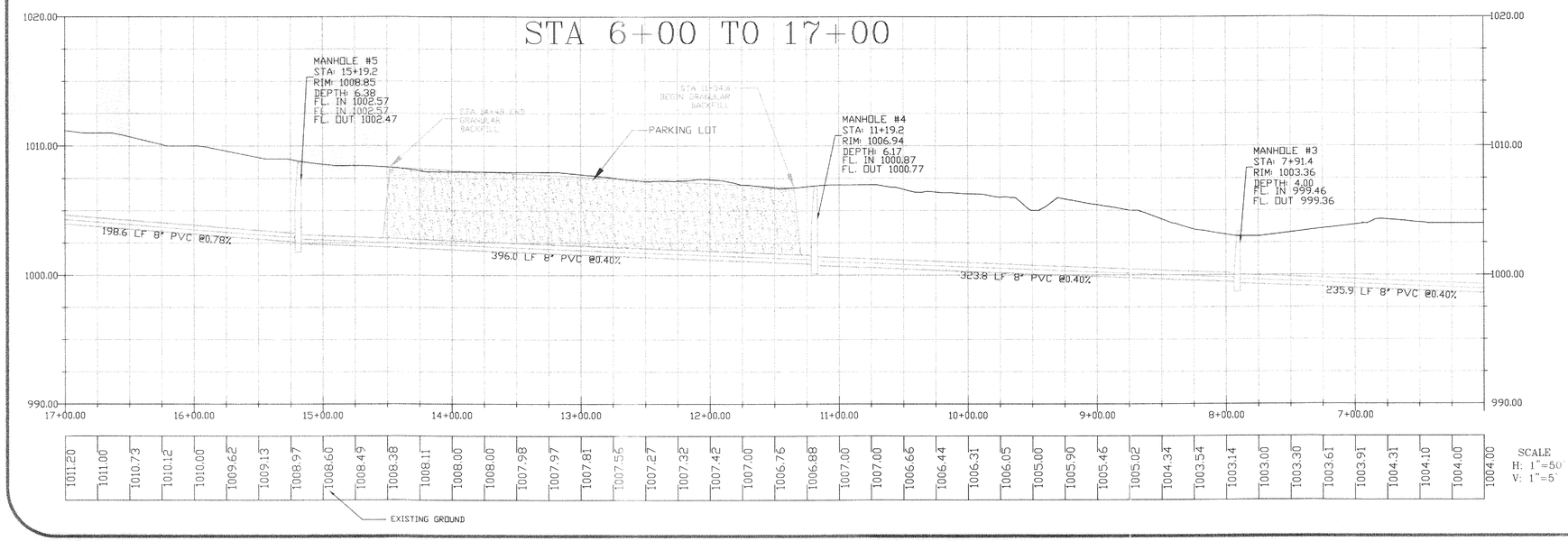
SANITARY SEWER STATION 0+00 TO 7+00

JOPLIN, MISSOURI

DRAWING NO. JOP-100-1637

SHEET NUMBER C4.1 OF 4.4





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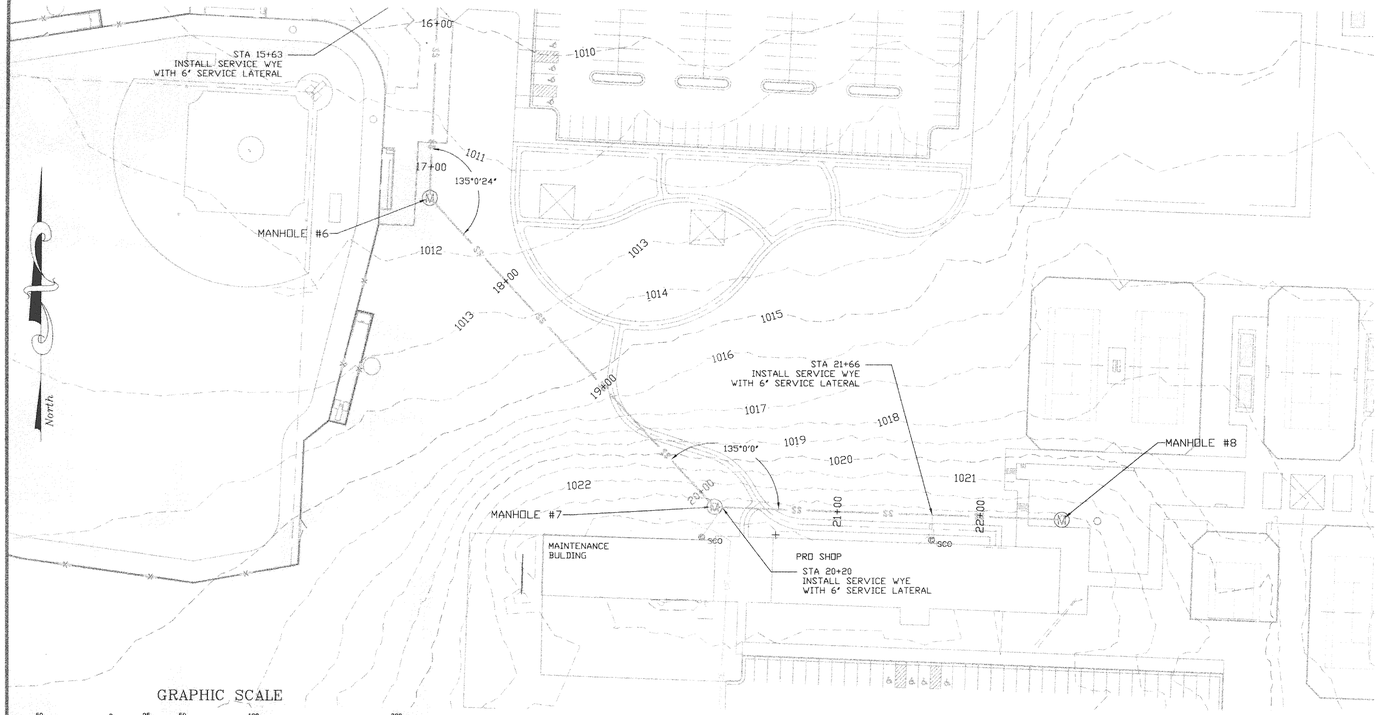
JOPLIN SPORTS COMPLEX

SANITARY SEWER STATION 6+00 TO 17+00

JOPLIN, MISSOURI

DRAWING NO.
JOP-100-1637

SHEET NUMBER
C4.2
OF 4.4

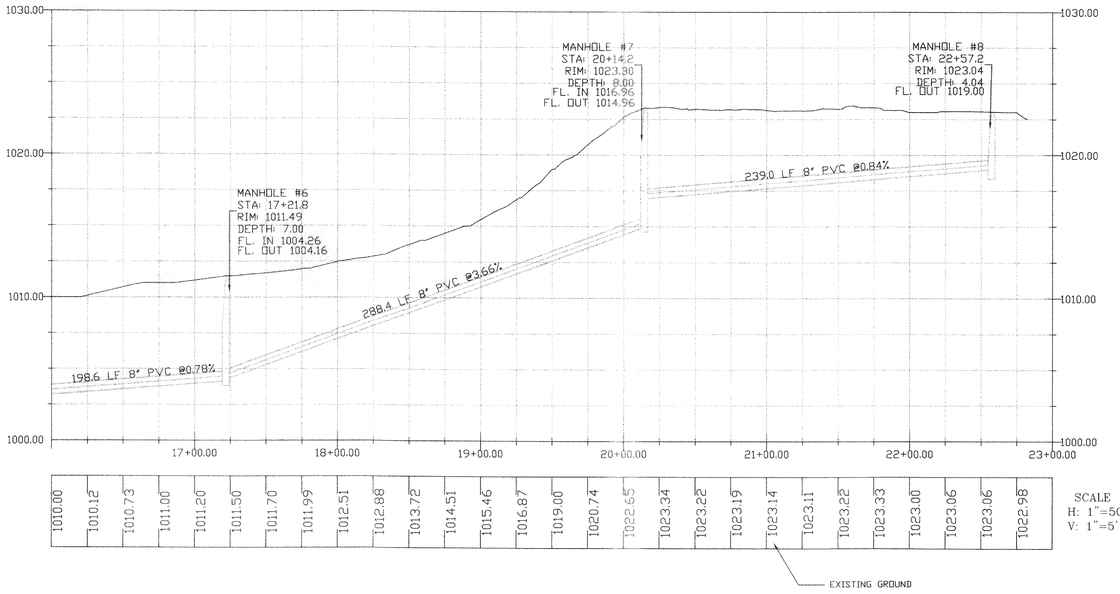


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

STA 16+00 TO 23+00



SCALE
H: 1"=50'
V: 1"=5'



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JOPLIN SPORTS COMPLEX

SANITARY SEWER STATION 16+00 TO 23+00

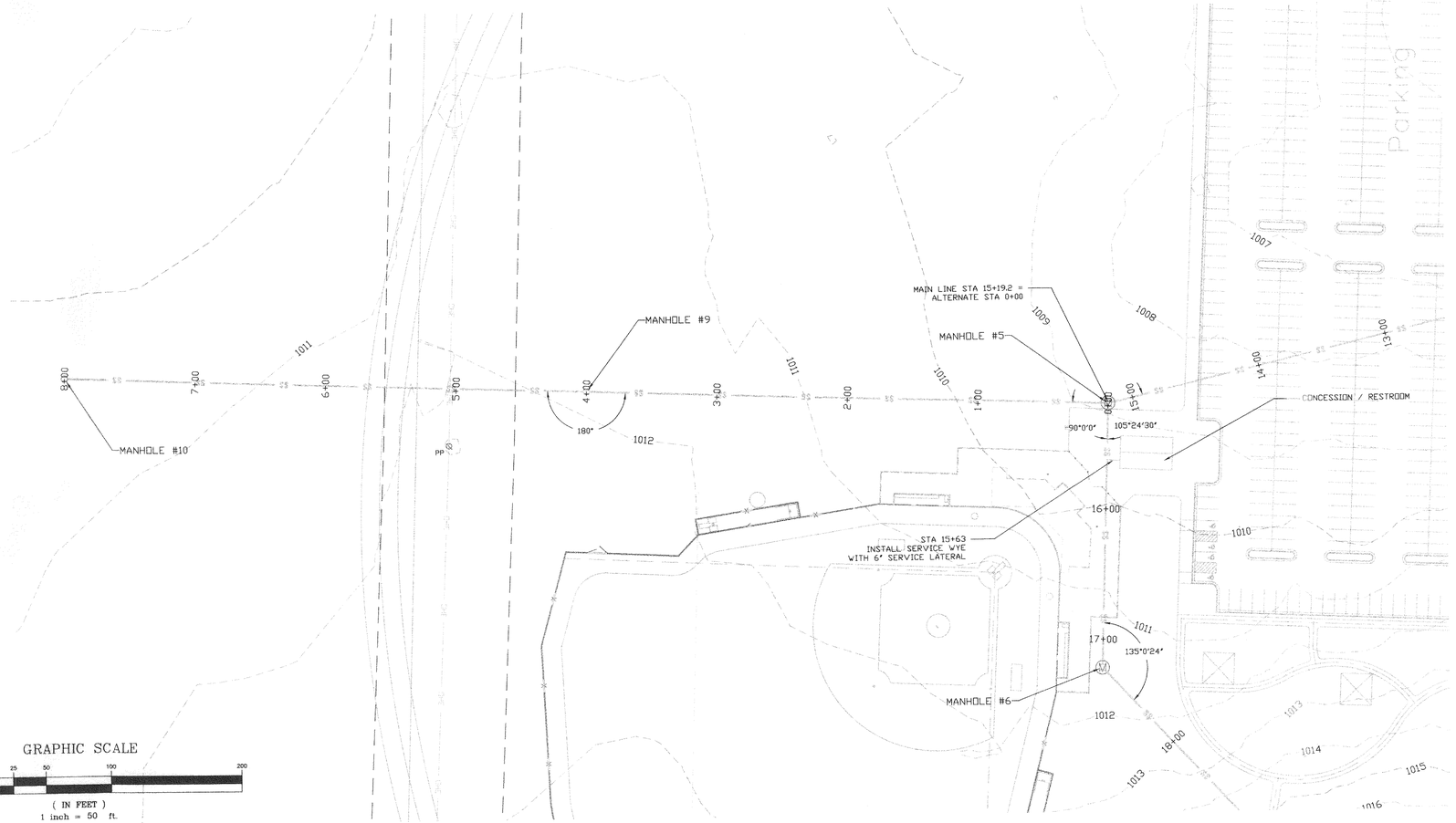
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SHEET NUMBER C4.3 OF 4.4

ALTERNATE SANITARY SEWER LINE

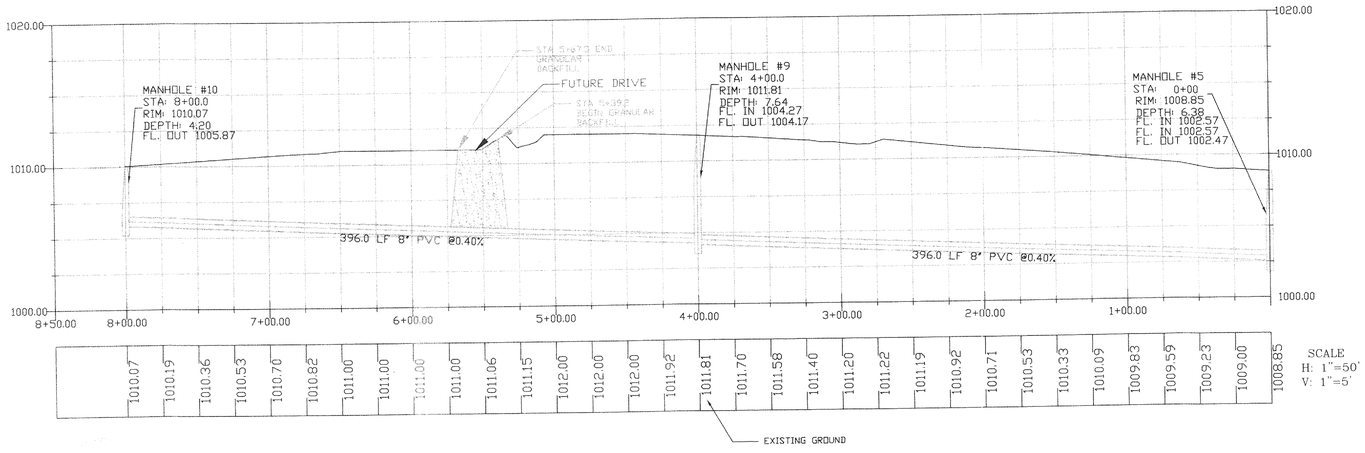
North



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



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SECTION 4500 CONCRETE MANHOLES

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STATE OF MISSOURI
WILLIAM C. SMITH
NUMBER
PE 2003015040
PROFESSIONAL ENGINEER

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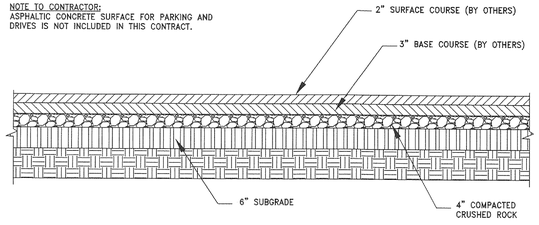
ALTERNATE SANITARY SEWER LINE

JOPLIN, MISSOURI

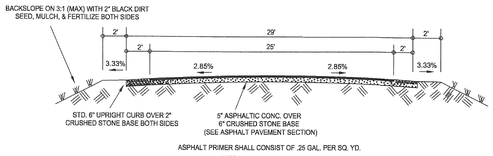
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SHEET NUMBER C4.4 OF 4.4

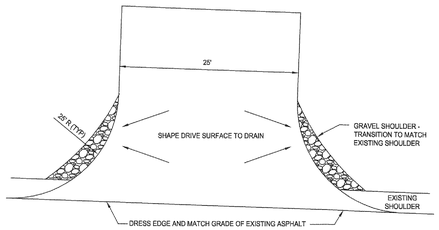
NOTE TO CONTRACTOR:
ASPHALTIC CONCRETE SURFACE FOR PARKING AND DRIVES IS NOT INCLUDED IN THIS CONTRACT.



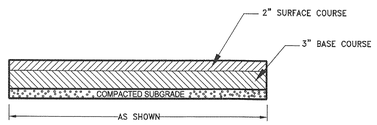
ASPHALT PAVEMENT SECTION
N.T.S.



TYPICAL SECTION
MAIN DRIVEWAY
N.T.S.

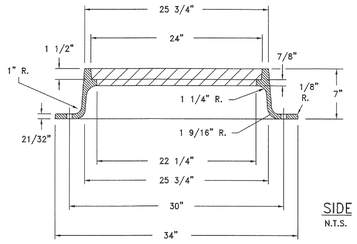


TYPICAL DRIVEWAY
N.T.S.



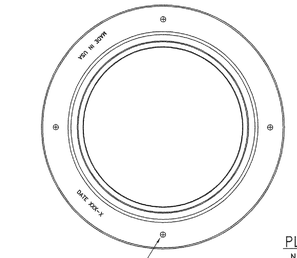
ASPHALT WALKWAY
N.T.S.

NOTE TO CONTRACTOR:
ASPHALTIC CONCRETE SURFACE FOR ASPHALT WALKWAYS IS INCLUDED IN THIS CONTRACT.

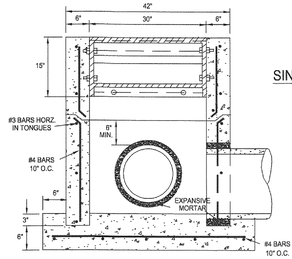


SIDE
N.T.S.

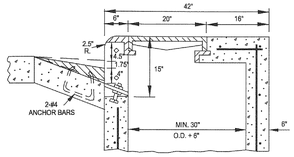
NOTE : NEENAH R-1668 CASTING OR EQUAVELENT.



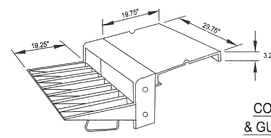
PLAN
N.T.S.



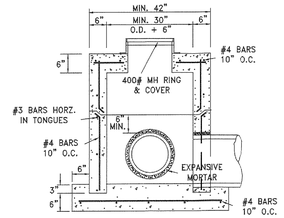
TYPE B
SINGLE CURB INLET
FRONT VIEW
N.T.S.



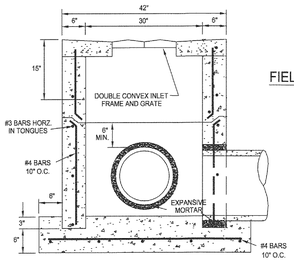
SIDE VIEW
N.T.S.



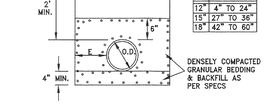
COVER PLATE
& GUTTER PLATE
N.T.S.



CONC. J'BOX
W/ MH RING
& COVER
N.T.S.

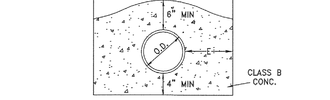


FIELD INLET
N.T.S.



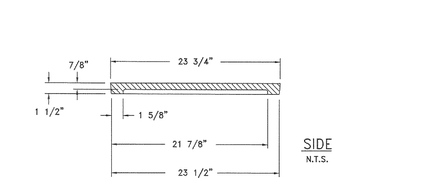
E	PIPE O.D.
12"	4" TO 24"
15"	27" TO 36"
18"	42" TO 60"

BEDDING DETAIL
N.T.S.

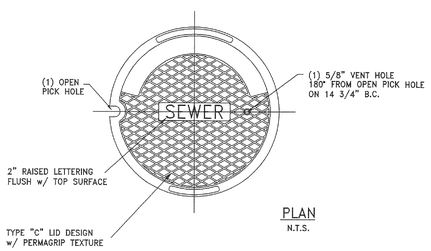


E	PIPE O.D.
9"	4" TO 24"
12"	27" TO 36"
15"	42" TO 60"

CONC. ENCASEMENT
N.T.S.

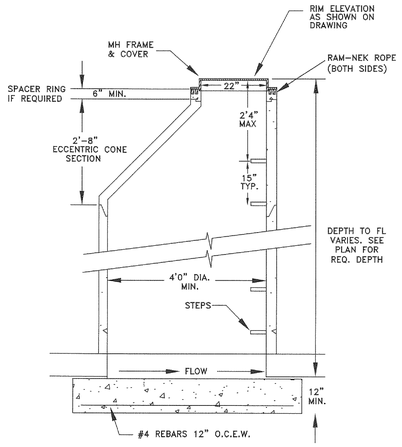


SIDE
N.T.S.

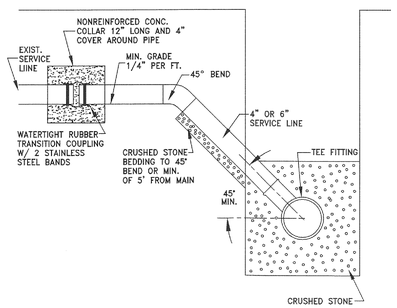


PLAN
N.T.S.

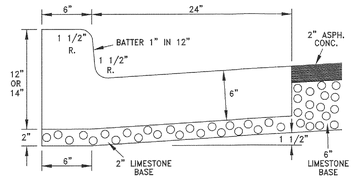
NOTE : NEENAH R-1668
CASTING OR EQUIVALENT



PRECAST MANHOLE DETAIL
N.T.S.



SERVICE CONNECTION
N.T.S.



NOTES:
1. BACK OF CURB IS 12" W/ 6" CURB & 14" W/ 8" CURB.
2. CONSTRUCT EXPANSION JOINT EACH 25'.
3. JOINT MATERIAL TO EXTEND THRU C & G, FRONT TO BACK, AND NEATLY TRIMMED TO MATCH CONC. SURFACE.
4. FLOAT GROUT TO SURFACE ON EXPOSED SURFACES.
5. CONC. SHALL BE 3000# TEST AT 28 DAY TEST FOR COMPRESSIVE STRENGTH.

STD UPRIGHT C & G
N.T.S.

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City of Joplin, Missouri
Parks and Recreation Department

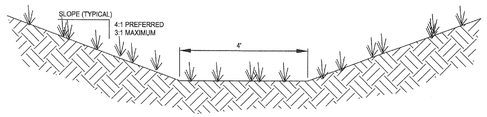
Joplin Sports Complex - Phase One
Joplin, Missouri

PROJECT NO. 20060924
DRAWN BY RCL DATE
CHECKED BY JBB DATE
DESIGNED BY TMP DATE
REVISIONS DATE
ISSUE DATE 4-27-07

CIVIL DETAILS

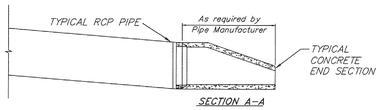
C5.1

SHEET OF

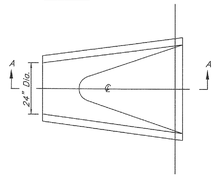


TYPICAL SWALE

N.T.S.



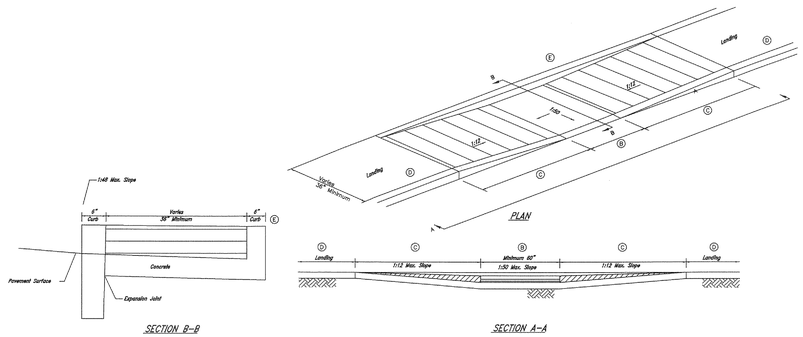
PLAN



TOP VIEW

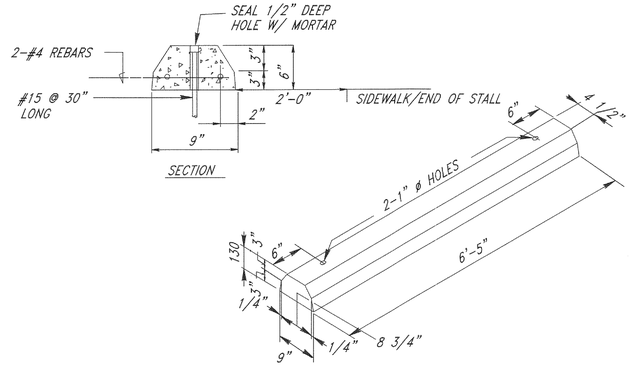
FLARED END SECTION

N.T.S.



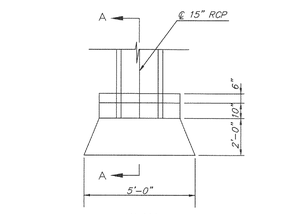
SIDEWALK RAMP DETAIL

N.T.S. (APPLICABLE FOR ALTERNATE Z ONLY)

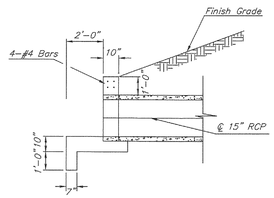


PRECAST CONCRETE WHEEL STOP

N.T.S.



PLAN



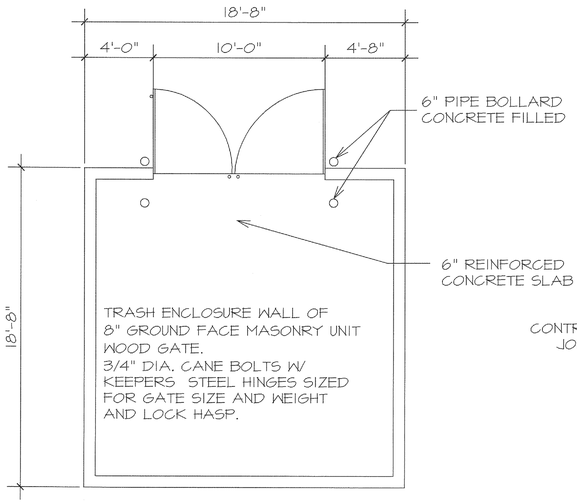
SECTION A-A

NOTE:

1. Reinforcing Steel Shall be #4 bars @ 9" Centers each way, Unless Indicated Otherwise.
2. Slab Section Shall Have One Layer of Reinforcing Steel.

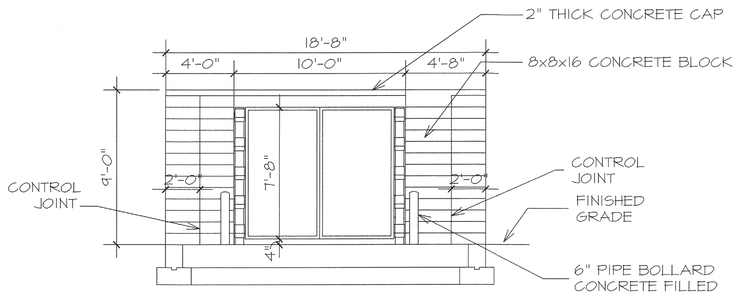
POND OUTLET HEADWALL

N.T.S.

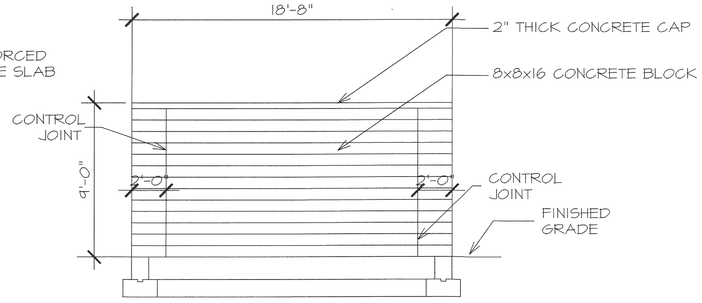


TRASH ENCLOSURE PLAN

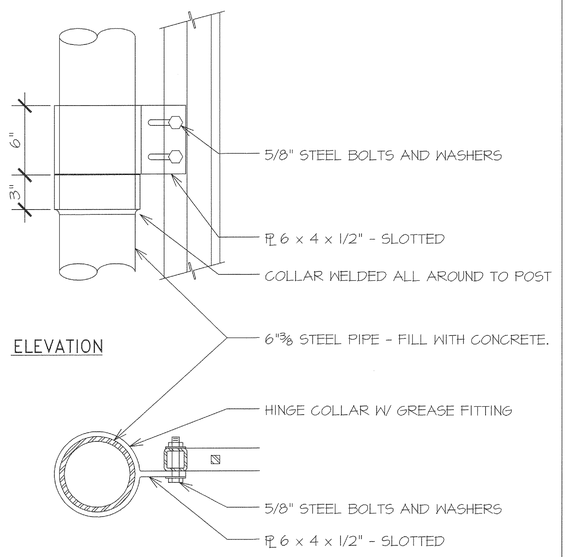
N.T.S.



TRASH ENCLOSURE FRONT ELEVATION



TRASH ENCLOSURE SIDES/BACK ELEVATION



TRASH ENCLOSURE HINGE DETAIL

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
Joplin, Missouri

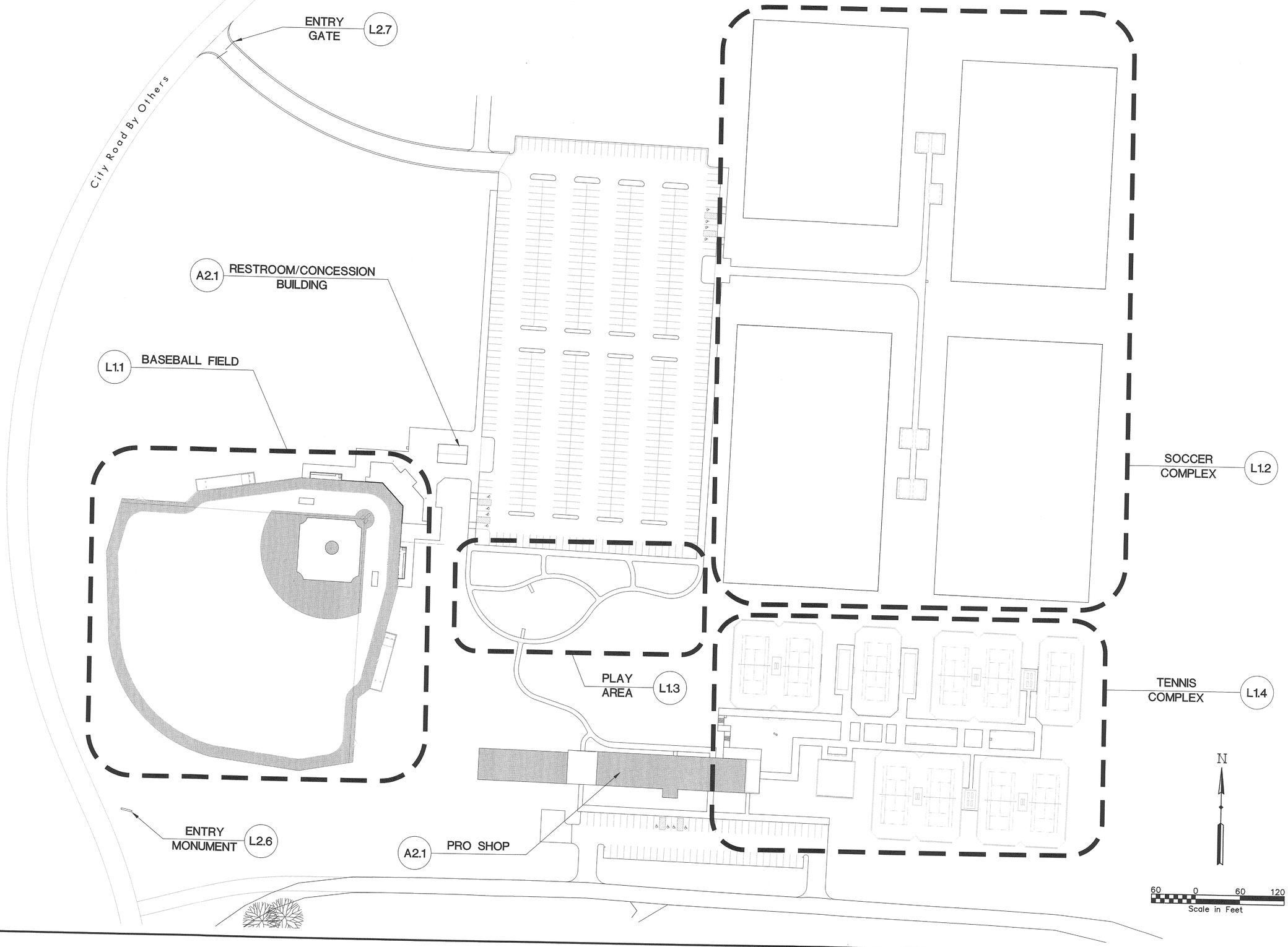
PROJECT NO.	20060924
DRAWN BY	RCL
DATE	7-5-2007
CHECKED BY	JBB
DATE	7-12-2007
DESIGNED BY	TMP
DATE	7-5-2007
REVISIONS	DATE
ISSUE DATE	4-27-07

CIVIL DETAILS

C5.2

SHEET OF

Drawing Name: Q:\2006-0924\01 - 1st\Project\Civil\ACAD\C5.2 CIVIL DETAIL SHEET.dwg Jul 13,2007 - 10:49am



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City of Joplin, Missouri
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Joplin Sports Complex - Phase One

PROJECT NO.	20060924
DRAWN BY	GAH
DATE	
CHECKED BY	MHM
DATE	
DESIGNED BY	GAH
DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Site Reference Plan

L1.0

SHEET 28 OF 74

Drawing Name: Q:\2006-0924\01-1stProject\PRL\ACAD\Final CD\sL1.0_Site Reference.dwg Jul 13,2007 - 2:22pm

CONCRETE SLAB FOR BATTING CAGES-SEE SHEET L2.8 FOR LAYOUT

N 337497.46
E 2771822.10

1 / L2.3 **BASEBALL PLAZA LAYOUT**

N 337423.46
E 2771858.10

N 337407.85
E 2771995.62

N 337395.51
E 2771917.23

N 337383.45
E 2771815.48

330'

N 337379.50
E 2771901.68

MAINTENANCE GATE SEE DETAIL 1 SHEET L2.8

N 337311.89
E 2771795.76

SCOREBOARD-SEE DETAIL 2 ON SHEET L2.5 FOR LOCATION

PLAY AREA - SEE DETAIL SHEET L1.3 FOR DETAILS

N 337211.37
E 2772174.85

N 337190.54
E 2771801.19

N 337215.29
E 2771981.85

R 402'

R 182.34'

R 20'

R 25'

BULL PEN SEE DETAIL 3 SHEET L2.1 (TYP)

N 337134.45
E 2772155.39

N 337120.42
E 2772138.01

APPROXIMATE LOCATION OF BATTER'S EYE - SEE SHEET L2.8 FOR DETAILS

R 25' TYP.

MAINTENANCE GATE SEE DETAIL 1 SHEET L2.8

N 337037.67
E 2771940.65

N 337034.23
E 2772134.06

N 337021.14
E 2772060.99

N 336961.43
E 2771836.76

ALTERNATE J
ENTRY MONUMENT (APPROXIMATE LOCATION) TO BE LOCATED IN FIELD BY LANDSCAPE ARCHITECT. SEE SHEET L2.6 FOR DETAILS

N

30 0 30 60
Scale in Feet

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PROJECT NO.	20060924
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DESIGNED BY	GAH/MHM
REVISIONS	DATE
ISSUE DATE	7-11-07

Baseball Field Layout

L1.1

SHEET 29 OF 74

Drawing Name: Q:\2006-0924\01-1stProject\PRL\ACAD\Final CDs\L1.0-L1.2 Baseball Soccer Layout.dwg, Jul 12,2007 - 1:55pm

END 8' CHAIN LINK FENCE

N 338071.54
E 2772638.76

N 338065.32
E 2772811.47

BEGIN 8' CHAIN LINK FENCE

4' CHAIN LINK FENCE

FIELD 4

ALTERNATE F
SUBSTITUTE SOD FOR SEED ON SOCCER FIELD 4

100'

270'

210'

FIELD 1

300'

210'

SCOREBOARD - LOCATE AT CENTER OF FIELD 20' OUT AND PARALLEL TO THE PERIMETER OF FIELD (TYP.) SEE SPECIFICATIONS FOR DETAILS.

N 337841.92
E 2773169.19

COORDINATE IS THE APPROXIMATE CENTER OF THE SCOREBOARD

4' ORNAMENTAL METAL FENCE W/GATE

SOCCER ENTRY PLAZA L1.3

210'

4' CHAIN LINK FENCE

FIELD 3

N 337461.69
E 2772620.22

SCOREBOARD

350'

210'

FIELD 2

350'

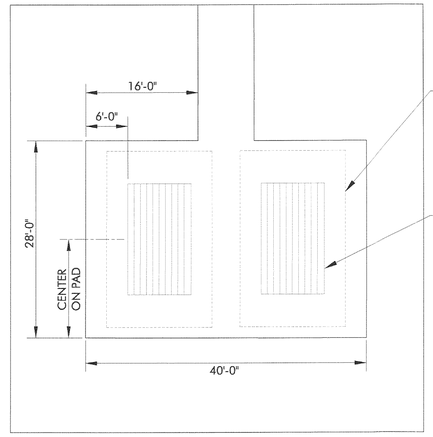
SCOREBOARD

N 337442.18
E 2773154.79

BLEACHER PAD LAYOUT L1.2

END 4' CHAIN LINK FENCE

TENNIS COURT FENCING



1 TYPICAL BLEACHER PAD LAYOUT AT SOCCER FIELDS
1"=20'-0"

N

40 0 40 80
Scale in Feet

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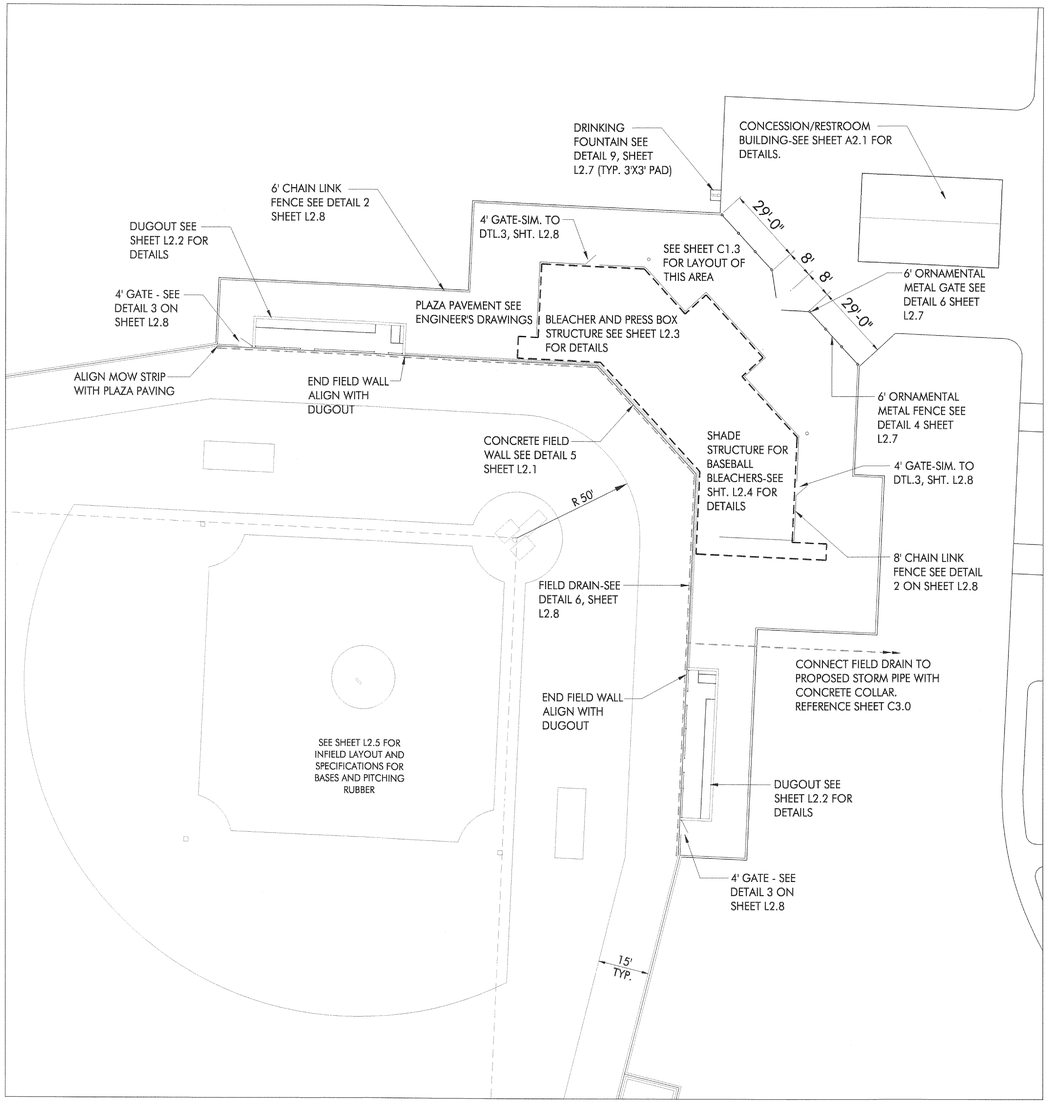
PROJECT NO.	20060924
DRAWN BY	GAH
DATE	
CHECKED BY	MHM
DATE	
DESIGNED BY	GAH
DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Soccer Complex Layout

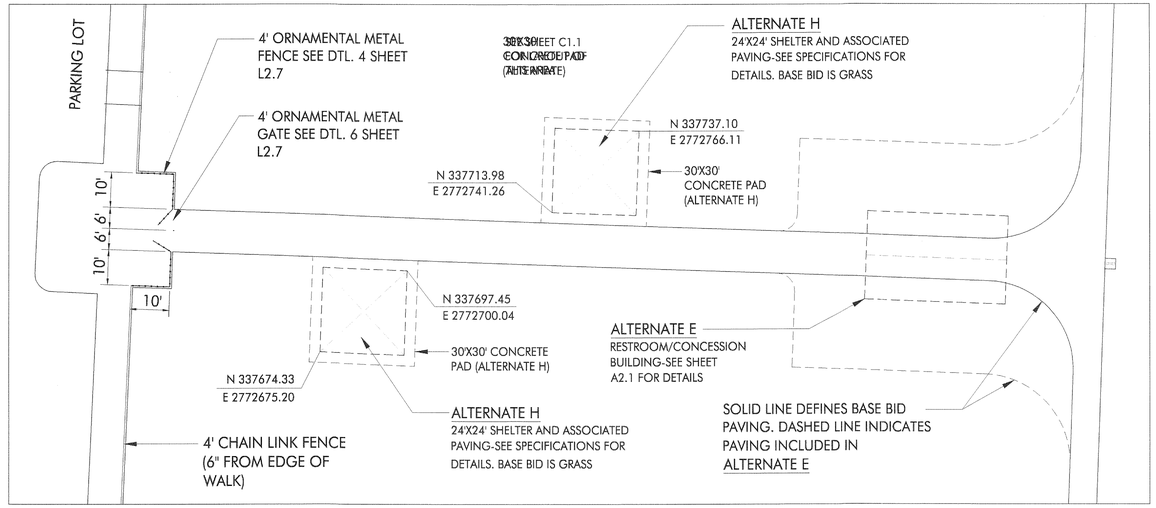
L1.2

SHEET 30 OF 74

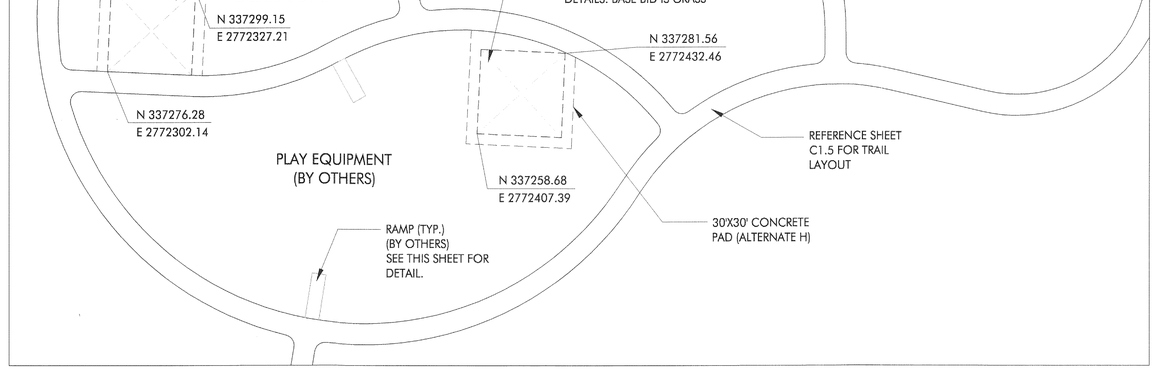
Drawing Name: Q:\2006-0924\01-1st Project\PRL\ACAD\Final CDs\L1.0-L1.2 Baseball Soccer Layout.dwg, Jul 12,2007 - 1:57pm



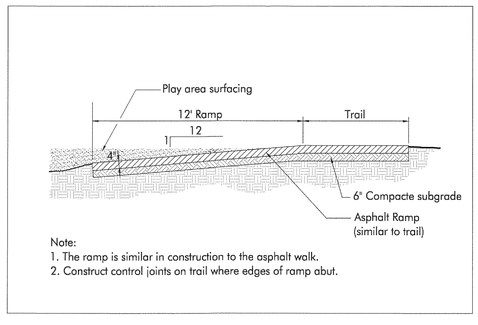
1 BASEBALL FIELD
1"=20'



2 SOCCER ENTRY PLAZA
1"=20'

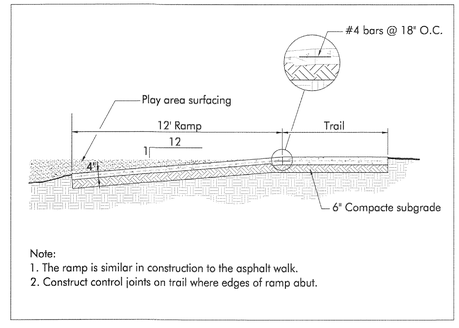


3 PLAY AREA
1"=20'



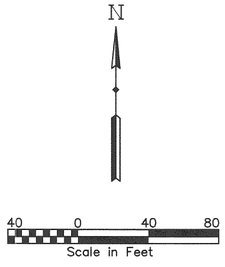
Note:
1. The ramp is similar in construction to the asphalt walk.
2. Construct control joints on trail where edges of ramp abut.

4 ASPHALT RAMP AT PLAY AREA
1/16"=1'-0"



Note:
1. The ramp is similar in construction to the asphalt walk.
2. Construct control joints on trail where edges of ramp abut.

5 CONCRETE RAMP AT PLAY AREA
1/16"=1'-0"



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Joplin Sports Complex - Phase One

PROJECT NO.	20060924
DRAWN BY	GAH
DATE	
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DATE	
DESIGNED BY	GAH
DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Baseball, Soccer Play Area

L1.3

SHEET 31 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\PRL\ACAD\Final CDs\L1.3 Baseball Soccer Play.dwg Jul 12,2007 - 1:59pm

ADD ALTERNATE I
TENNIS COURTS, FENCING, WINDSCREEN, ASSOCIATED PAVING, SEATING AND SHADE STRUCTURES

10' CHAIN LINK PERIMETER FENCING BETWEEN COURTS. TOP TO BE KEPT AT SAME ELEVATION AS TENNIS COURT FENCING.

SHADE STRUCTURE (TYP.) AT SPECTATOR BLEACHERS-SEE SHEET L1.5 FOR LAYOUT

WINDSCREEN-SEE SPECS FOR DETAILS. INSTALL ON COURT SIDE OF FENCE

SEE SHEET L1.5 FOR COURT LAYOUT

SHADE STRUCTURE (TYP.) AT PLAYER SEATING-SEE SHEET L1.5 FOR LAYOUT

SEE SHEET L1.5 FOR COURT LAYOUT

COURT 11

COURT 12

COURT 1

COURT 2

COURT 3

COURT 4

COURT 5

COURT 6

PLANTING

PLANTING

ACCESS GATES

TYPICAL PLAYER SEATING SEE DTL. 7 SHEET L1.5 FOR LAYOUT

CENTER COURT SEATING SEE SHEET L1.5 FOR LAYOUT

GATES-SEE SHEET L1.5

ACCESS GATES

TYPICAL SPECTATOR SEATING SEE SHEET L1.5 FOR LAYOUT

SHADE STRUCTURE (TYP.) AT SPECTATOR SEATING-SEE SHEET L1.5 FOR LAYOUT

ASPHALT SIDEWALK

ASPHALT SIDEWALK

ORNAMENTAL METAL FENCE SEE SHEET L2.7 FOR DETAILS

WATER FOUNTAIN SEE DTL. 9 ON SHEET L2.7

SITE BENCH-SEE DTL. 5 ON SHEET L1.5 FOR DETAILS (TYP.)

GATES-SEE SHEET L1.5

ALTERNATE H
PICNIC SHELTER AND RELATED PAVING SEE SPECIFICATIONS FOR DETAILS. BASE BID IS GRASS

SITE BENCH (TYP.)

WATER FOUNTAIN SEE DTL. 9 SHEET L2.7

ACCESS GATE

PERIMETER FENCING

EDGE OF WALK

PLANTING

CONCRETE STEPS WITH HANDRAILS SEE SHEET L2.7 FOR DETAILS

PLANTING- SEE SHEET L3.0 FOR LAYOUT

PLANTING

SITE BENCH

4' ACCESS

PRACTICE COURT

PLANTING

ACCESS GATES

ACCESS GATES

COURT 10

COURT 9

COURT 8

COURT 7

PRO SHOP

ASPHALT SIDEWALK

PLANTING

PLANTING

CONTROLLED ACCESS GATE SEE DTL. 5 ON SHEET L2.7 FOR DETAILS

SHADE STRUCTURE SEE SPECIFICATIONS FOR DETAILS

ORNAMENTAL METAL FENCING

PRACTICE BACKBOARD SEE DTL.8 SHEET L1.5 FOR SPECIFICATIONS

N

LEGEND

WINDSCREEN-SEE SPECIFICATIONS FOR DETAILS. INSTALL ON COURT SIDE OF FENCE WHERE SHOWN ON PLAN. SEE DETAIL 1 ON SHEET L2.57

NOTE:
SEE SHEET C1.4 FOR TENNIS COMPLEX LAYOUT AND L1.5 FOR COURT LAYOUTS.

20 0 20 40
Scale in Feet

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

PROJECT NO. 20060924
DRAWN BY GAH DATE
CHECKED BY MHM DATE
DESIGNED BY MHM/GAH DATE
REVISIONS DATE

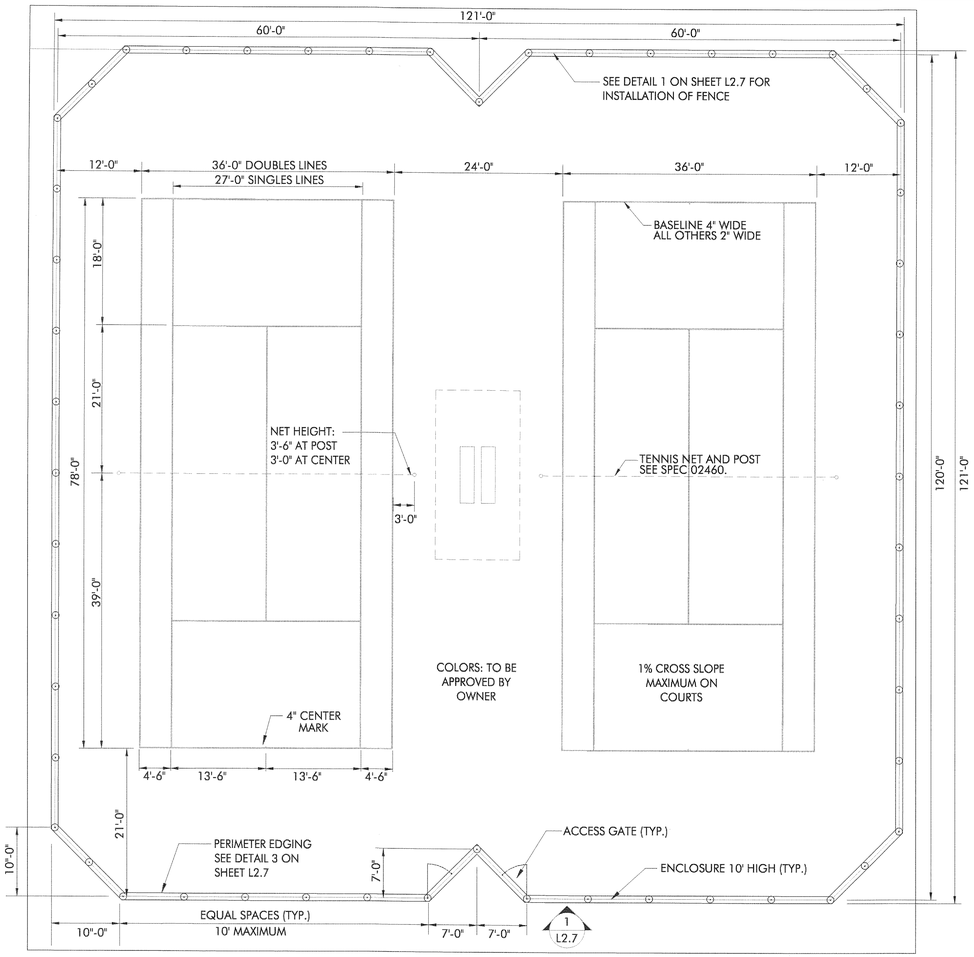
ISSUE DATE 7-11-07

Tennis Complex Layout

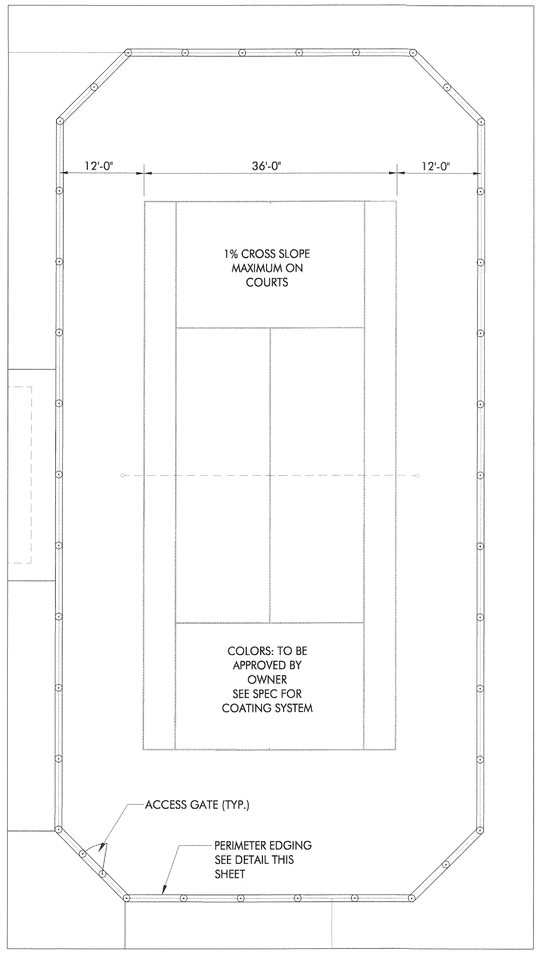
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SHEET 32 OF 74

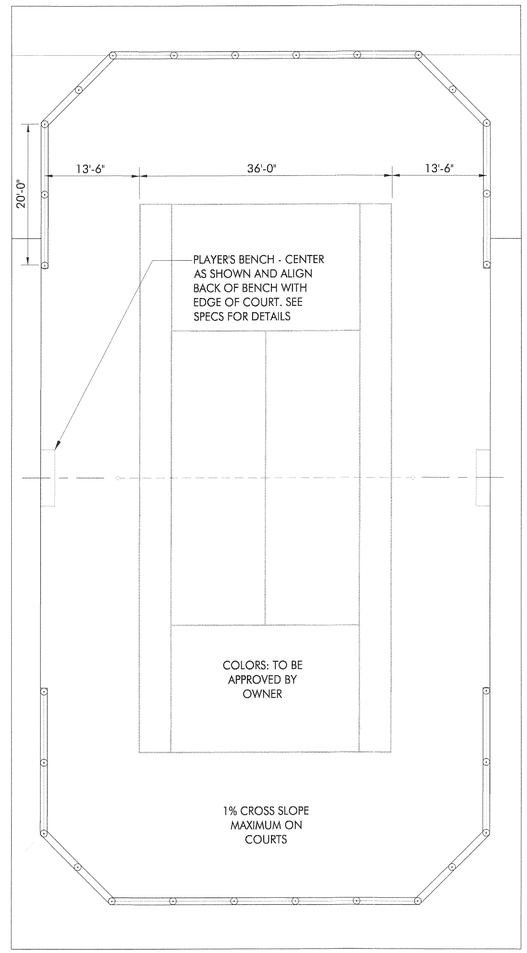
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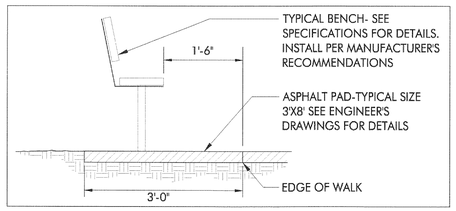
1 COURT DIMENSIONS-PAIR
1"=10'



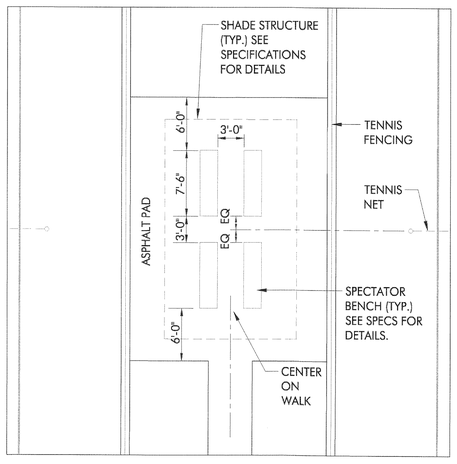
2 COURT DIMENSIONS-SINGLE
1"=10'



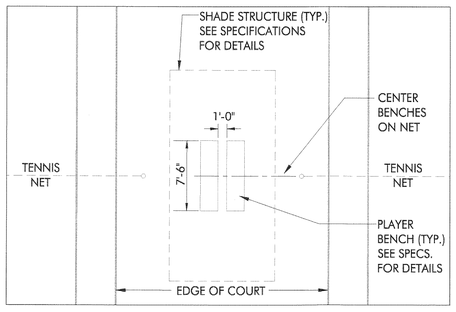
3 COURT DIMENSIONS-CENTER COURT
1"=10'



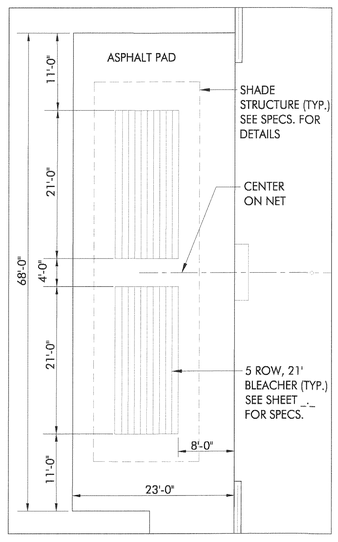
5 SITE BENCH
1/16"=1'-0"



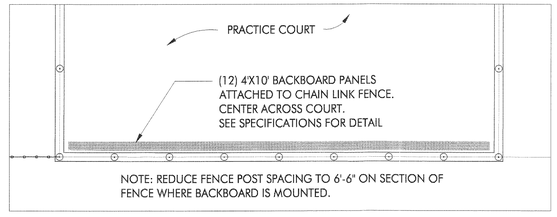
4 SPECTATOR SEATING
1/8"=1'-0"



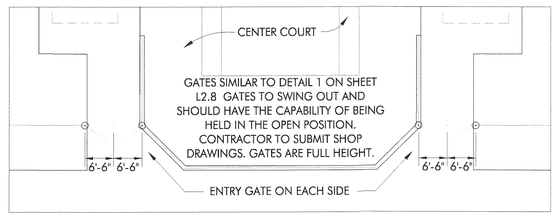
6 PLAYER SEATING
1/8"=1'-0"



7 SEATING LAYOUT AT CENTER COURT
1"=10'



8 PRACTICE COURT BACKBOARD
1/8"=1'-0"



9 CENTER COURT ACCESS GATES
1/16"=1'-0"

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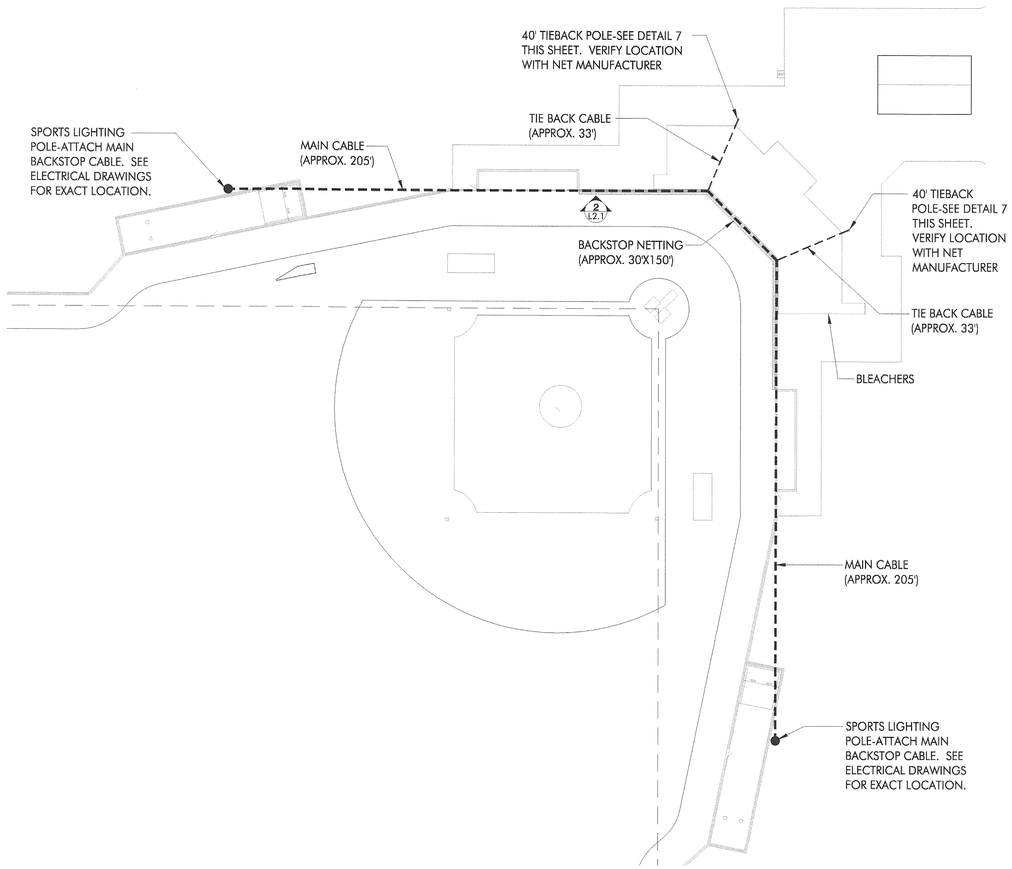
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DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	
DATE	
ISSUE DATE	7-11-07

Tennis Court Layouts and Details

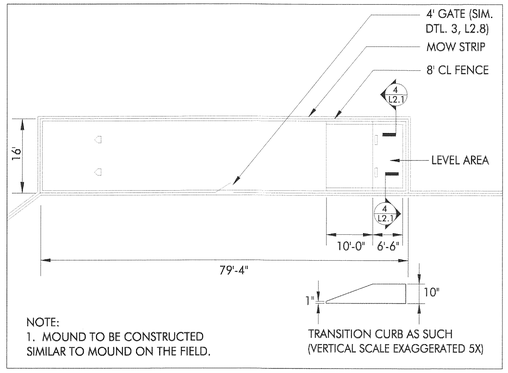
L1.5

SHEET 33 OF 74

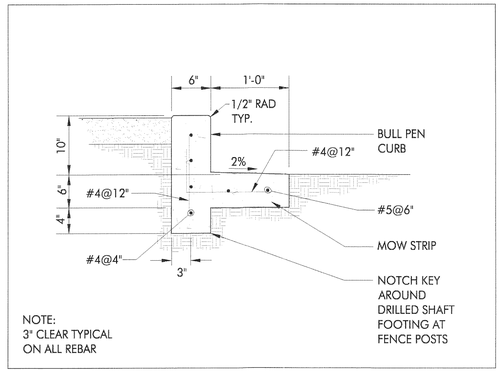
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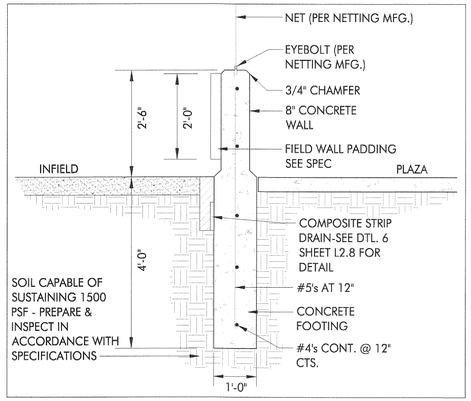
1 BASEBALL- BACKSTOP PLAN
SCALE: 1/16"=1'-0"



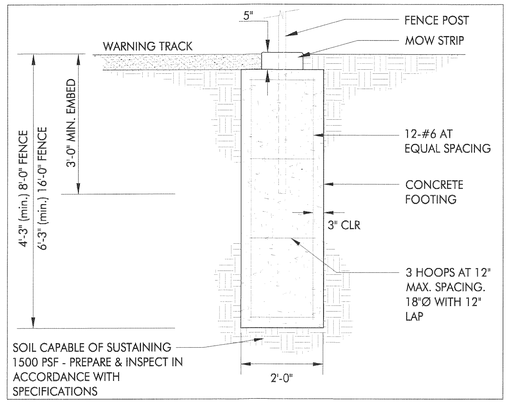
3 BULL PEN
SCALE: NTS



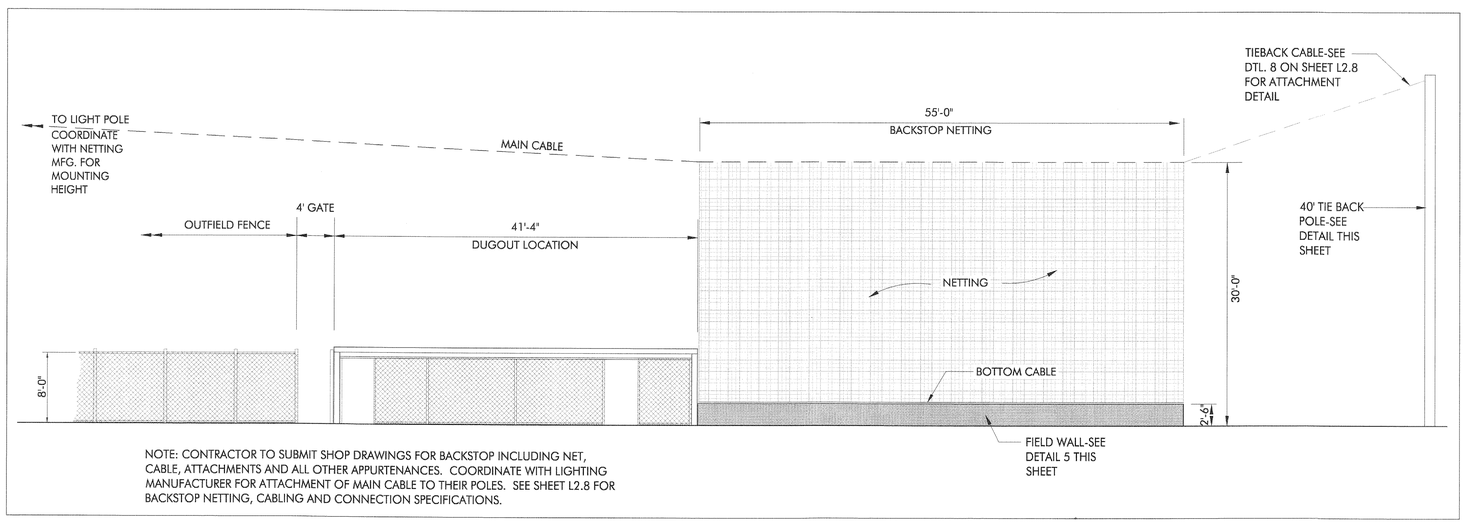
4 BULL PEN CURB
SCALE: NTS



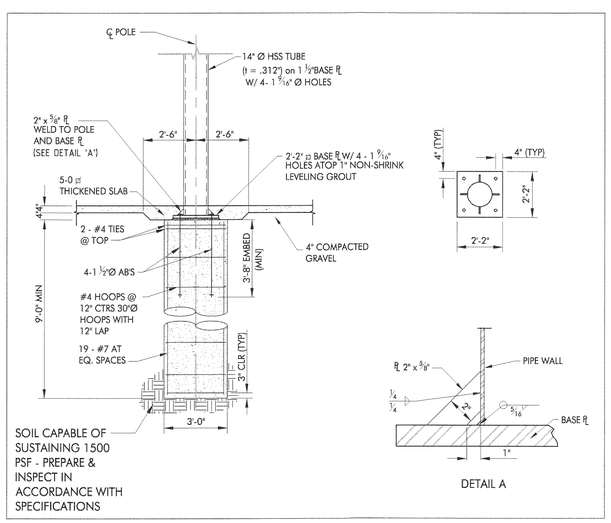
5 FIELD WALL
SCALE: NTS



6 POLE FOUNDATION AT FENCE
SCALE: NTS



2 BASEBALL- BACKSTOP ELEVATION
SCALE: 1/8"=1'-0"



7 TIE BACK POLE FOUNDATION
SCALE: NTS

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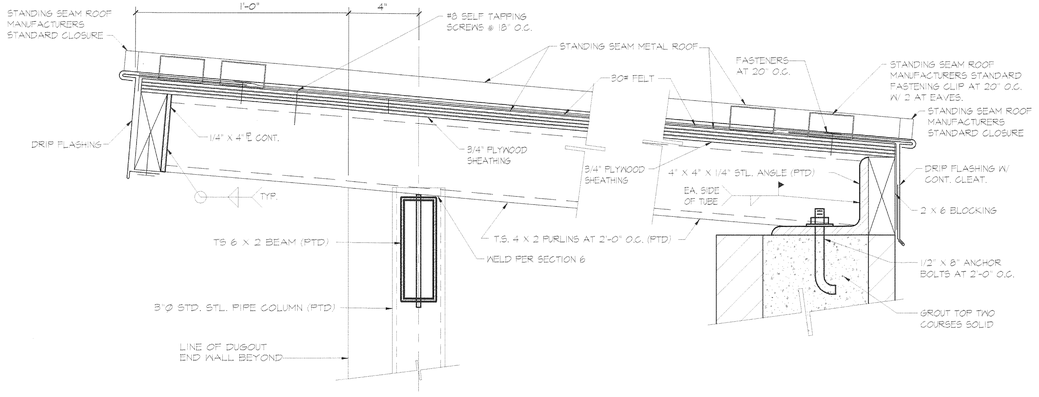
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DESIGNED BY	GAH
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REVISIONS	DATE
ISSUE DATE	7-11-07

BACKSTOP DETAILS

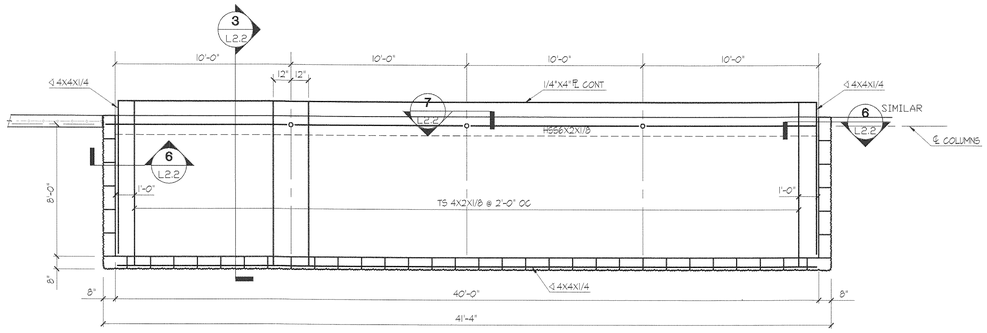
L2.1

SHEET 34 OF 74

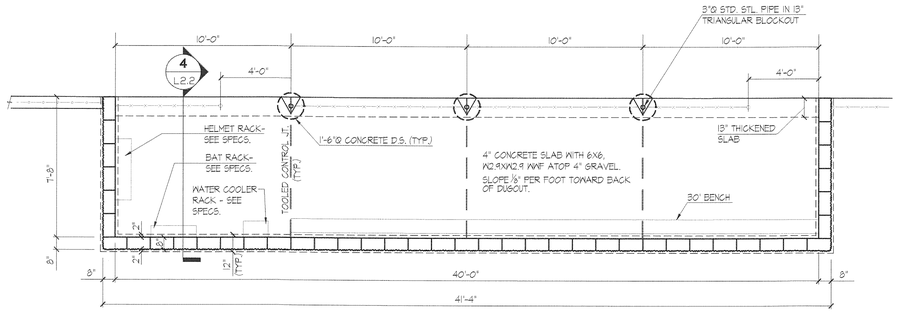
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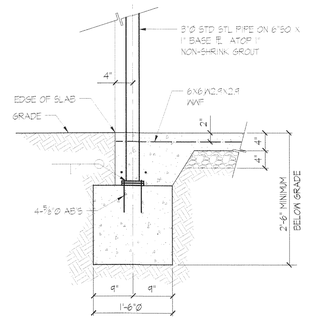
3 DUGOUT ROOF DETAILS
SCALE: 3"=1'-0"

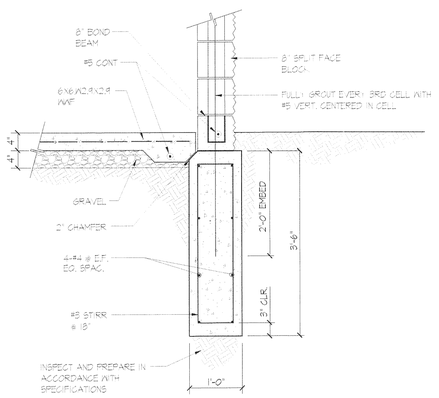


1 BASEBALL DUGOUT FRAMING PLAN
SCALE: 1/4"=1'-0"

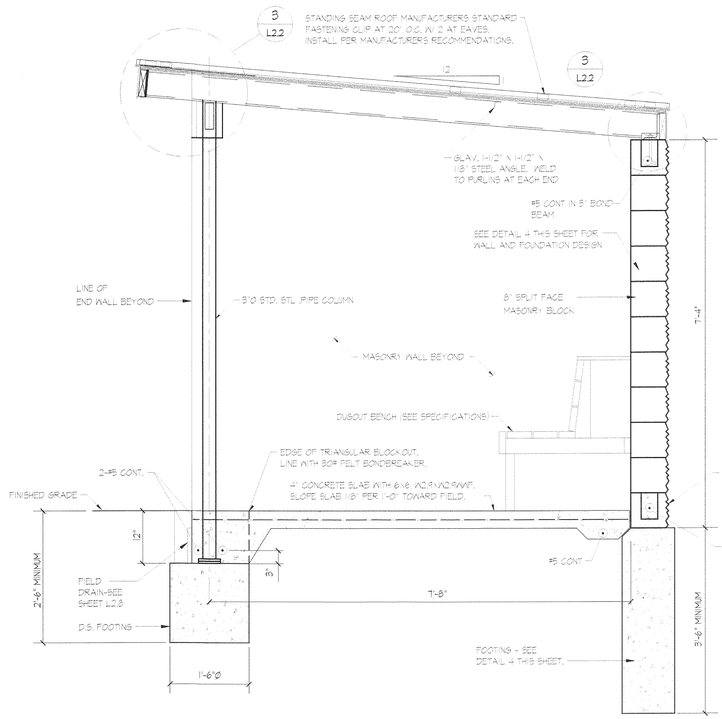


5 BASEBALL DUGOUT FLOOR PLAN
SCALE: 1/4"=1'-0"

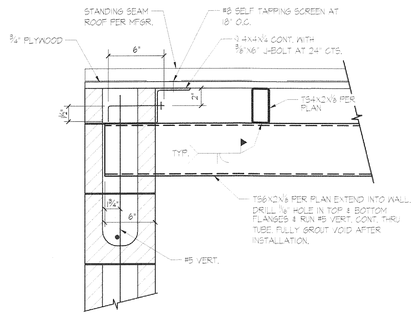




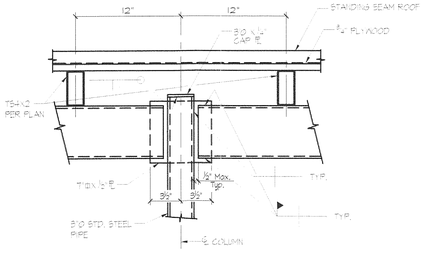
4 DUGOUT FOUNDATION
SCALE: 3/4"=1'-0"



2 SECTION
SCALE: 3/4"=1'-0"



6 DUGOUT ROOF DETAILS
SCALE: 1 1/2"=1'-0"



7 COLUMN CONNECTION DETAILS
SCALE: 1 1/2"=1'-0"

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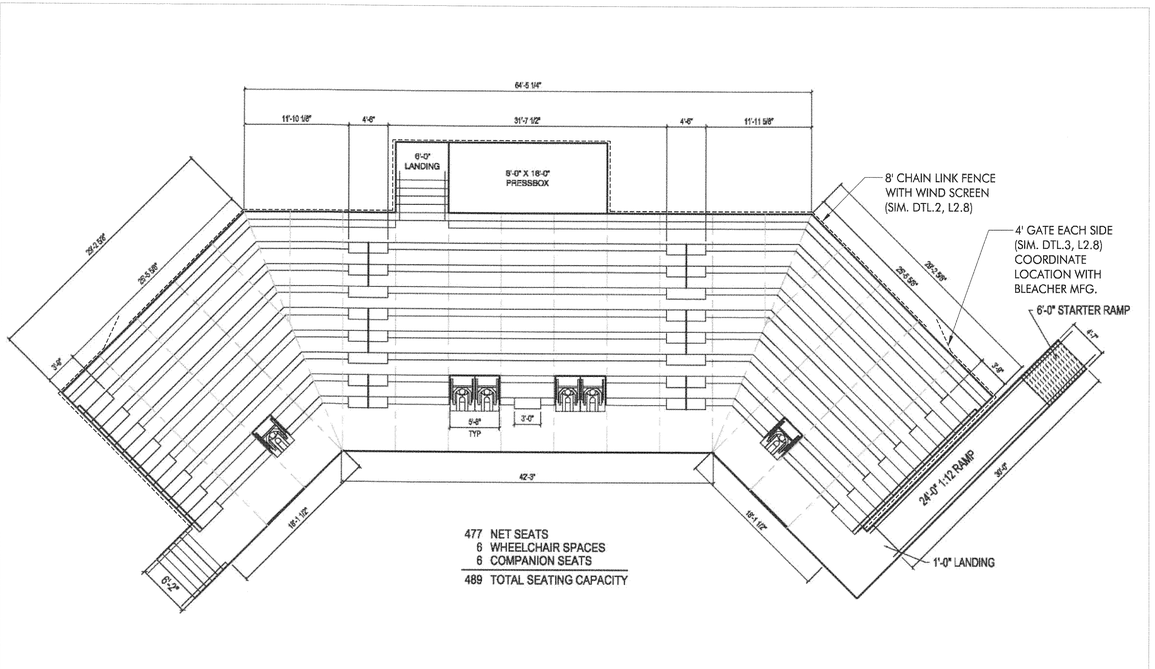
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REVISIONS	DATE
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Dugout Details

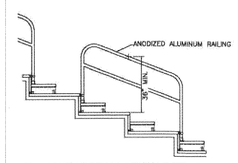
L2.2

SHEET 35 OF 74

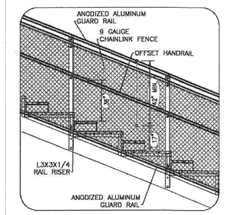
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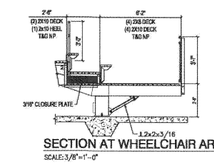
1 BLEACHER SEATING LAYOUT
SCALE: 1/8"=1'-0"



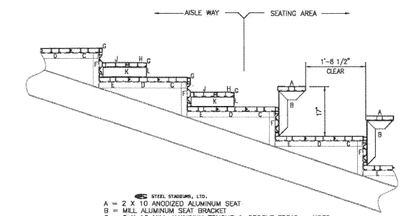
MID-AISLE INSTALLATION DETAIL
NOT TO SCALE



SIDE FENCE DETAIL @ END AISLE
NOT TO SCALE

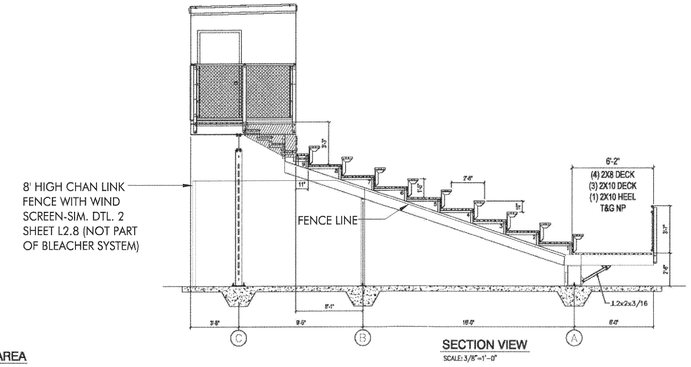


SECTION AT WHEELCHAIR AREA
SCALE:3/8"=1'-0"



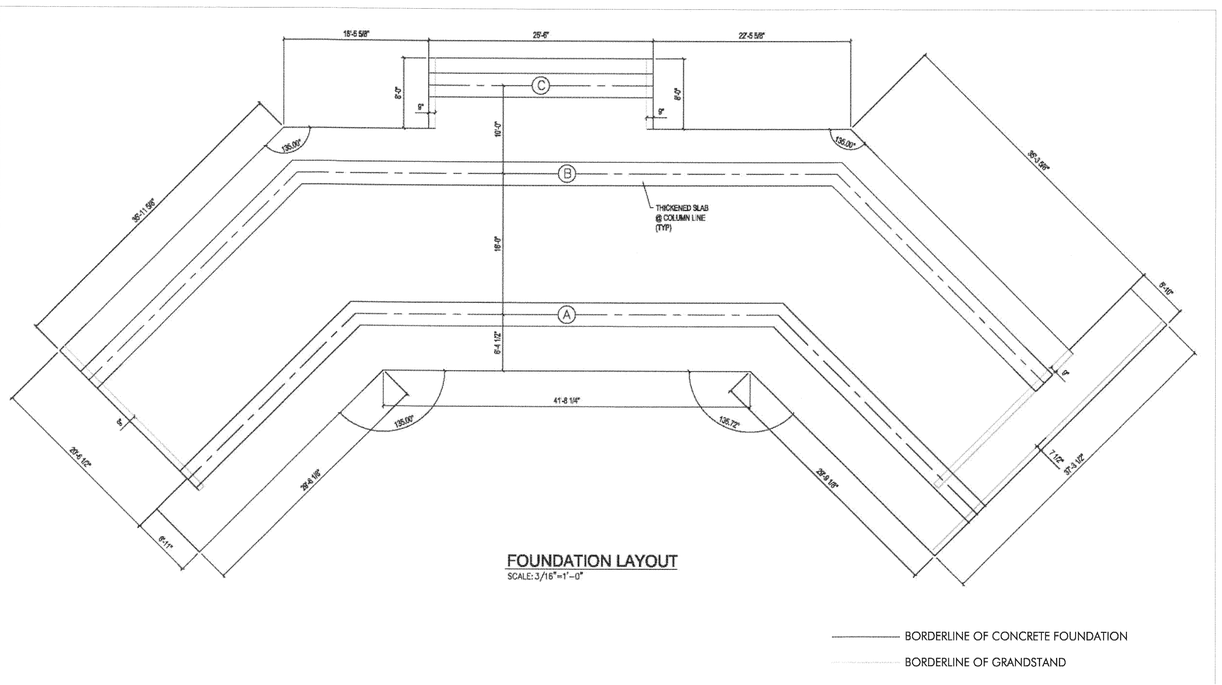
STEEL STADIUMS, LTD.
A = 2 X 10 ANODIZED ALUMINUM SEAT
B = MILL ALUMINUM SEAT BRACKET
C = 2 X 10 MILL ALUMINUM TONGUE & GROOVE TREAD – NOSE
D = 2 X 10 MILL ALUMINUM TONGUE & GROOVE TREAD – DECK
E = 2 X 10 MILL ALUMINUM TONGUE & GROOVE TREAD – HEEL
F = 1 X 6 1/2 ANODIZED ALUMINUM RISER
G = 1 X 1 PAINTED ALUMINUM CONTRASTING NOSING (BLACK)
H = 2 X 7 MILL ALUM. INTERLOCK HALFSTEP – NOSE W/RISER
J = 2 X 8 MILL ALUM. INTERLOCK HALFSTEP – DECK
K = 3 1/2" MILL ALUMINUM HALFSTEP BRACKET
L = 2 3/4 ANODIZED ALUMINUM INTERLOCK STEP RISER

PLANK ARRANGEMENT
NOT TO SCALE 10" X 30"



SECTION VIEW
SCALE: 3/8"=1'-0"

2 BLEACHER SECTION
SCALE: 1/8"=1'-0"



FOUNDATION LAYOUT
SCALE: 3/16"=1'-0"

BORDERLINE OF CONCRETE FOUNDATION

BORDERLINE OF GRANDSTAND

3 BLEACHER FOUNDATION
SCALE: 1/8"=1'-0"

BASEBALL BLEACHER AND PRESS BOX AS MANUFACTURED BY STEEL STADIUMS. CONTACT JENNY ROBBINS AT 940.549.5700 SEE SPECIFICATION SECTION 133430 FOR DETAILS

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DESIGNED BY	DATE
REVISIONS	DATE
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Shade Structure Diagram

L2.3

SHEET 36 OF 74

Drawing Name: Q:\2006-092#01-1st\Project\PRJ\ACAD\Final CDs\L2.3-L2.4 Bleacher System.dwg, Jul 12,2007 - 2:25pm

SHADE STRUCTURE AS MANUFACTURED BY SUN PORTS. CONTACT DAVE GRUNDON AT 972.354.1944 SEE THIS SHEET FOR SPECIFICATIONS.

NOTE:
THE SKETCHES BELOW ARE DIAGRAMMATIC AND PROVIDED SOLELY FOR THE PURPOSE OF DELINEATING WHICH AREAS ARE TO BE SHADED. THE MANUFACTURER IS TO SUBMIT SHOP DRAWINGS FOR A SHADE STRUCTURE THAT WILL MEET THE ABOVE SPECIFICATIONS AND SHADE THE DESIRED AREAS. THE MANUFACTURER SHALL ALSO COORDINATE WITH THE BLEACHER MANUFACTURER TO ASSURE THAT THE TWO SYSTEMS ARE COMPATIBLE.

SPECIFICATIONS FOR SHADE STRUCTURE

HARDWARE - All hardware is first grade stainless steel. All bolt fittings include nylon washers for watertight seals at all joints. Wire rope is ¼" nominal diameter, 7 strand, 19 wires per strand (minimum), with a miminum nominal tensile strength of 9,000 pounds. Wire rope shall be secured with appoved fittings and cable hardware, as per manufacturers' specifications. All erection bolts are ASTM A-307 grade B, treated to retard corrosion, or stainless steel.

Raw Material - High Density Polyethylene with Ultra Violet additives.
Construction - A monofilament and tape construction giving a stable material. Rachel knitted to ensure material will not unravel if cut.

	SOLID COLORS	STRIPE COLORS
Finish	Fabric is stentored.	Fabric is stentored.
Tear Strength	Warp 220.4622 lb. Weft 462.9707 lb.	Warp 182.9836 lb. Weft 401.2413 lb.
Burst Strength	37.7098 PSIA	33.0686 PSIA
Fabric Mass	6.8784 ozm	7.0547 ozm
Fabric Width	9.8425 ft.	9.8425 ft.
Roll Length	164.04 ft.	164.04 ft.
Roll Dimensions	62.99" X 16.5354"	62.99" X 16.5354"
Roll Weight	+/- 66 lb.	+/- 68.34 lb.
Life Expectancy	A minimum of 8 years continuous exposure to the sun	
Fading	Minimum fading after 5 years.	
Minimum Temp.	- 22°	F- 22° F
Maximum Temp.	+ 176° F	+ 176° F

NOTES:

STEEL STRUCTURE - The Steel Structure is designed to meet or exceed the requirements of the 2002 IBC Building Code. The Steel Structure is covered by a 10-year warranty against failure of the structure, a one-year paint warranty, and fabric is covered by a full 10-year warranty against significant fading, tearing, ripping and/or discoloration (red is covered by a 3-year fade warranty.)

Live Load - 10.00 psf | Wind Design Speed - 90 mph | Snow Load - 10.00 psf

FOUNDATIONS - The foundations are designed depending on specific soil conditions.

CONCRETE - Concrete work is executed in strict accordance with the latest American Concrete Institute Building Code (ACI 318-99.) 28-Day Strength: 2500 psi

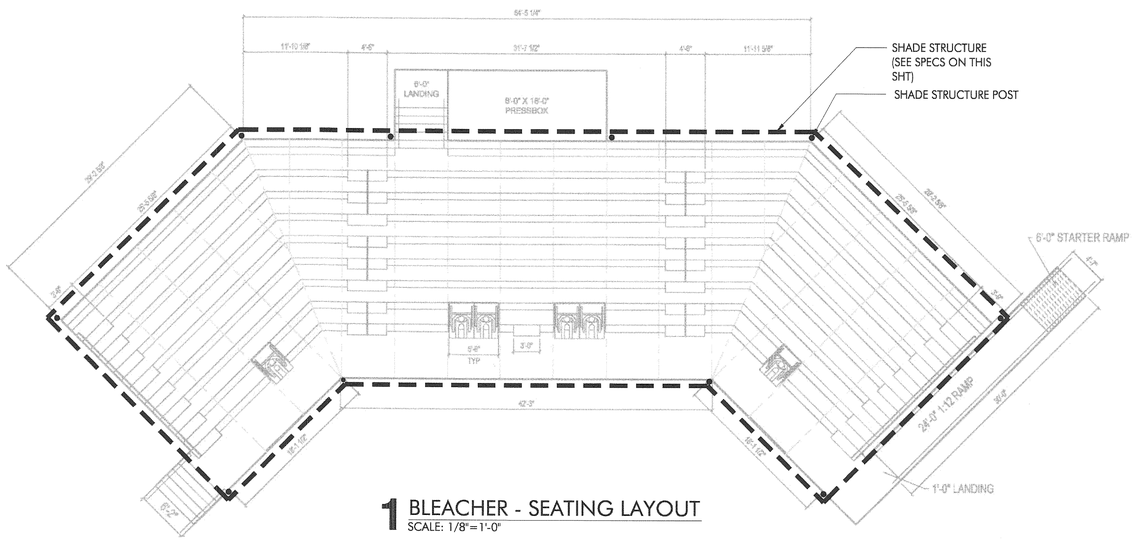
CONCRETE ANCHORS -
A) On existing concrete slab
Hilti Stainless Steel/SS with a minimum of 3 ½" embedment. Epoxy anchor system used in accordance with ICBO #5193.
B) Cast in-place footings
Cast in-place anchors are A-36 steel.

STEEL - All Reinforcement conforms to 60,000 psi ASTM A-42 Grade 60(excludes Super Spans and Tension Cable Structures). Reinforcement steel, if required, is designed, detailed, fabricated and placed in accordance with the latest ACI Detailing Manual (SP-66) and CRSI Manual of Standard Practice.

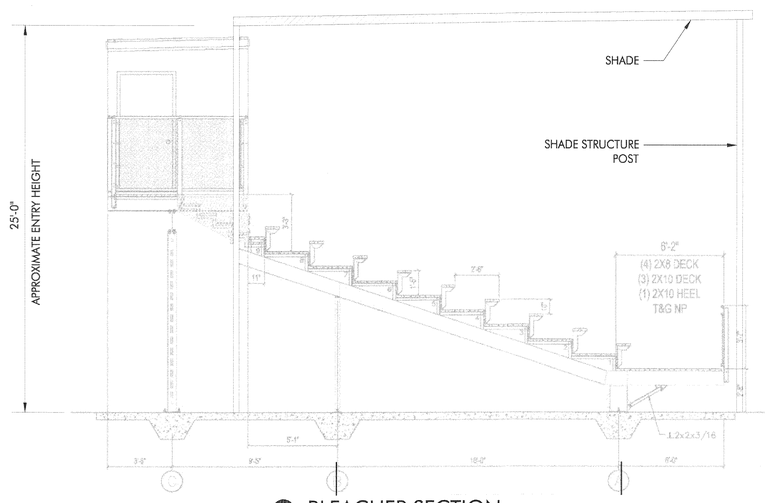
STRUCTURAL STEEL - All steel tubing is triple coated for rust protection using the in-line zinc electroplating, Allied Flo-Coat® process. Tubing is internally coated with zinc and organic coatings to prevent corrosion. All structural steel plates are rust/corrosion treated by zinc electroplating. Steel tubing and plates are finished with a minimum of 2.5 to 3.5 MIL thick UV-inhibited weather resistant powder coat.
Where size of structure or determined loads require larger structural steel members or steel greater than 7 gauge thickness, carbon steel may be substituted. Cleaning and coating of carbon steel conforms to the following:

1. A de-greasing agent is applied to remove surface oil and grease.
2. An acid-phosphate wash be applied to etch and prepare the surface for powder-coating, where wall thickness requires pre-heating.
3. Steel members are to be pre-heated prior to powder coat application to assure adhesion.

1. All carbon Structural Steel shall be ASTM A-36, except steel pipe columns, which shall be ASTM A-53, grade B, unless otherwise noted. Slip fittings are manufactured using drawn-over-mandrel steel with a minimum yield strength of 70 ksi and a minimum tensile strength of 80 ksi.
2. Steel telescoped sleeves do not have more than 1/16" tolerance, with no less than 4" overlap at all sleeves. All internal fittings are welded on one side.
3. Structural steel is detail, fabricated, and erected in accordance with AISC specifications.
4. All shop and field welding is executed by certified welders in accordance with the latest edition of the American Welding Society specifications.
5. Shop connections are welded unless noted otherwise. Field connections are separately indicated on all drawings.
6. All welds are performed using E70 electrodes or gas-metal arc welding using ER 7053 wire. All fillet welds are a minimum 3/16" unless otherwise noted. All steel shall be welded shut at terminations to prevent internal leakage.



1 BLEACHER - SEATING LAYOUT
SCALE: 1/8"=1'-0"



2 BLEACHER SECTION
SCALE: 3/16"=1'-0"

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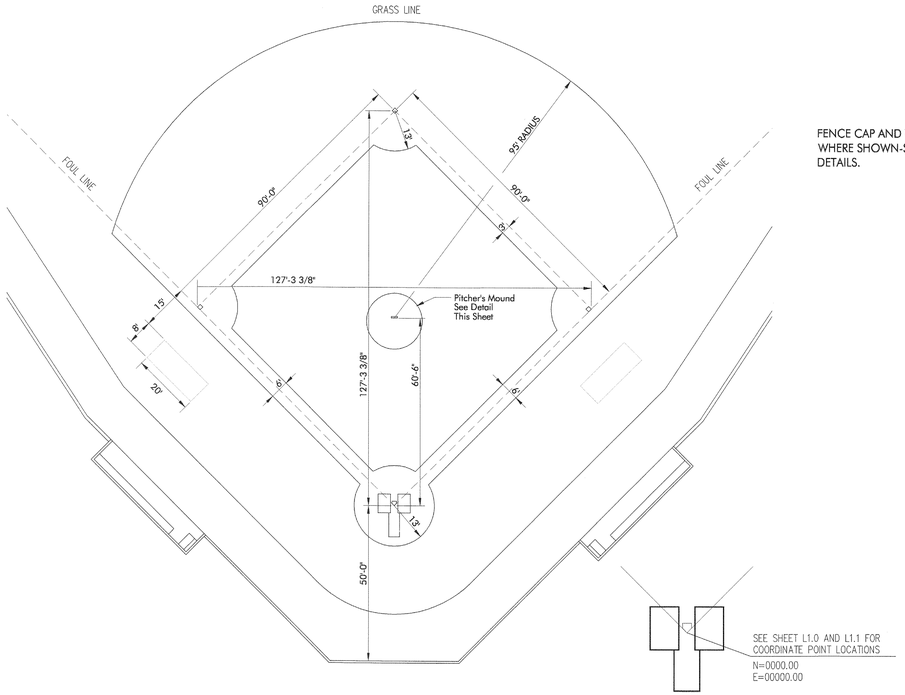
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DRAWN BY	DATE
CHECKED BY	DATE
DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-11-07

Shade Structure Diagram

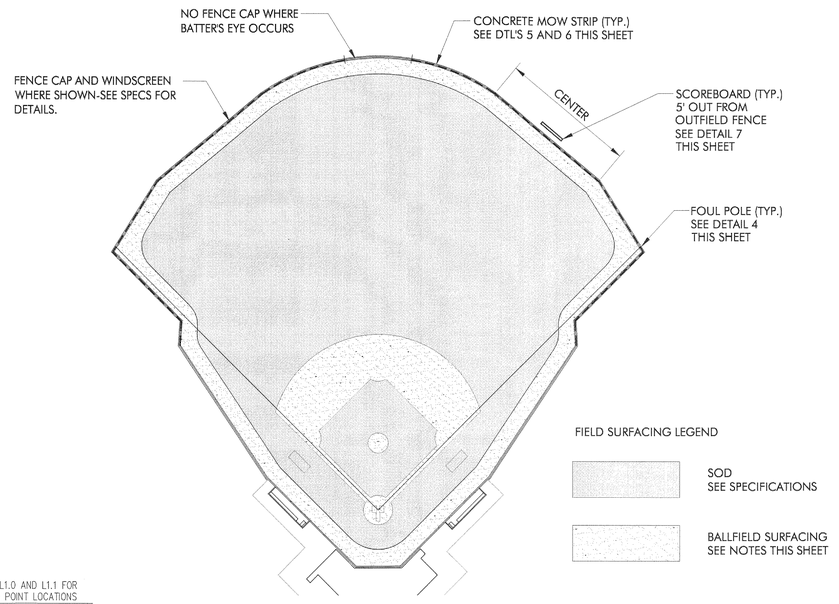
L2.4

SHEET 37 OF 74

Drawing Name: Q:\2006-092401-1.tsf\Project\PRLIM\CAD\Final CDs\L2.3-L2.4 Bleacher System.dwg Jul 12,2007 - 2:28pm



1 BASEBALL-INFIELD LAYOUT
NOT TO SCALE



2 BASEBALL FIELD-SURFACING
NOT TO SCALE

INFIELD MIX:

1. Provide infield mix to fill cavity that will be approximately 4" in depth.
2. Base mix will consist of 60% sand, 20% silt and 20% clay

Angular/Sub-Angular sand shall meet the following criteria:

Fraction Size Name	Sieve Diameter (mm)	Allowable Range (% Retained on Sieve)
Gravel	2 mm - 4 mm	10%
Very Coarse	1 mm - 2 mm	80% particles in this range
Coarse	.5 mm - 1 mm	
Medium	.25 mm - .5 mm	
Fine	.15 mm - .25 mm	10%
Gravel	<.15	

3. Once the infield mix is blended, Turface Pro League calcined clay (or approved equal) shall be incorporated at a rate of 10% by volume and mixed throughout.
4. Provide sample of proposed infield surfacing material and "Particle Size Analysis" from a soil testing lab to the Owner's Representative for approval prior to installation.
5. Execution:

Infield Mix

A. Delivery: Infield surfacing shall be delivered in truck beds that have been completely cleaned of gravel or any other metter. Any load of material delivered which contains gravel will be rejected.

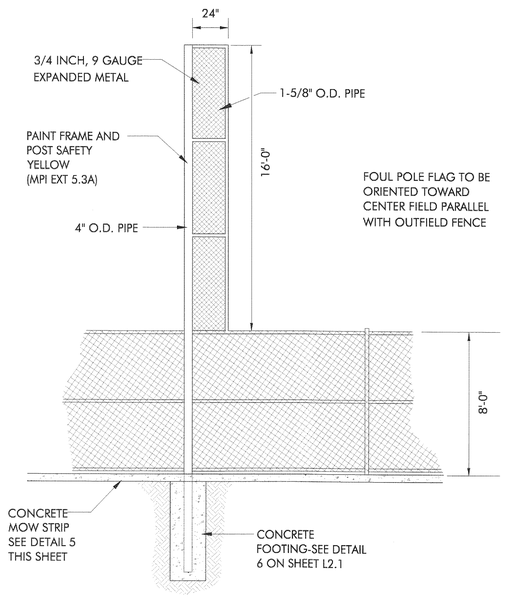
B. Subgrade: The subgrade shall have been prepared to a depth of 4 inches to receive the infield surfacing material. The cavity shall have vertical or close to vertical sides so as not to "dilute" the infield surfacing material.

C. Mixing: Surfacing material will be pre-mixed off-site, delivered to the site and dumped in piles evenly space around the infield. Surfacing material shall be thoroughly blended in a manner approved by the Owner's Represntative prior to construction.

D. Placement: Contractor to install in 2" lifts and then roll.

F. Fine grading: Laser grading equipment will be used in order for the grade and elevation of the surfacing material to be true to line, grade and cross section. When tested with an 8 foot straight edge it shall have no deviation from the face of the straight edge in excess of 1/4 inch at any point. Any point of the surface not meeting these requirements shall be corrected.

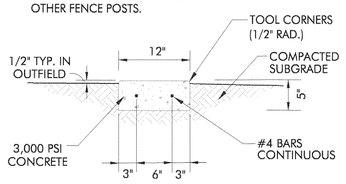
G. Watering: Water shall be applied as neccessary to achieve 90% and 95% percent of Standard AASHTO density. The finished product shall be 4 inches of compacted surfacing, finely laser graded to the finished contours indicated on the plans.



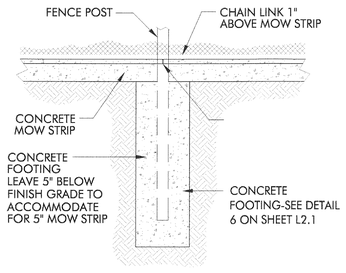
NOTE:
1. CONTRACTOR TO SUBMIT SHOP DRAWINGS.
2. POSTS ARE 4" O.D. PIPE (SCHEDULE 40) AND ARE HOT DIPPED GALVANIZED INSIDE AND OUTSIDE, (COMPLIES WITH ASTM-A-120 SPECIFICATIONS).
3. ALL EXPANDED METAL IS GALVANIZED CARBON STEEL (ASTM-A-569/569M) 1/4" #20 REGULAR.
4. FOUL POLE TO BE LOCATED ON FOUL LINE INTEGRAL WITH OUTFIELD FENCE.

3 FOUL POLE
SCALE: 1/4"=1'-0"

EXPANSION JOINTS TO BE PLACED AT EVERY FIFTH FENCE POST AND A DUMMY JOINT PLACED AT ALL OTHER FENCE POSTS.



4 MOW STRIP
SCALE: 1"=1'-0"



5 FENCE POST
SCALE: 3/4"=1'-0"

PITCHING MOUND - AN 18' DIAMETER CIRCLE, CENTER OF WHICH IS 59' FROM BACK OF HOME PLATE.

LOCATE FRONT EDGE OF RUBBER 18" BEHIND CENTER OF MOUND.

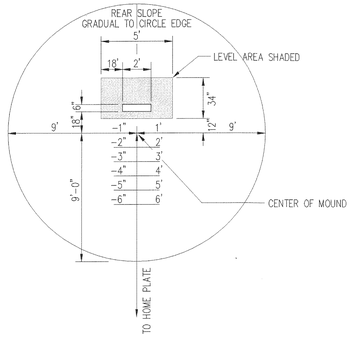
FRONT EDGE OF RUBBER TO BACK POINT OF HOME PLATE, 60'-6".

SLOPE STARTS 6' FROM FRONT EDGE OF RUBBER.

THE LEVEL AREA EXTENDS 6 INCHES IN FRONT OF THE RUBBER AND IS ELEVATED 10 INCHES ABOVE HOME PLATE.

BEGINNING AT THE FRONT OF LEVEL AREA, THE MOUND IS TO SLOPE TOWARD HOME PLATE AT THE RATE OF 1 INCH PER FOOT FOR THE FIRST 6 FEET, THEN GRADUALLY SLOPE THE REMAINING 4 INCHES.

LEVEL AREA SURROUNDING RUBBER SHOULD BE 6' IN FRONT OF RUBBER, 18" TO EACH SIDE AND 24" TO REAR OF RUBBER. TOTAL LEVEL AREA 5'-0" x 3'-0".



6 PITCHER'S MOUND
NOT TO SCALE

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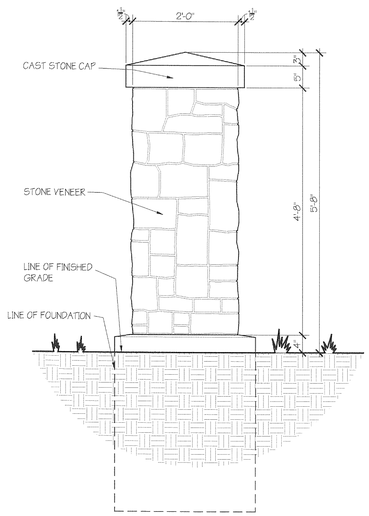
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DRAWN BY	RCL
DATE	
CHECKED BY	JBB
DATE	
DESIGNED BY	JBB/TMP
DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Ball Field Layout and Surfacing

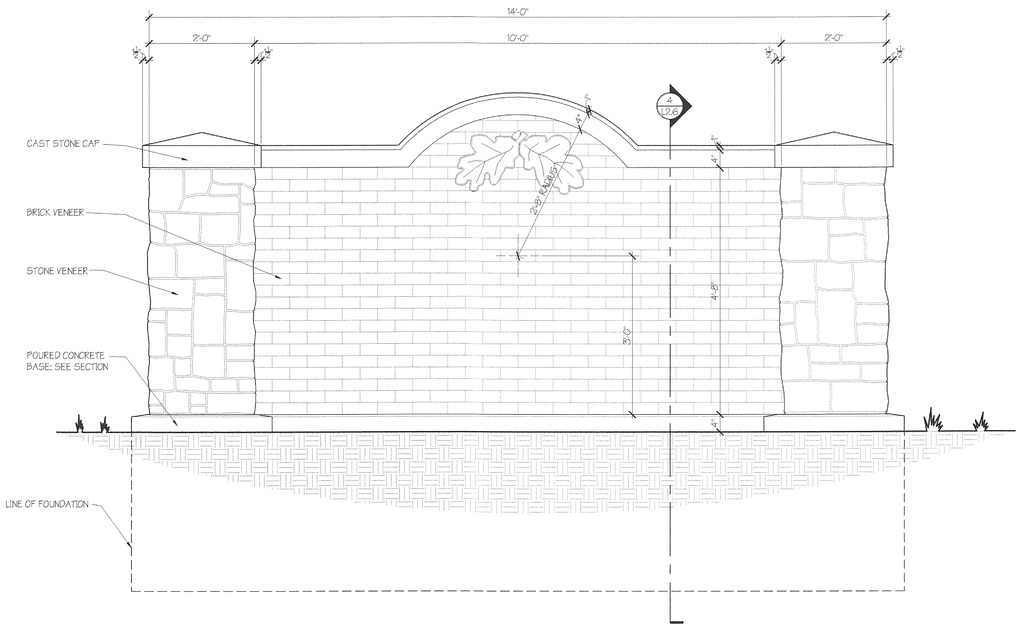
L2.5

SHEET 38 OF 74

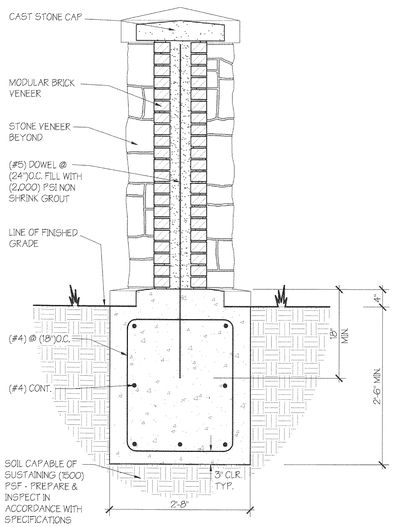
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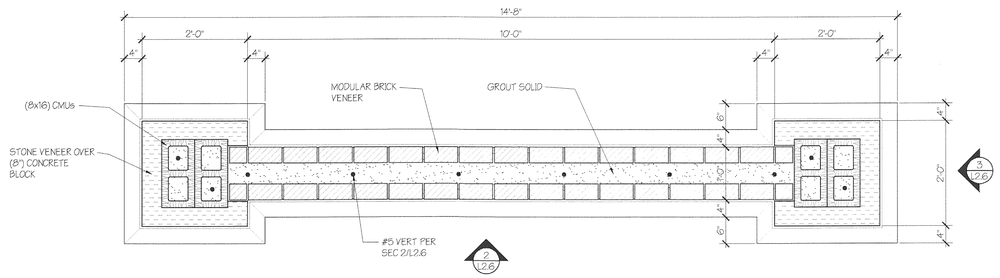
3 MONUMENT SIGN ELEVATION
SCALE: 3/4" = 1'-0"



2 MONUMENT SIGN ELEVATION
SCALE: 3/4" = 1'-0"



4 MONUMENT SIGN SECTION
SCALE: 3/4" = 1'-0"



1 MONUMENT SIGN PLAN
SCALE: 3/4" = 1'-0"

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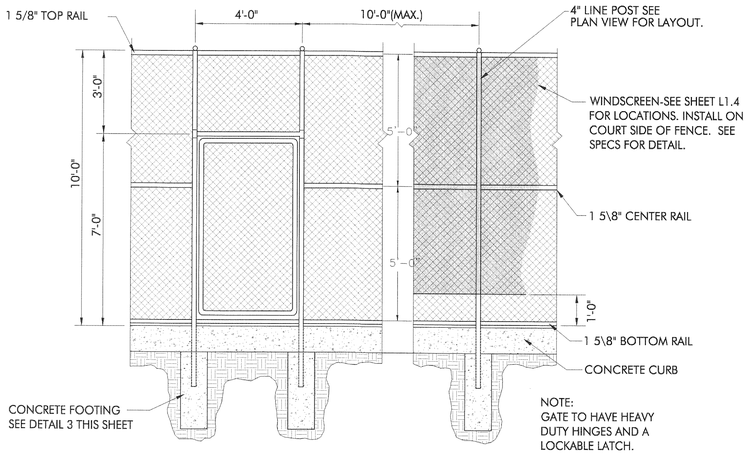
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DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-11-07

Monument Sign

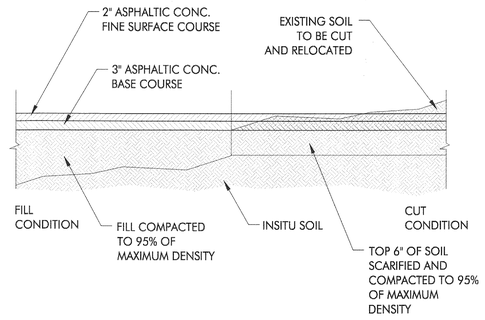
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SHEET 39 OF 74

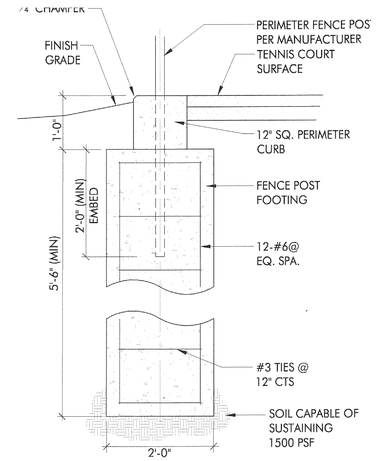
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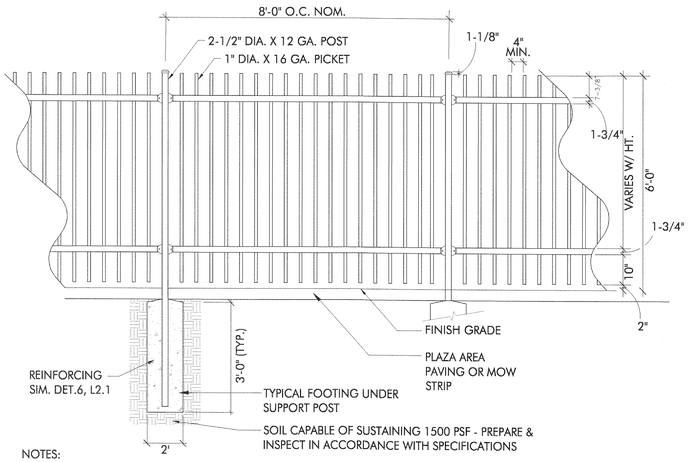
1 ELEVATION @ TENNIS COURT ENCLOSURE
3/8"=1'-0"



2 TYPICAL TENNIS COURT PAVEMENT SECTION
1/2"=1'-0"

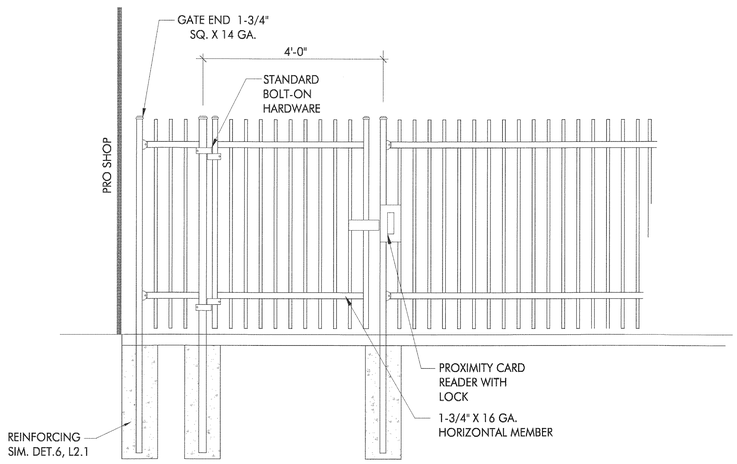


3 PERIMETER CURB AND FOOTING AT TENNIS COURTS
3/4"=1'-0"



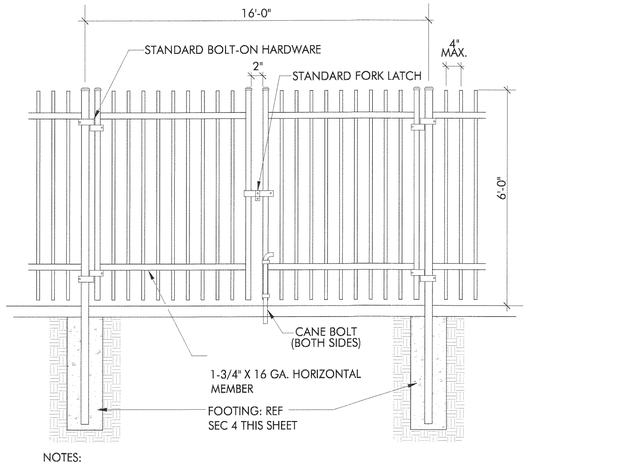
NOTES:
1. CONTRACTOR TO SUPPLY SHOP DRAWINGS OF METAL WORK TO INCLUDE FENCE AND POST CONNECTIONS INCLUDING ANCHORING.
2. WHEN FENCE IS LOCATED IN A TURF AREA USE A MOW STRIP BENEATH. SEE DETAIL 4 ON SHEET L2.5

4 ORNAMENTAL METAL FENCE
NTS



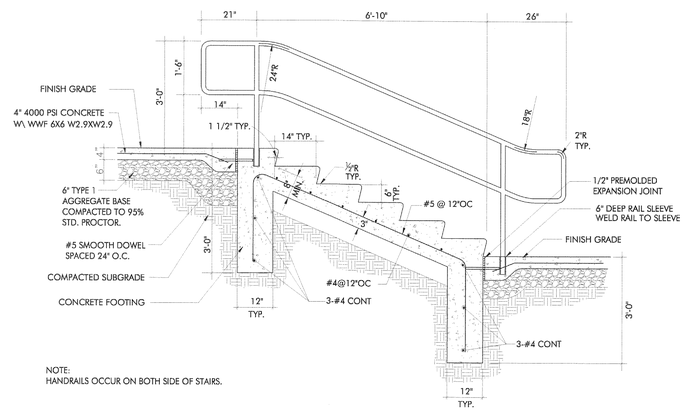
NOTES:
1. PROX CARD READER IS TO BE WIRED BACK TO THE PRO SHOP FOR INTEGRATION INTO COMPUTER SYSTEM. SEE ELECTRICAL DRAWINGS.
2. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL FENCING, HINGES, LOCKS AND CARD READER SYSTEM.

5 CONTROLLED ACCESS GATE AT PRO SHOP PATIO
NTS



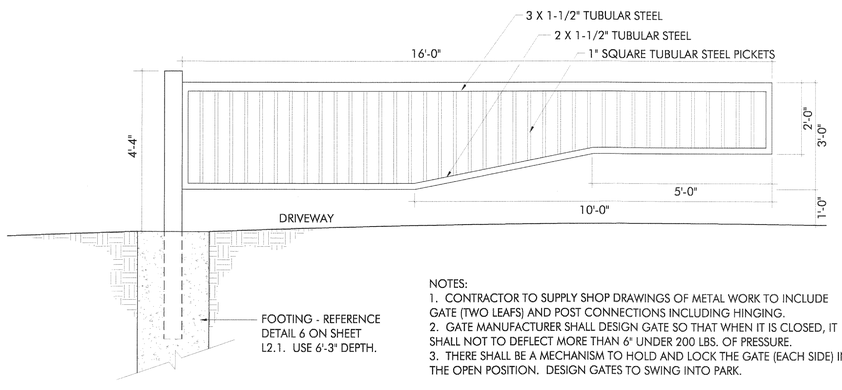
NOTES:
1. CONTRACTOR TO SUBMIT SHOP DRAWINGS ON ALL FENCING, HINGES AND LOCKS.
2. THERE SHALL BE A MECHANISM TO HOLD AND LOCK THE GATE (EACH SIDE) IN THE OPEN POSITION. DESIGN GATES TO SWING AWAY FROM FIELD.

6 ORNAMENTAL METAL GATE
NTS



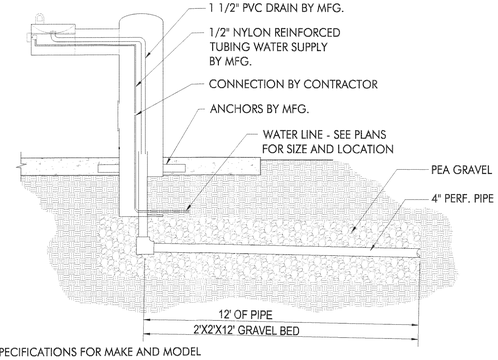
NOTE:
HANDRAILS OCCUR ON BOTH SIDE OF STAIRS.

7 CONCRETE STEPS AND HANDRAIL
NTS



NOTES:
1. CONTRACTOR TO SUPPLY SHOP DRAWINGS OF METAL WORK TO INCLUDE GATE (TWO LEAFS) AND POST CONNECTIONS INCLUDING HINGING.
2. GATE MANUFACTURER SHALL DESIGN GATE SO THAT WHEN IT IS CLOSED, IT SHALL NOT TO DEFLECT MORE THAN 6" UNDER 200 LBS. OF PRESSURE.
3. THERE SHALL BE A MECHANISM TO HOLD AND LOCK THE GATE (EACH SIDE) IN THE OPEN POSITION. DESIGN GATES TO SWING INTO PARK.

8 ORNAMENTAL METAL ENTRY GATE
1/2"=1'-0"



SEE SPECIFICATIONS FOR MAKE AND MODEL

9 DRINKING FOUNTAIN AND DRAIN
NOT TO SCALE

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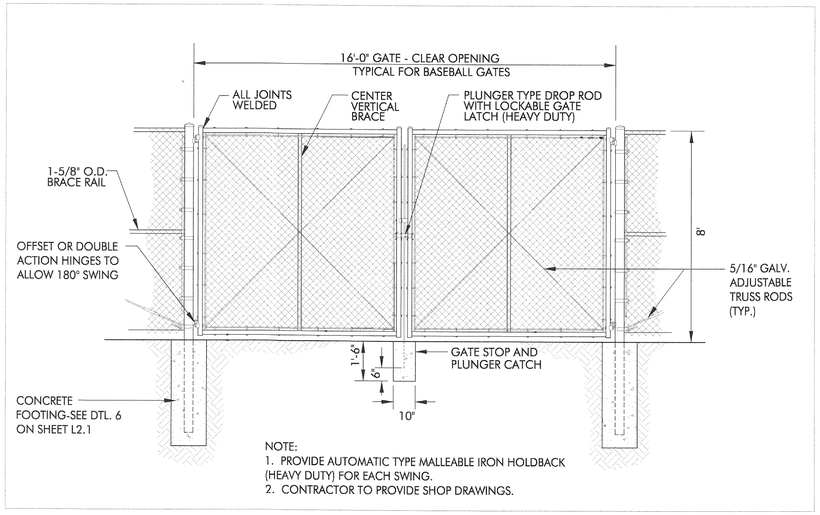
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DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Site Details

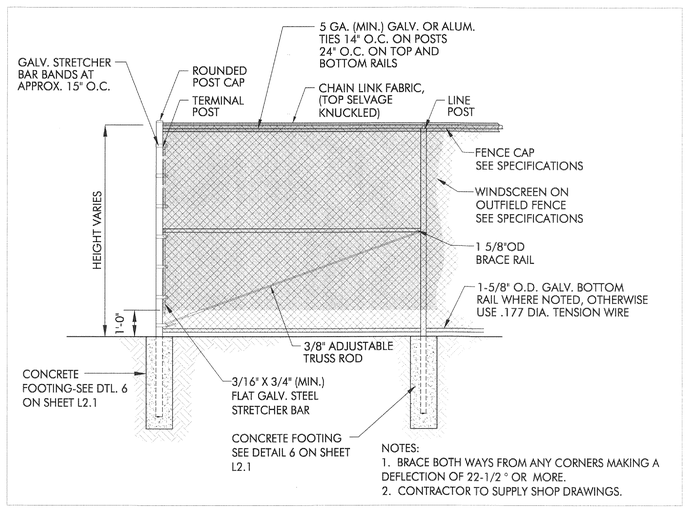
L2.7

SHEET 40 OF 74

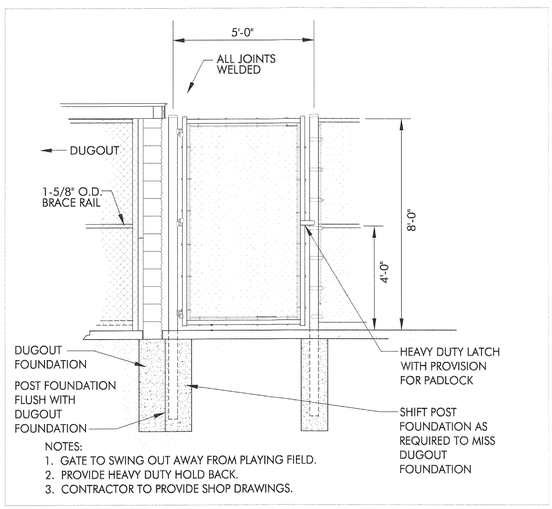
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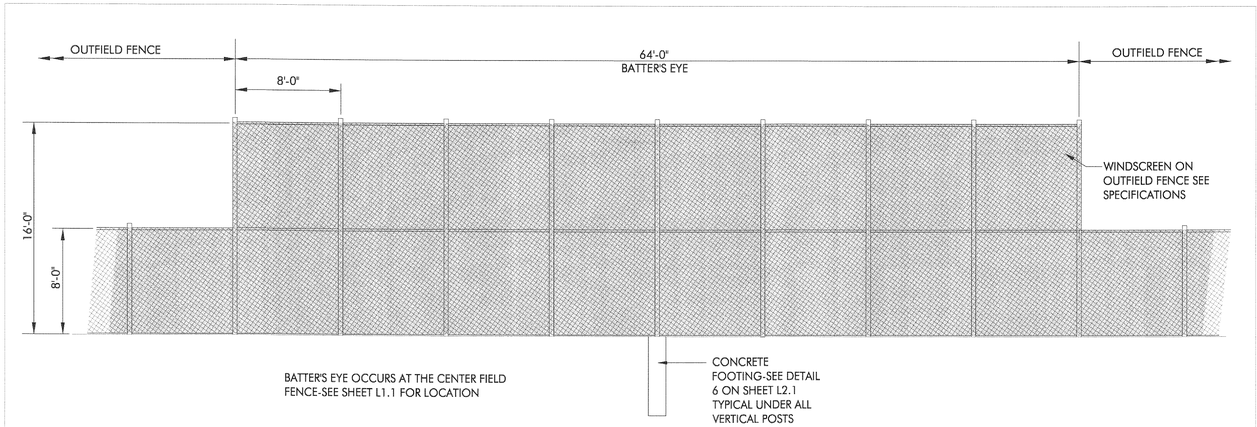
1 DOUBLE DRIVE GATE - AT BASEBALL FIELD
3/8"=1'-0"



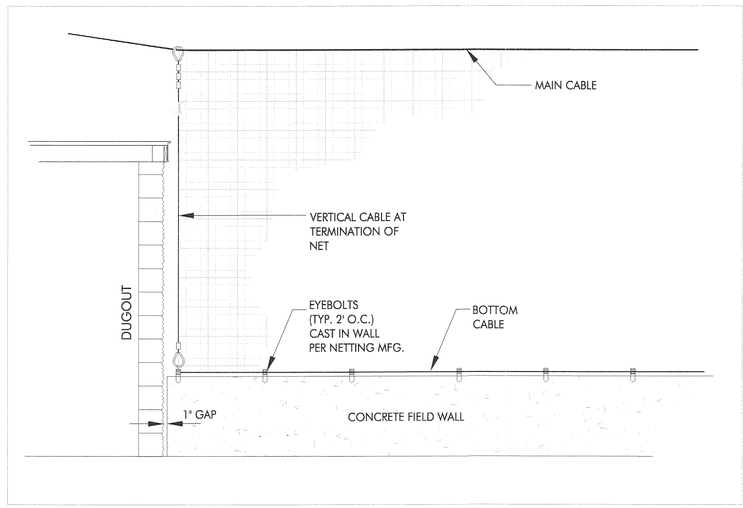
2 CHAIN LINK FENCE-TYPICAL TERMINAL SECTION
3/8"=1'-0"



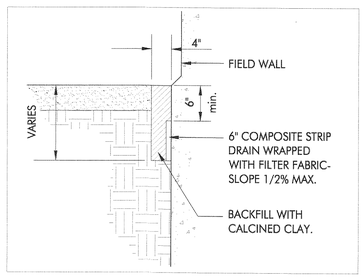
3 CHAIN LINK GATE - AT BASEBALL DUGOUT
3/8"=1'-0"



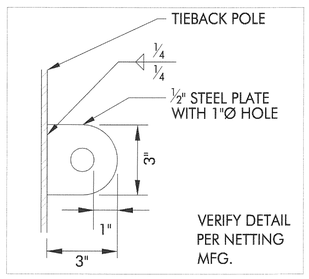
4 DOUBLE DRIVE GATE - TYPICAL ALL FIELDS
3/8"=1'-0"



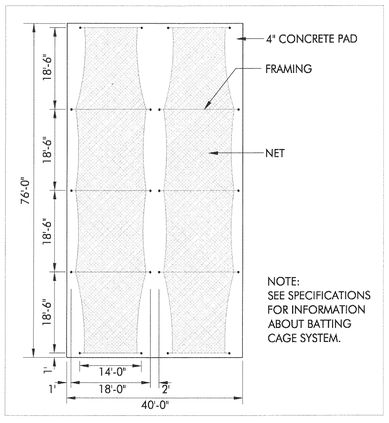
5 BACKSTOP NET AT FIELD WALL
1/2"=1'-0"



6 FIELD DRAIN
3/8"=1'-0"



7 CABLE ATTACHMENT
1/2"=1'-0"



8 BATTING CAGE LAYOUT
1/16"=1'-0"

Backstop Netting and Cabling Specifications

As supplied by Burbank Sport Nets (or approved equal)
Contact Eli Rowe 866.349.0057

Backstop Netting
UDR2 Dyneema Netting; heat set; depth stretched under tension
* 0.02 lbs/sq. ft. treated weight
* 1/6mm diameter twine size (equiv #18)
* 92.7% open mesh
* 1.7 inch x 1.7 inch mesh size (knot-to-knot dimensions)
* Minimum breaking strength 350 lbs.
* Double treated all weather UV Black BSF paint

Backstop Cabling and Connections
Main and Tie Back Cables - Dyneema Rope:
* 9mm diameter
* 12 stranded Dyneema fibre
* Weight 3.6 lbs / 100 ft.-
* Minimum breaking strength 14,100 lbs
* Urethane coated
* Non-rotational

Bottom and Side Hold-Down Cables Stainless Steel Cable
* 5/16" SS type 302/304 Fed Spec RR-W-410 7 x 19
* 9,000 breaking strength
* Weight 173 lbs / 1,000 ft.

Fittings and Connections
* Galvanized ASTM
* Stainless Steel Type 304

Break Away Safety Connections
* Stainless Steel Safety Pin break away shackles
* Sizes vary upon net size and pole attachments
* Designed to release netting from poles during extreme weather conditions

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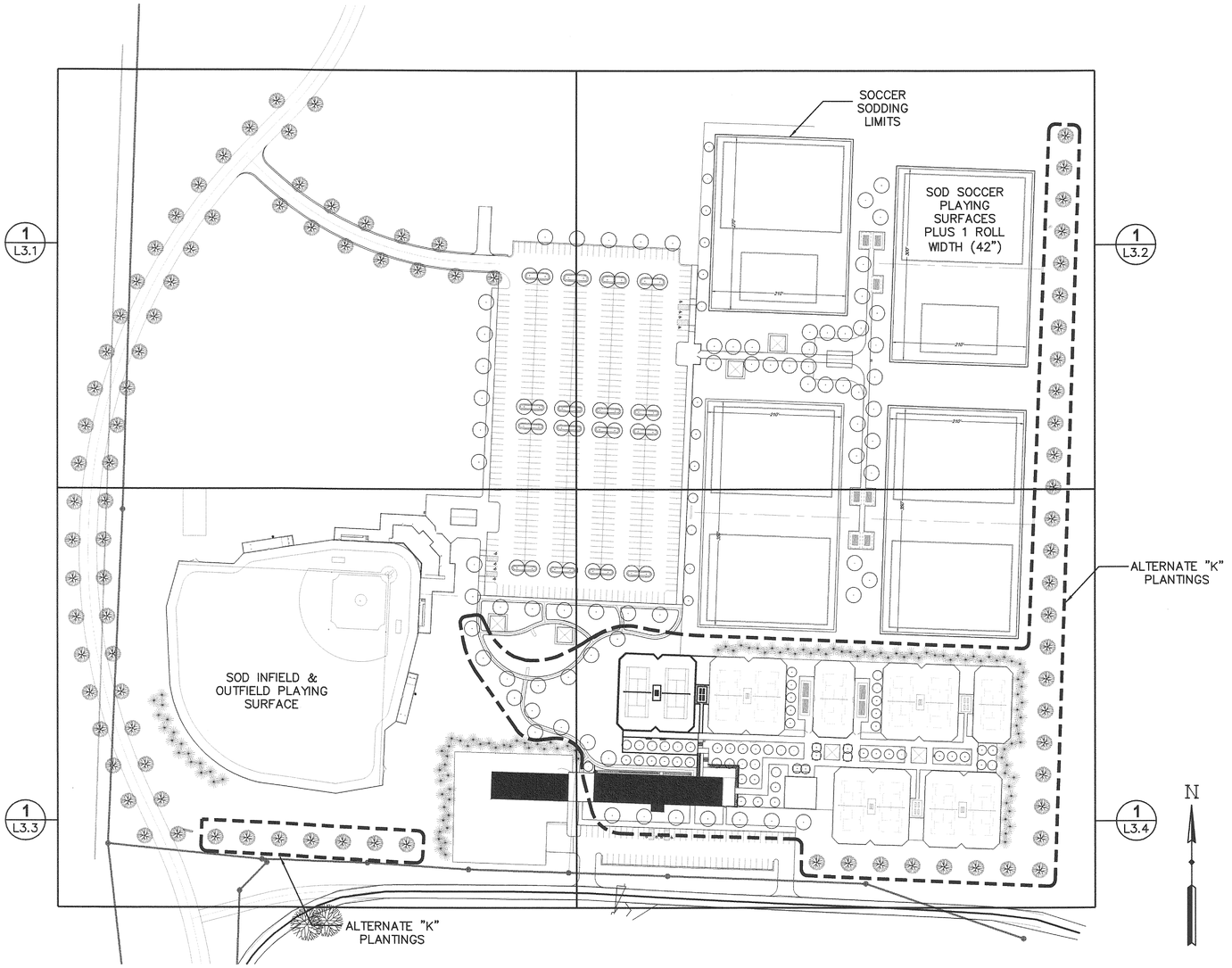
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CHECKED BY MHM DATE
DESIGNED BY GAH DATE
REVISIONS DATE
ISSUE DATE 7-11-07

Site Details

L2.8

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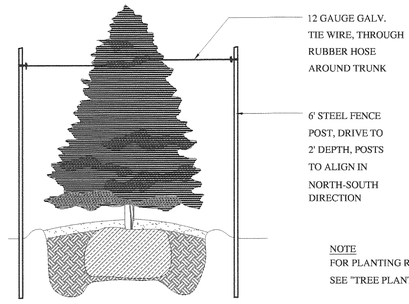
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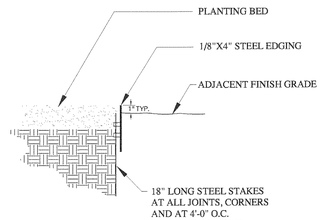
1 LANDSCAPE PLAN
1" = 100'

PLANTING NOTES:

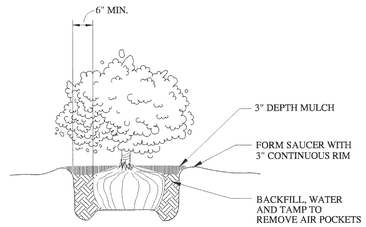
1. CONTRACTOR SHALL VERIFY ALL LANDSCAPE MATERIAL QUANTITIES AND SHALL REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
2. CONTRACTOR SHALL MAKE NO SUBSTITUTIONS WITHOUT THE APPROVAL OF THE LANDSCAPE ARCHITECT.
3. CONTRACTOR SHALL STAKE LAYOUT PLAN IN THE FIELD AND SHALL HAVE THE LAYOUT APPROVED BY THE LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE INSTALLATION.
4. ALL LANDSCAPE AREAS IDENTIFIED ON THE DRAWINGS SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD MULCH. SHREDDED HARDWOOD MULCH TO BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO PLACEMENT. ALL MULCH TO BE RAKED EVEN TO THE SPECIFIED DEPTH & WATER SETTLED.
5. ALL TREES SHALL HAVE A MINIMUM 36" DIAMETER, 3" DEEP SHREDDED HARDWOOD MULCH RING AS DETAILED ON THIS SHEET.
6. CONTRACTOR SHALL GUARANTEE ALL WORK AND PLANT MATERIAL FOR PERIOD STATED IN SPECIFICATIONS.
7. ANY PLANT MATERIAL WHICH DIES DURING THE GUARANTEE PERIOD SHALL BE REMOVED IMMEDIATELY AND REPLACED BY THE CONTRACTOR DURING THE NEXT NORMAL PLANTING SEASON IN ACCORDANCE WITH THE SPECIFICATIONS AND LOCAL PRACTICE.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE PLANTS UNTIL COMPLETION OF THE JOB.
9. ALL PLANT NAMES ON THE PLANT LIST SHALL CONFORM TO HORTICULTURAL NOMENCLATURE AS SET FORTH IN HORTIS III OR IN DATASCAPE, 1994 EDITION AND ALL SUPPLEMENTS.
10. ALL PLANT MATERIAL SHALL MEET THE MINIMUM SPECIFICATIONS IN THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-1990 OR LATEST REVISION) SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND BE FREE OF PLANT DISEASES AND PEST. THE PLANTS SHALL BE OF TYPICAL FORM FOR THE SPECIES AND HAVING A HEALTHY, WELL BRANCHED ROOT SYSTEM.
11. SIZES INDICATED ON THE PLANT LIST ARE THE MINIMUM ACCEPTABLE SIZE. IN NO CASE WILL SIZES LESS THAN THE SPECIFIED SIZES BE ACCEPTED.
12. PLANTS SHALL BE PRUNED ONLY IN ACCORDANCE WITH STANDARD SPECIFICATIONS.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH OTHER RELATED SITE WORK BEING PERFORMED BY OTHER CONTRACTORS AS REQUIRED TO ACCOMPLISH SITE CONSTRUCTION OPERATIONS.
14. THE PLANTING OF ANY PLANT MATERIAL WILL INCLUDE AS SUBSIDIARY ITEMS; SHREDDED HARDWOOD MULCH, WEED BARRIER FABRIC, STAKES, WIRE AND ANY OTHER ELEMENTS NECESSARY TO INSTALL AS DETAILED.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSURING THE TREE PITS ARE EXCAVATED TO TWICE THE ROOT BALL SIZE AND SPECIFIED SOIL AMENDMENTS ARE ADDED TO SOIL IN THE PLANT PIT (SEE SPECIFICATIONS).
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEEDING AND SODDING ALL TURFGRASS LAWN AREAS AS DESIGNATED ON THIS PLAN AND PROVIDING PROPER STABILIZATION COVER FOR SEEDED AREAS (STRAW OR BLANKET) UNTIL TURF HAS ESTABLISHED EVEN GERMINATION THROUGHOUT THE PLANTED AREA.
17. SEEDING LIMITS SHALL BE DEFINED AS THE LIMITS OF GRADING DISTURBANCE AS SHOWN ON THE CIVIL GRADING PLAN, SHEET C2.1 THRU C2.4. THE CONTRACTOR IS RESPONSIBLE FOR REVEGITATION OF ALL AREAS DISTURBED DURING CONSTRUCTION BEYOND THE GRADING LIMITS AS DEFINED IN THE CIVIL GRADING PLANS.
18. SOCCER AND BASEBALL FIELDS ARE TO BE SODDED. SODDING LIMITS FOR THE SOCCER FIELDS SHALL EXTEND 42" (ONE ROLL WIDTH) BEYOND A STRAIGHT LINE BETWEEN THE SURVEY DEFINED FIELD CORNERS. SODDING LIMITS FOR THE BASEBALL FIELD IS THE CONCRETE MOW STRIP AROUND THE PERIMETER OF THE PLAYING FIELD.
19. CALLIPER OF ALL TREES SHALL BE MEASURED BY LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION AND ALL UNDERSIZED TREES SHALL BE REJECTED.
20. ALL PLANTING ISLANDS SHALL BE BERMED TO MEET A MINIMUM CROSS SLOPE OF 2% TOWARD THE ROADWAY.
21. ANY DEVIATIONS TO THE APPROVED FINAL LANDSCAPE PLAN SHALL REQUIRE THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT AND THE CITY OF MELISSA PRIOR TO INSTALLATION.
22. TOP SOIL IN PLANTING BEDS SHALL BE GRADED TO 2" BELOW THE ADJACENT CURB OR WALK TO ALLOW FOR MULCH.
23. SOIL AMMENDMENTS SHALL BE ADDED TO THE PLANTING AREAS (SHRUB PLANTING AREAS) AS DIRECTED BY THE MANUFACTURER OR SUPPLIER.
24. CONTRACTOR SHALL INSTALL WEED BARRIER FABRIC IN ALL PLANTING BEDS (SHRUB AREAS ADJACENT TO TENNIS PRO SHOP) BETWEEN THE SOIL AND MULCH PER MANUFACTURERS RECOMMENDATION AND LOCAL STANDARD PRACTICE.



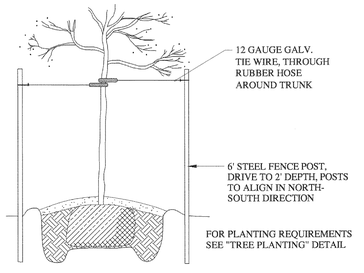
2 TREE STAKING/CONIFEROUS
NOT TO SCALE



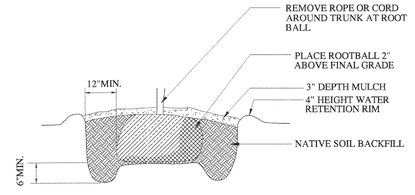
3 STEEL EDGING
NOT TO SCALE



4 SHRUB PLANTING
NOT TO SCALE



5 TREE STAKING/DECIDUOUS
NOT TO SCALE



6 TREE PLANTING
NOT TO SCALE

PLANTING LEGEND - ALTERNATE "K"

TREES

Symbol	Qty.	Botantical Name	Common Name	Root Ball	Size	Remarks
·	20	Acer saccharanum 'Caddo'	Caddo Maple	B&B	2" CAL.	
	38	Quercus shumardii	Shumard Oak	B&B	2" CAL.	
·	58	Cercis canadensis 'Forest Pansy'	Forest Pansy Redbud	B&B	1.5" CAL.	
	64	Picea pungens	Colorado Blue Spruce	B&B	2" CAL.	

SHRUBS

○○○○○○○○	108	Buxus sempirvirens 'Green Velvet'	Green Velvet Boxwood	#3 C	12"-15"	36" O.C.

PLANTING LEGEND - ALTERNATE "L"

TREES

Symbol	Qty.	Botantical Name	Common Name	Root Ball	Size	Remarks
·	85	Acer saccharanum 'Caddo'	Caddo Maple	B&B	2" CAL.	
	54	Quercus shumardii	Shumard Oak	B&B	2" CAL.	
·	13	Cercis canadensis 'Forest Pansy'	Forest Pansy Redbud	B&B	1.5" CAL.	
	55	Picea pungens	Colorado Blue Spruce	B&B	2" CAL.	

SHRUBS

○○○○○○○○	0	Buxus sempirvirens 'Green Velvet'	Green Velvet Boxwood	Cont.	3 Gallon	36" O.C.

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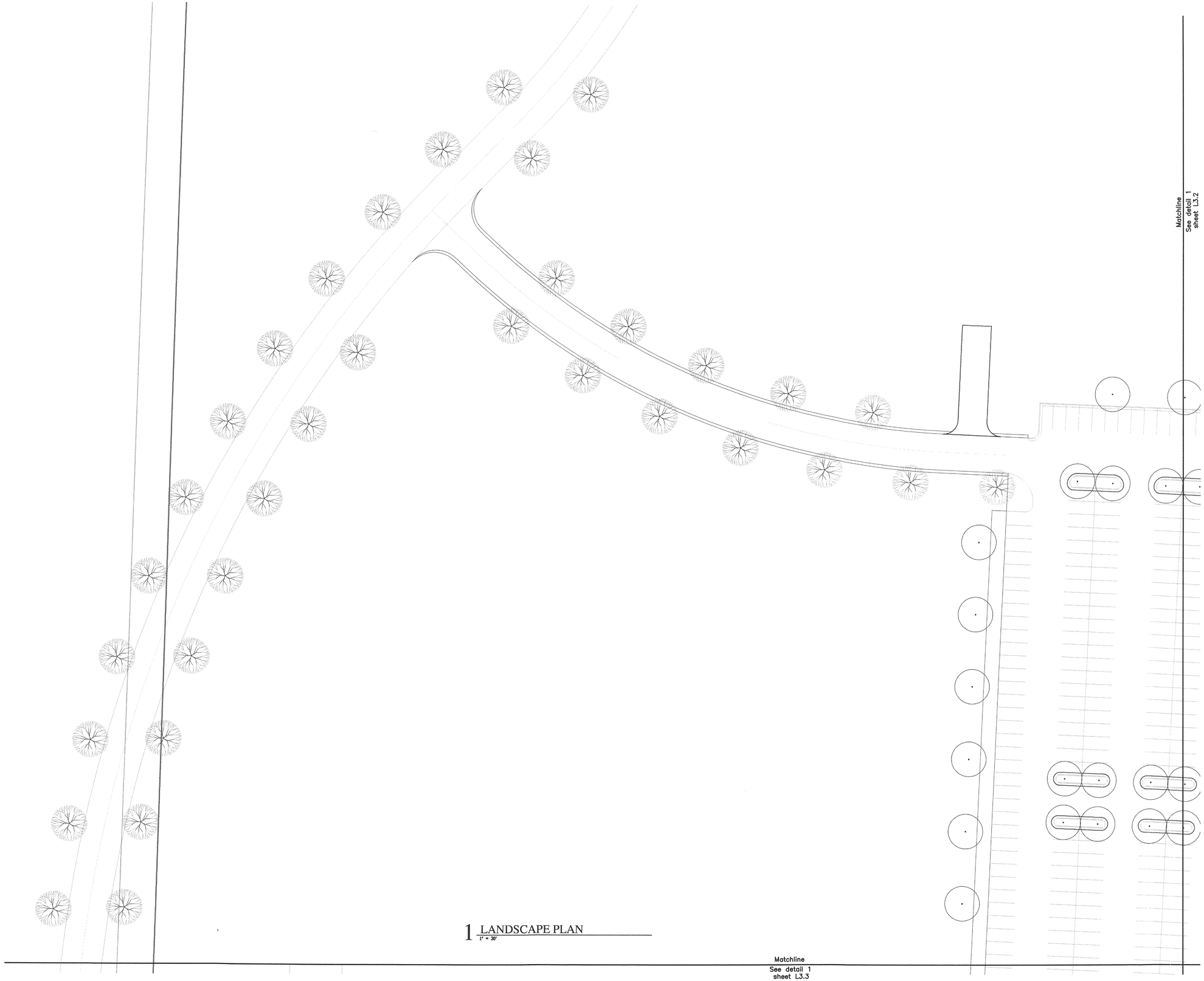
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CHECKED BY MHM DATE
DESIGNED BY GAH DATE
REVISIONS DATE
ISSUE DATE 7-11-07

Site Planting Reference Plan

L3.0

SHEET 42 OF 74

Drawing Name: Q:\2006-0924\01 - 1st\Project\PRL\ACAD\Final CDs\L3.0-L3.4 Site Planting.dwg Jul 12,2007 - 10:19am



PLANTING LEGEND

TREES

Symbol	Common Name
	Caddo Maple
	Shumard Oak
	Forest Pansy Redbud
	Colorado Blue Spruce

SHRUBS

Symbol	Common Name
	Green Velvet Boxwood

NOTE: See sheet L1.4 for complete plant information.

1 LANDSCAPE PLAN
1" = 30'

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Soccer Complex Layout

L3.1

SHEET 43 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\FRL\ACAD\Final CDs\L3.0-L3.4 Site Planting.dwg, Jul 12,2007 - 10:20am

Matchline
See detail 1
sheet L3.1

SOD SOCCER PLAYING SURFACES PLUS 1 ROLL WIDTH (42")

SODDING LIMITS

SOD SOCCER PLAYING SURFACES PLUS 1 ROLL WIDTH (42")

SOD SOCCER PLAYING SURFACES PLUS 1 ROLL WIDTH (42")

SOD SOCCER PLAYING SURFACES PLUS 1 ROLL WIDTH (42")

Matchline
See detail 1
sheet L3.4

1 LANDSCAPE PLAN
1" = 30'

N

40 0 40 80
Scale in Feet

PLANTING LEGEND

TREES

Symbol	Common Name
	Caddo Maple
	Shumard Oak
	Forest Pansy Redbud
	Colorado Blue Spruce

SHRUBS

Symbol	Common Name
	Green Velvet Boxwood

NOTE: See sheet L1.4 for complete plant information.

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ISSUE DATE	7-11-07

Soccer Complex Layout

L3.2

SHEET 44 OF 74

Drawing Name: Q:\2006-092\01 - ist\Project\PRL\ACAD\Final CD's\L3.0-L3.4 Site Planting.dwg Jul 12,2007 - 10:20am

Matchline
See detail 1
sheet L3.1

SOD INFIELD &
OUTFIELD PLAYING
SURFACE

Matchline
See detail 1
sheet L3.4

PLANTING LEGEND

TREES

Symbol	Common Name
	Caddo Maple
	Shumard Oak
	Forest Pansy Redbud
	Colorado Blue Spruce

SHRUBS

Symbol	Common Name
	Green Velvet Boxwood

NOTE: See sheet L1.4 for complete plant information.

N

30 0 30 60
Scale in Feet

1 LANDSCAPE PLAN
1" = 30'

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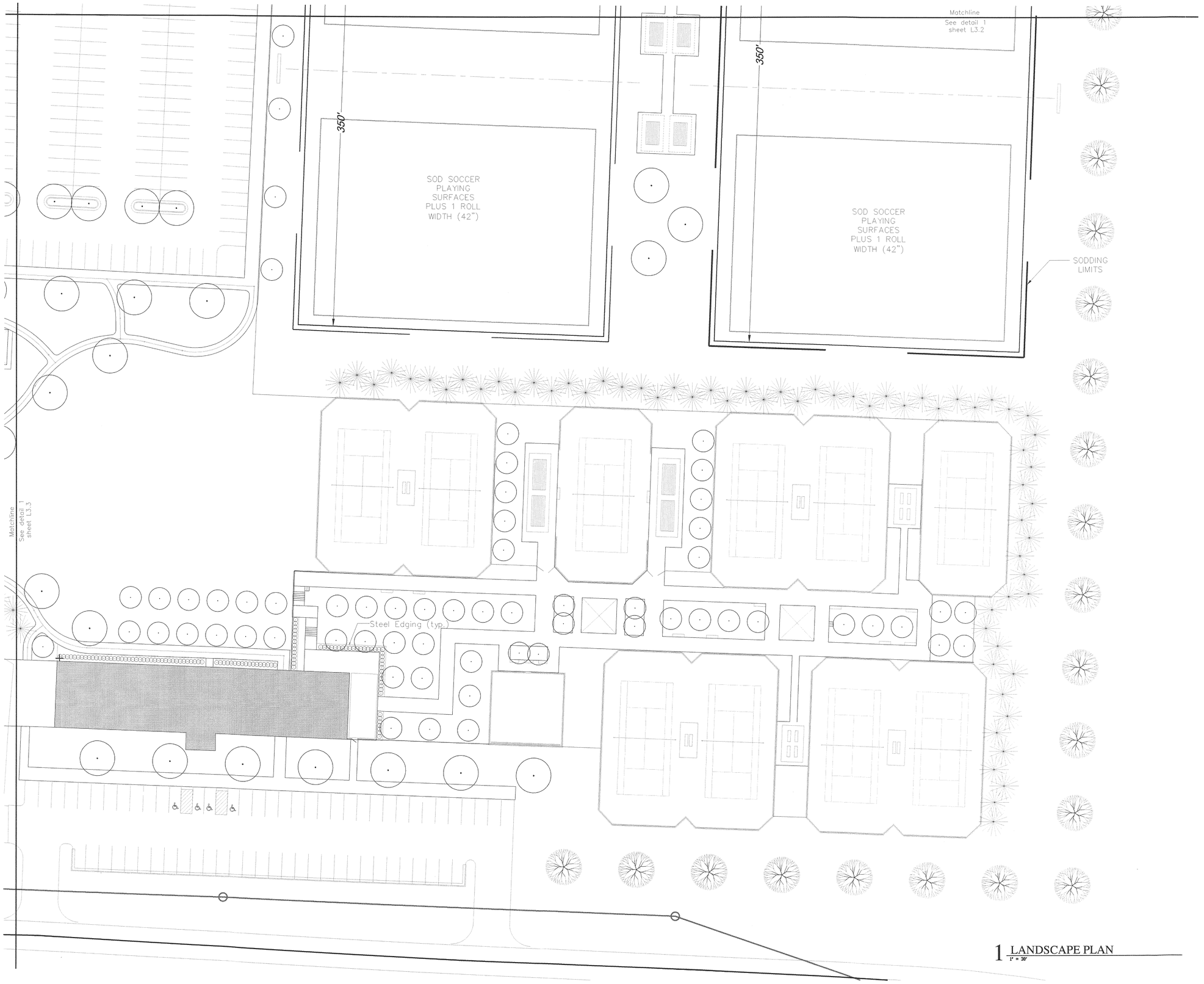
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DESIGNED BY	GAH/MHM
DATE	
REVISIONS	DATE
ISSUE DATE	7-11-07

Baseball Field Layout

L3.3

SHEET 45 OF 74

Drawing Name: Q:\2006-0924\01 - 1st Project\PRL\ACAD\Final CDs\L3.0-L3.4 Site Planting.dwg Jul 13,2007 - 11:21am



PLANTING LEGEND

TREES

Symbol	Common Name
	Caddo Maple
	Shumard Oak
	Forest Pansy Redbud
	Colorado Blue Spruce

SHRUBS

Symbol	Common Name
	Green Velvet Boxwood

NOTE: See sheet L1.4 for complete plant information.

1 LANDSCAPE PLAN
1" = 30'

N

40 0 40 80
Scale in Feet

Drawing Name: Q:\2006-0924\01-1stProject\PRL\ACAD\Final CD\dwl\L3.0-L3.4 Site Planting.dwg, Jul 13,2007 - 11:20am

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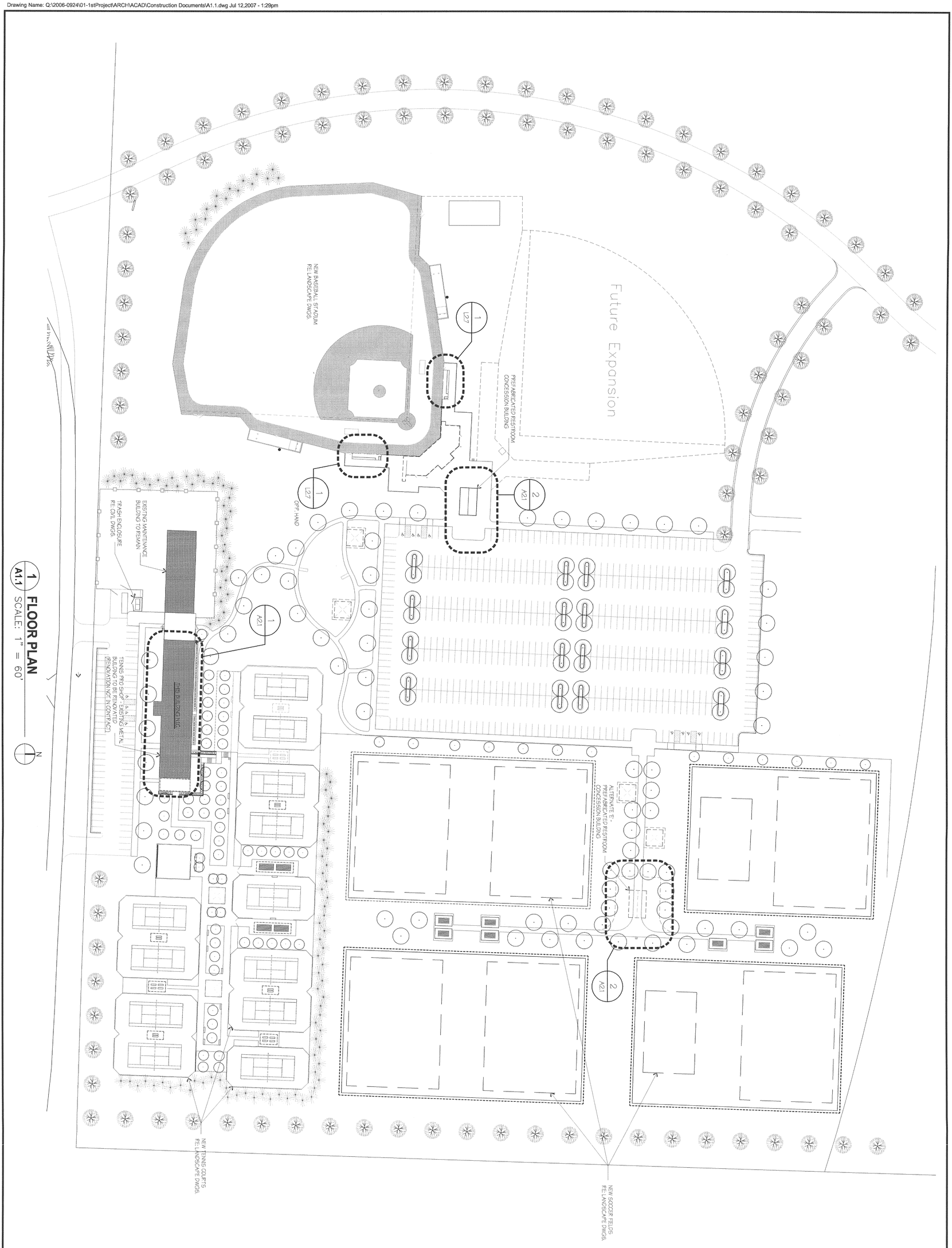
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DESIGNED BY	GAH
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REVISIONS	DATE
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Soccer Complex Layout

L3.4

Drawing Name: Q:\2006-0924\01-1stProject\ARCH\ACAD\Construction Documents\A1.1.dwg Jul 12,2007 - 1:29pm



1 / A1.1 FLOOR PLAN
SCALE: 1" = 60'

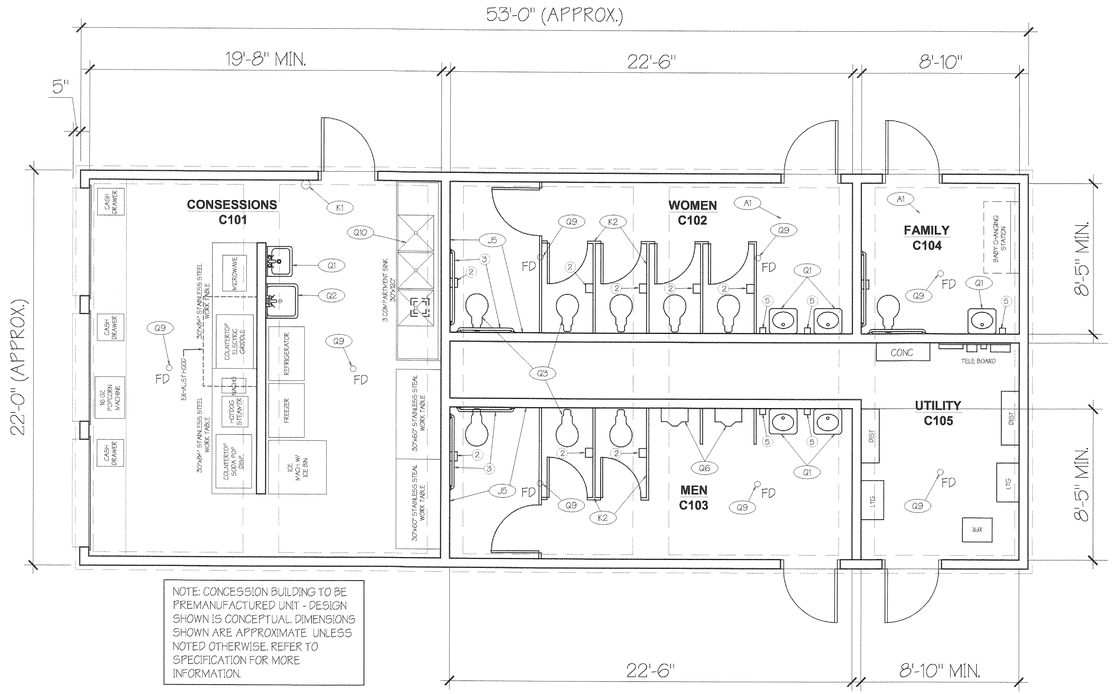
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A1.1	
SHEET 47 OF 74	
Architectural Site Plan	
ISSUE DATE	7-11-07
REVISIONS	DATE
DESIGNED BY	DATE
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PROJECT NO.	20060924

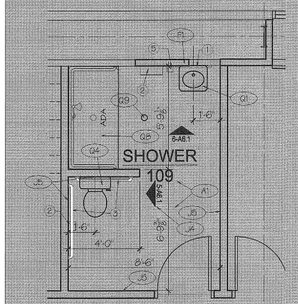
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Joplin Sports Complex - Phase One

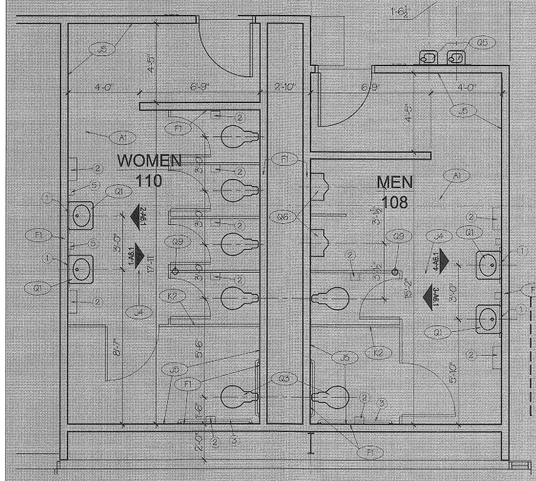
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2 A2.1 PREFAB. CONCESSION BLDG. PLAN SCALE: 1/4" = 1'-0"



4 A2.1 ENLARGED FLOOR PLAN SCALE: 1/4" = 1'-0"



3 A2.1 ENLARGED TOILET PLAN SCALE: 1/4" = 1'-0"

TOILET ACCESSORY SCHEDULE

1. 24"x40" STAINLESS STEEL MIRROR (BRADLEY MODEL 748 OR APPROVED EQUAL)
2. TOILET PAPER DISPENSER (BRADLEY MODEL 5402 OR APPROVED EQUAL)
3. GRAB BARS - 36" & 42" (AMERICAN SPECIALTIES, INC.: MODEL 3100-P OR APPROVED EQUAL)
4. PAPER TOWEL DISPENSER (BRADLEY MODEL 250-15 OR APPROVED EQUAL)
5. SOAP DISPENSER (BRADLEY MODEL 6562 OR APPROVED EQUAL)
6. (ADA/ANSI) SIGNAGE; RE: FIXTURE MOUNTING HEIGHTS

WALL TYPES:

- W1 CHASE WALL: (2 X 4) WOOD STUDS AT (16") OC FROM FINISHED FLOOR TO ROOF DECK; INSTALL SLIP TRACK AT STUD TO ROOF DECK CONNECTION INSTALL (3-5/8") MINERAL SOUND ATTENUATION BATT INSULATION (FULL HEIGHT); INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (RESTROOM SIDE) FROM FINISHED FLOOR TO ROOF DECK; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W2 STANDARD WALL: (2 X 4) WOOD STUDS AT (16") OC FROM FINISHED FLOOR TO ROOF DECK; INSTALL SLIP TRACK AT STUD TO ROOF DECK CONNECTION INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (EACH FACE) FROM FINISHED FLOOR TO (4') ABOVE CEILING; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W3 COLUMN FURRING: (1 X 2) WOOD STUDS AT (16") OC FROM FINISHED FLOOR TO (4") ABOVE CEILING; INSTALL (1) LAYER OF (5/8") (TYPE-X) GYPSUM BOARD FROM FINISHED FLOOR TO (4") ABOVE FINISHED CEILING LINE; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W4 EXISTING STUD WALL: EXISTING WOOD STUD WALL FRAMING; INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (EACH FACE) FROM FINISHED FLOOR TO (4") ABOVE CEILING; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W5 EXISTING PERIMETER STUD WALL: EXISTING WOOD STUD WALL FRAMING; INSTALL (1) LAYER OF (5/8") (TYPE-X) GYPSUM BOARD (INTERIOR FACE) FROM FINISHED FLOOR TO (4") ABOVE CEILING; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W6 STANDARD PERIMETER WALL: NEW WOOD STUD FRAMING TO MATCH ADJACENT; INSTALL (1) LAYER OF (5/8") (TYPE-X) GYPSUM BOARD (INTERIOR FACE) FROM FINISHED FLOOR TO (4") ABOVE CEILING; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W7 STANDARD FULL HEIGHT WALL: (2 X 4) WOOD STUDS AT (16") OC FROM FINISHED FLOOR TO ROOF DECK; INSTALL SLIP TRACK AT STUD TO ROOF DECK CONNECTION INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (EACH FACE) FROM FINISHED FLOOR TO ROOF DECK; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W8 EXISTING FULL HEIGHT WALL: EXISTING WOOD STUD WALL FRAMING/EXTEND WALL FRAMING TO ROOF DECK; INSTALL SLIP TRACK AT STUD TO ROOF DECK CONNECTION INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (EACH FACE) FROM FINISHED FLOOR TO ROOF DECK; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.
- W9 EXISTING CMU WALL TO REMAIN: EXISTING CMU WALL CONSTRUCTION TO REMAIN; NO FURTHER FINISHES REQUIRED.
- W10 EXISTING TO REMAIN: EXISTING WOOD STUD WALL FRAMING TO REMAIN; NO FURTHER FINISHES REQUIRED.
- W11 NEW SOUND WALL: (2 X 4) WOOD STUDS AT (16") OC FROM FINISHED FLOOR TO ROOF DECK; INSTALL SLIP TRACK AT STUD TO ROOF DECK CONNECTION INSTALL (3-5/8") MINERAL SOUND ATTENUATION BATT INSULATION (FULL HEIGHT); INSTALL (1) LAYERS OF (5/8") (TYPE-X) GYPSUM BOARD (EACH FACE) FROM FINISHED FLOOR TO ROOF DECK; TAPE, MUD, SAND AND FINISH GYPSUM BOARD PER FINISH SCHEDULE.

NOTE:
INSTALL WATER RESISTANT GYPSUM BOARD INSIDE MENS, WOMENS AND UNISEX RESTROOMS AND ON WALL WITH UTILITY SINK AND DRINKING FOUNTAIN.

FLOOR PLAN KEY NOTES:

(A) GENERAL:
- A1 (5'-0" DIA.) WHEELCHAIR TURNING RADIUS.

(B) SITE:

(C) CONCRETE:
- C1 PATCH FLOOR SLAB TO MATCH EXISTING AT LOCATIONS WHERE FLOOR DRAINS AND PLUMBING ARE ADDED OR REMOVED. PREPARE SLAB AS REQUIRED TO RECEIVE SCHEDULED FLOOR FINISH.
- C2 SAWCUT SLAB TO REMOVE EXISTING CRACK; PATCH CONCRETE SLAB AND PREPARE AS REQUIRED TO RECEIVE SCHEDULED FLOOR FINISH.

(D) MASONRY:

(E) METALS:

(F) WOOD AND PLASTICS:
- F1 CONTINUOUS WOOD BLOCKING IN WALL FOR FIXTURE SUPPORT (TYPICAL)
- F2 PLASTIC LAMINATE COUNTER
- F3 PLASTIC LAMINATE SILL
- F4 (24") THICK MELAMINE FINISHED SHELVING WITH HEAVY DUTY BRACKETS AND STANDARDS; TRIM SHELVING TO FIT WALL CONFIGURATION. SEE DETAIL
- F5 (3/4") (5-C) PLYWOOD VENEER; GLUE AND SCREW ATTACH PLYWOOD THROUGH SCHEDULED GYPSUM BOARD INTO WOOD STUDS AT 16" O.C.; SEE DETAIL. PAINT TO MATCH WALLS.

(H) DOORS AND WINDOWS:
- H1 NEW PREFINISHED (THERMAL BREAK) ALUMINUM STOREFRONT FRAMING SYSTEM; KAWNEER (TRIFAB 451T), OR APPROVED EQUAL WITH (1") (CLEAR) INSULATED GLAZING; INSTALL TEMPERED PLATE GLASS AT HAZARDOUS LOCATIONS SUBJECT TO HUMAN IMPACT LOADS AS DEFINED BY APPLICABLE EDITION OF THE INTERNATIONAL BUILDING CODE; FINISH ALUMINUM (ALUM 1).

(J) FINISHES:
- J1 EDGE TRIM AT TRANSITION BETWEEN EDGE OF CARPET AND VINYL COMPOSITION TILE (SCHLUTER-REND-U, ALUMINUM SATIN ANODIZED)
- J2 EDGE TRIM WHERE CONCRETE FLOOR TRANSITIONS TO CARPET (SCHLUTER-REND-RAMP, ALUMINUM SATIN ANODIZED)
- J3 CARPET FLOORING
- J4 VINYL COMPOSITION TILE FLOORING
- J5 FIBER REINFORCED POLYESTER (FRP) PANEL BOARD WAINSCOTING

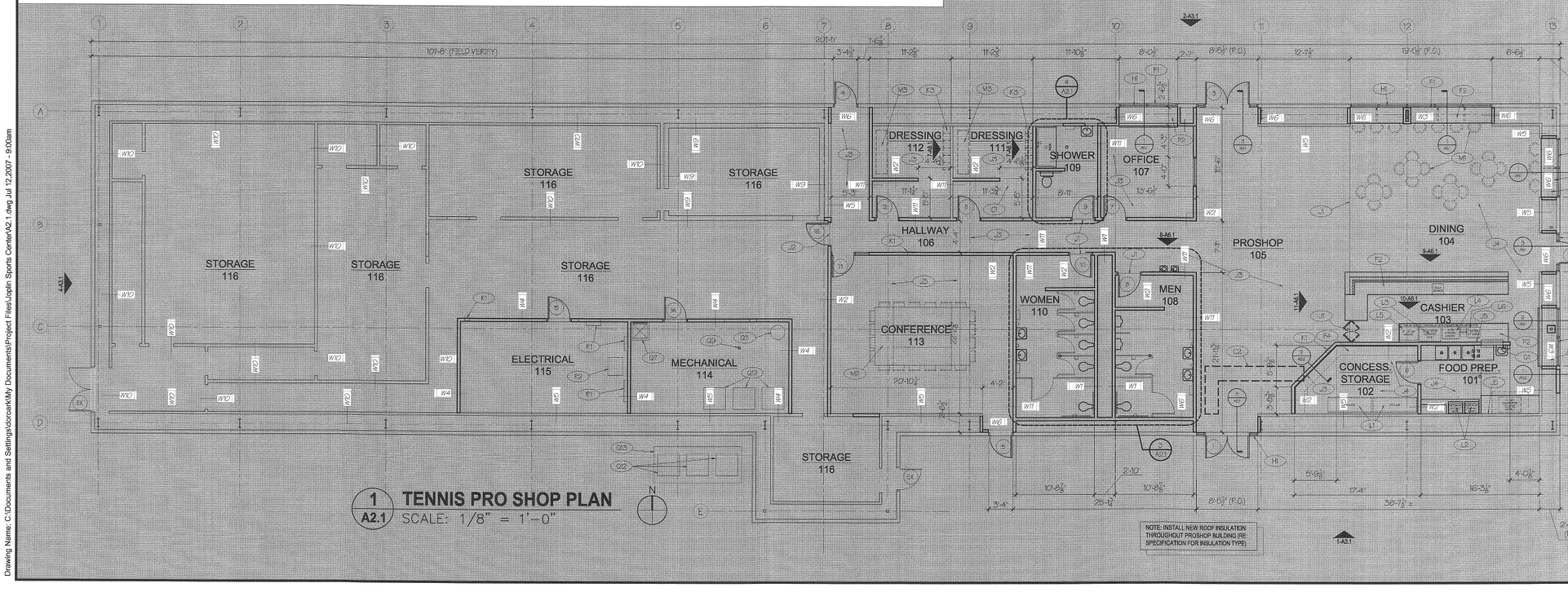
(K) SPECIALTIES:
- K1 (SEMI-RECESSED FIRE EXTINGUISHER; MOUNT ACCORDING TO (SECTION 906) IN THE 2000 INTERNATIONAL FIRE CODE.
- K2 FLOOR SUPPORTED HEAD RAIL BRACED TOILET PARTITION; MOUNT TOP AT (7'-0") A.F.F.; COLOR AS SPECIFIED.
- K3 TWO TIERED PREFINISHED VENTED METAL LOCKERS; SEE INTERIOR ELEVATIONS.
- K4 BRACKET MOUNTED FIRE EXTINGUISHER; MOUNT ACCORDING TO (SECTION 906) IN THE 2000 INTERNATIONAL FIRE CODE.

(L) EQUIPMENT:
- L1 FREEZER
- L2 MICROWAVE
- L3 SODA FOUNTAIN
- L4 POPCORN MACHINE
- L5 ICE CREAM MAKER
- L6 HOTDOG WARMER
- L7 UNDERCOUNTER REFRIGERATOR
- L8 UNDERCOUNTER ICE MAKER

(M) FURNISHINGS:
- M1 DINING FURNITURE PROVIDED BY OWNER
- M2 CONFERENCE ROOM FURNITURE PROVIDED BY OWNER
- M3 PREFABRICATED BENCH PROVIDED BY OWNER

(Q) MECHANICAL
- Q1 (ADA/ANSI) COMPLIANT WALL MOUNTED LAVATORY AND FAUCET; SEE FIXTURE MOUNTING HEIGHTS AND PLUMBING DRAWINGS
- Q2 WALL MOUNTED UTILITY SINK WITH FAUCET; SEE PLUMBING DRAWINGS
- Q3 WALL MOUNTED WATER CLOSET; (ADA/ANSI) HANDICAPPED ACCESSIBLE; SEE PLUMBING DRAWINGS
- Q4 FLOOR MOUNTED WATER CLOSET; (ADA/ANSI) HANDICAPPED ACCESSIBLE; SEE PLUMBING DRAWINGS
- Q5 DRINKING FOUNTAIN; MOUNT PER ADA/AG REQUIREMENTS; SEE PLUMBING DRAWINGS
- Q6 WALL MOUNTED URINAL; SEE PLUMBING DRAWINGS
- Q7 FLOOR MOUNTED MOP SINK AND FAUCET; SEE PLUMBING DRAWINGS
- Q8 (ADA/ANSI) COMPLIANT FIBERGLASS SHOWER WITH GRAB BAR COMBO; SEE PLUMBING DRAWINGS
- Q9 FLOOR DRAIN; SEE PLUMBING DRAWINGS
- Q10 (3) COMPARTMENT STAINLESS STEEL SINK; SEE PLUMBING DRAWINGS
- Q11 WATER HEATER; SEE PLUMBING DRAWINGS
- Q12 HVAC UNITS; SEE MECHANICAL DRAWINGS
- Q13 CONCRETE EQUIPMENT PAD; SIZE APPROPRIATE FOR MECHANICAL UNITS; SEE MECHANICAL DRAWINGS

(R) ELECTRICAL
- R1 ELECTRICAL PANELBOARD; SEE ELECTRICAL DRAWINGS
- R2 ELECTRIC TRANSFORMER; SEE ELECTRICAL DRAWINGS



1 A2.1 TENNIS PRO SHOP PLAN SCALE: 1/8" = 1'-0"

NOTE: INSTALL NEW ROOF INSULATION THROUGHOUT PROSHOP BUILDING (RE: SPECIFICATION FOR INSULATION TYPE)

NOTE: WORK SHOWN FOR TENNIS PRO SHOP NOT IN CONTRACT

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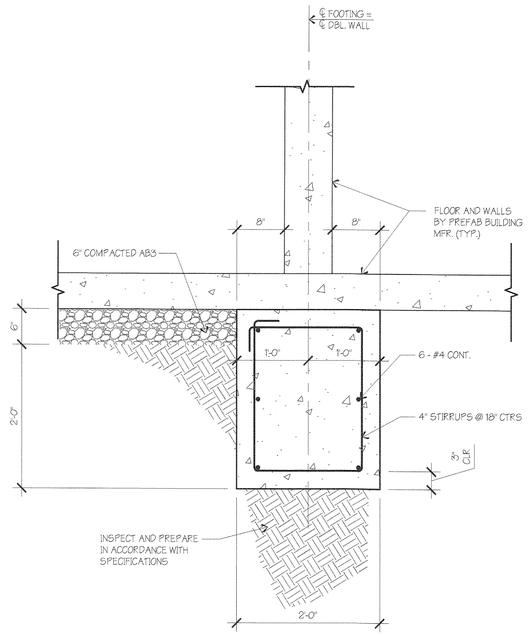
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Building Floor Plans

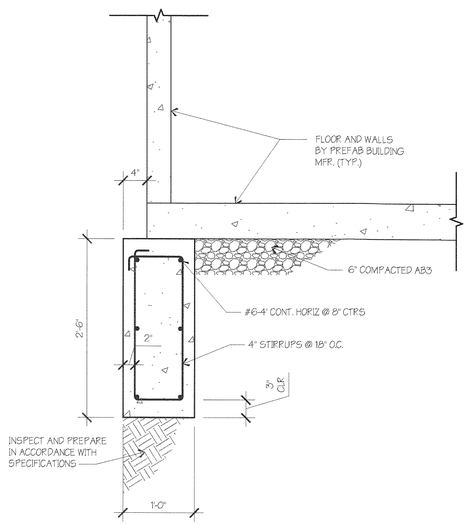
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SHEET 48 OF 74

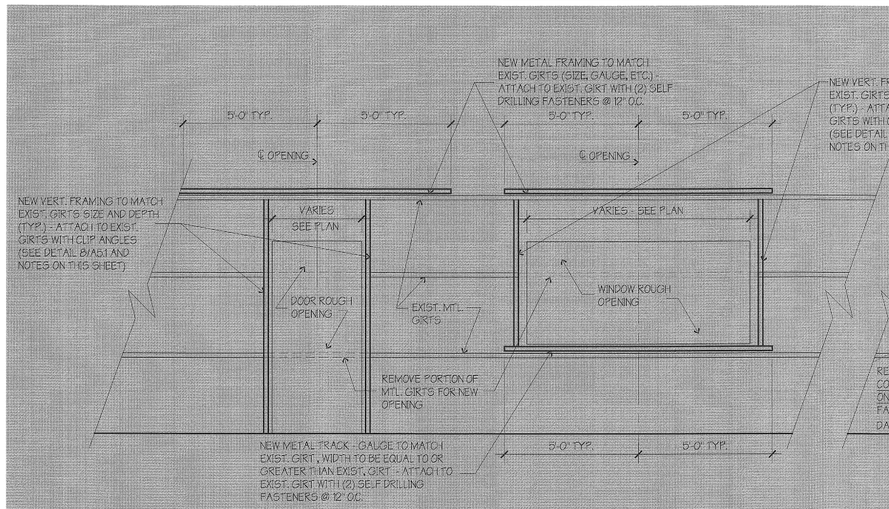
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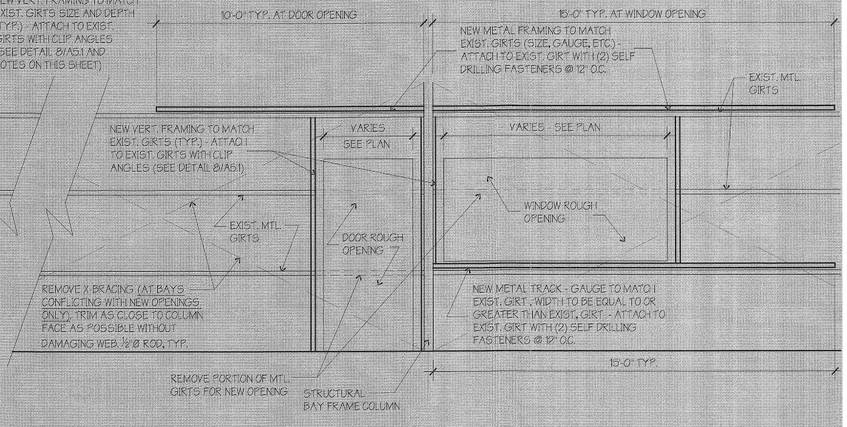
6 / A5.2 CONCESSION INT. WALL FOUNDATION DETAIL
SCALE: 1" = 1'-0"



5 / A5.2 CONCESSION EXT. WALL FOUNDATION DETAIL
SCALE: 1" = 1'-0"



4 / A5.2 TYP. STRUCT. FRAMING - NEW OPENINGS

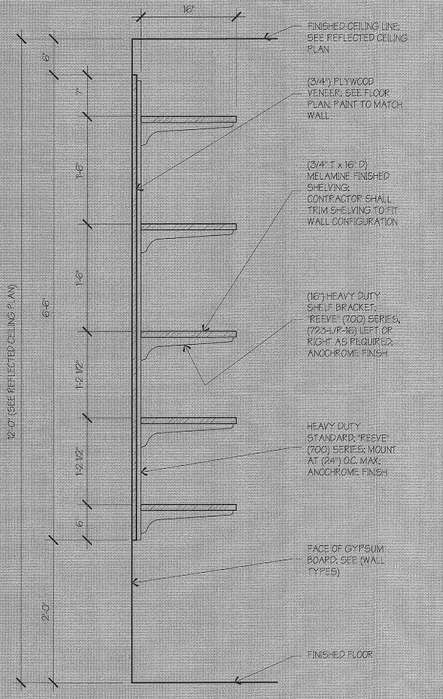


3 / A5.2 TYP. STRUCT. FRAMING - NEW OPENINGS @ BRACED BAYS OR FRAMING COLUMNS

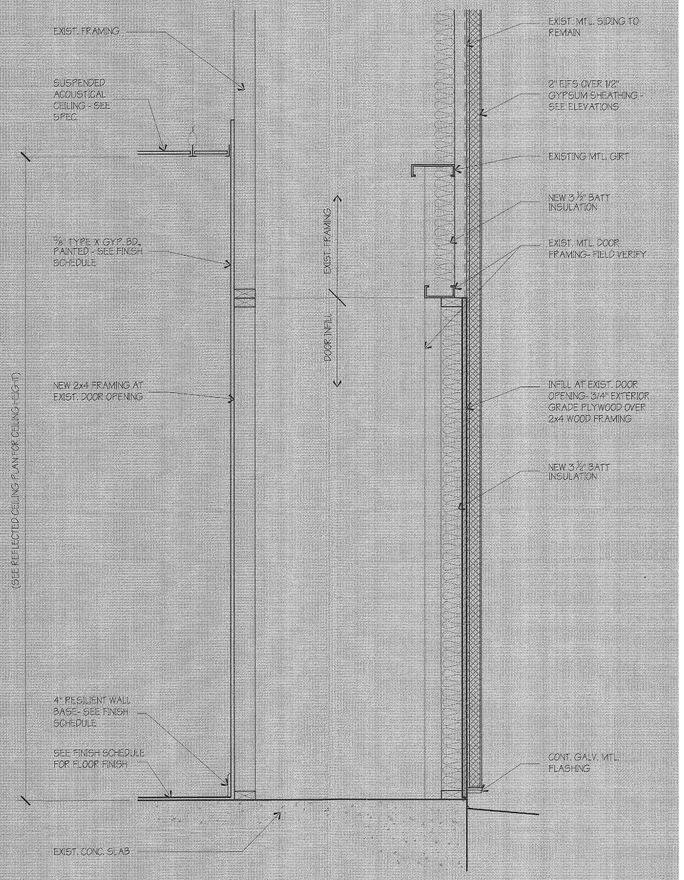
NOTES:

- WHERE HORIZ. AND VERT. FRAMING MEMBERS COME TOGETHER ATTACH WITH LONG CLIP ANGLES WITH ATLEAST SIX SCREWS ATTACHING TO THE HORIZ. MEMBER. USE #10-16X⅝ HWH HD SCREWS.
- ATTACH NEW STUDS TO THE CONCRETE FLOOR WITH LONG CLIPS MIN. 6 SCREWS INTO STUD AND USE TWO ⅜"Ø EXPANSION ANCHORS INTO FLOOR CONCRETE.
- IF A SCREW IS STRIPPED OUT DURING INSTALLATION, ANOTHER UNSTRIPPED SCREW SHALL BE ADDED TO THE CONNECTION.
- REMOVE X-BRACING ONLY WHEN IT CONFLICTS WITH A NEW OPENING. SEE DETAIL 3 THIS SHEET.

NOTE: WORK SHOWN FOR TENNIS PRO SHOP NOT IN CONTRACT



2 / A5.2 WALL SECTION
SCALE: 1" = 1'-0"



1 / A5.2 WALL SECTION
SCALE: 1" = 1'-0"

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Joplin Sports Complex - Phase One

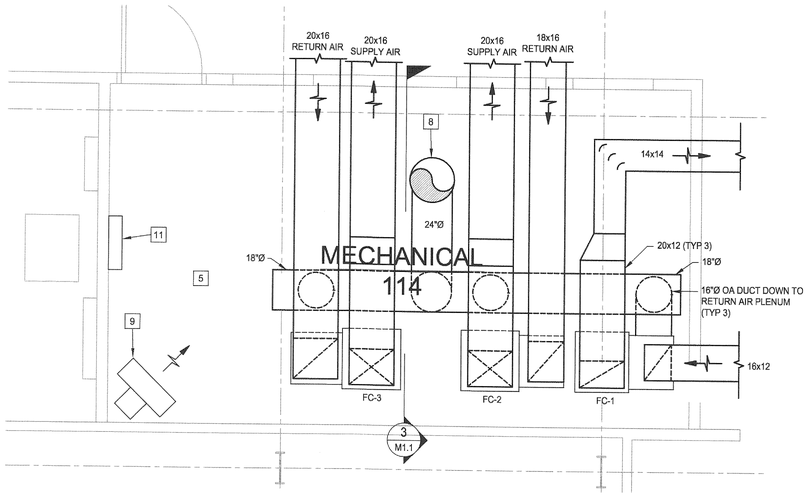
PROJECT NO.	20060924
DRAWN BY	DATE
CHECKED BY	DATE
DESIGNED BY	DATE
REVISIONS	DATE
ISSUE DATE	7-11-07

Wall Sections, Details & Framing Diagrams

A5.2

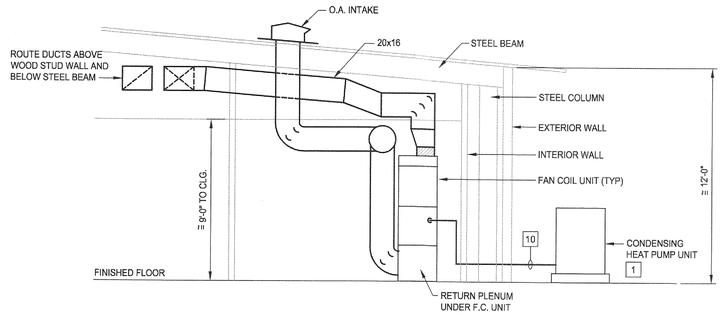
SHEET 52 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\ARCH\ACAD\Construction Documents\A5.1-A5.3.dwg, Jul 11,2007 - 12:10pm



2 M1.1 MECHANICAL ROOM HVAC PLAN

SCALE: 3/8" = 1'-0"



3 M1.1 MECHANICAL ROOM SECTION

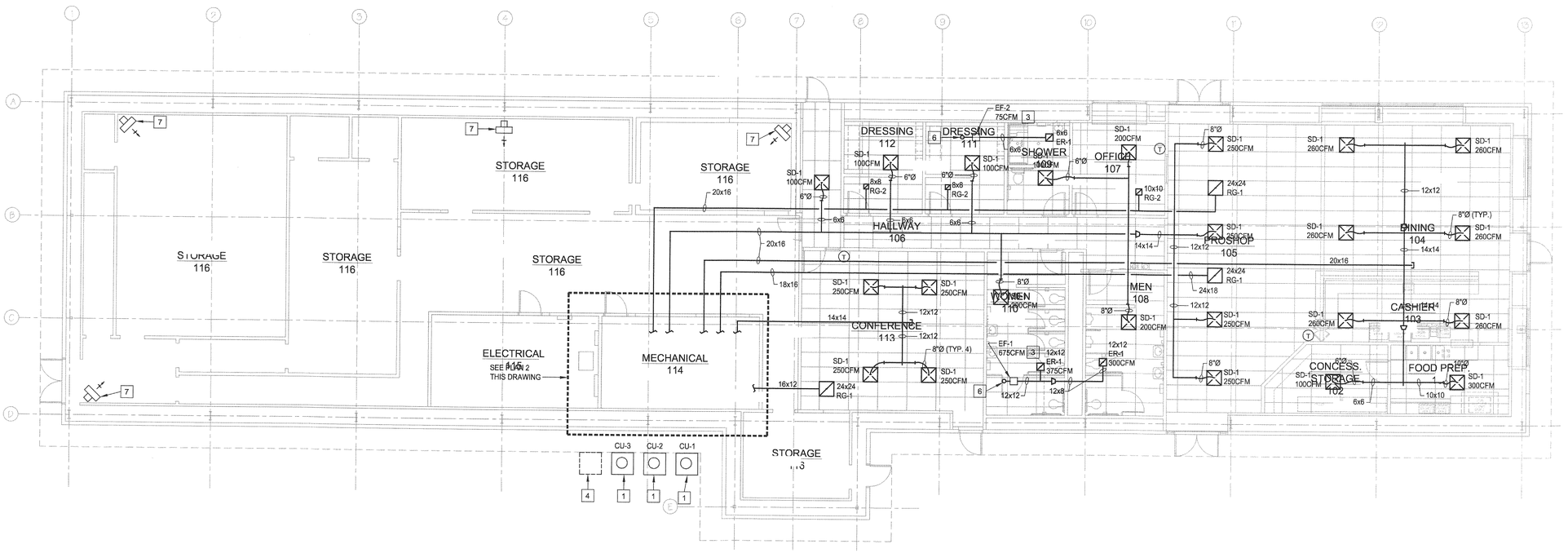
SCALE: 1/4" = 1'-0"

MECHANICAL NOTES:

1. CONDENSING HEAT PUMP UNIT ON 6" CONCRETE PAD. SEE SCHEDULE ON DRAWING M1.2 FOR SIZE.
2. FAN COIL UNIT. SEE DRAWING M2.1 FOR DETAIL AND SCHEDULE.
3. EXHAUST FAN . SEE DRAWING M1.2 FOR DETAIL AND SCHEDULE.
4. FUTURE CONDENSING UNIT SPACE.
5. FUTURE FAN COIL SPACE.
6. BROAN, OR EQUAL, MODEL 2C905 ROOF CAP.
7. 5KW 208/1/60 ELECTRIC UNIT HEATER.
8. 24Ø UP TO 24"x24" ROOF INTAKE HOOD.
9. 3KW 208/1/60 ELECTRIC UNIT HEATER.
10. REFRIGERANT PIPES SIZED PER MANUFACTURER RECOMMENDATIONS.
11. TEMPERATURE CONTROL PANEL FOR DDC FUNCTIONS NOT AVAILABLE AT THERMOSTAT. SEE DRAWING M2.1 FOR CONTROL SEQUENCE.

LEGEND:

10x10	SHEET METAL DUCTWORK. SIZE SHOWN IS SHEET METAL SIZE
AP	ACCESS PANEL
BD	BALANCE DAMPER
CU-1	CONDENSING UNIT
EF-1	EXHAUST FAN AND DESIGNATION
ER-1	EXHAUST REGISTER AND DESIGNATION
FC-1	FAN COIL UNIT AND DESIGNATION
OACD	OUTSIDE AIR CONTROL DAMPER
RACD	RETURN AIR CONTROL DAMPER
RG-1	RETURN GRILLE AND DESIGNATION
SD-1	SUPPLY DIFFUSER AND DESIGNATION
SR-1	SUPPLY REGISTER AND DESIGNATION



1 M1.1 MECHANICAL HVAC PLAN

SCALE: 1/8" = 1'-0"

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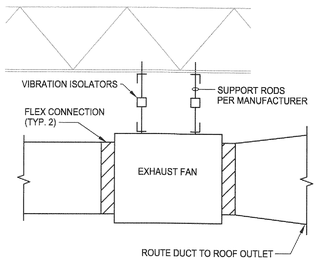
PROJECT NO.	20060924
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DESIGNED BY	RJS
REVISIONS	
ISSUE DATE	7-03-07

ProShop Building
Mechanical HVAC Plan

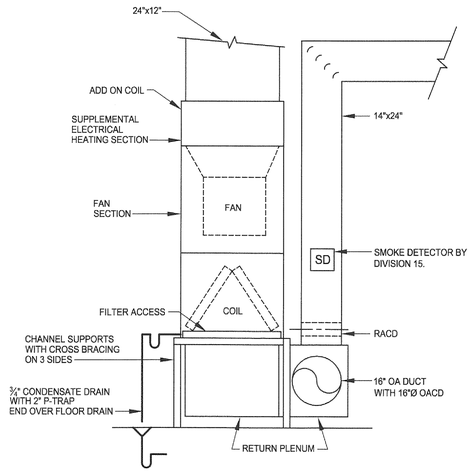
M1.1

SHEET 55 OF 74

Drawing Name: Q:\2006-0924\01-1st Project\MEC\Acad\M1.1.dwg Jul 03,2007 - 3:16pm



1 EXHAUST FAN DETAIL
SCALE: NONE



2 FAN COIL DETAIL
SCALE: NONE

MECHANICAL NOTES:

FAN COIL CONTROL SEQUENCE: THERMOSTAT SHALL CONTROL HEATING/COOLING FUNCTIONS. PROVIDE AN ECONOMIZER CONTROL CYCLE TO CONTROL RACD AND OACD TO PROVIDE FREE COOLING WHEN OUTSIDE AIR IS 60°F (ADJUSTABLE) OR BELOW.

HEAT PUMP SHALL PROVIDE HEAT FROM CONDENSING UNIT. ON FURTHER CALL BY HEAT FROM THERMOSTAT, SUPPLIMENTAL ELECTRIC HEAT SHALL ENERGIZE IN STAGES AS APPLICABLE.

SMOKE DETECTOR SHALL SHUT DOWN FAN UPON DETECTION OF SMOKE. PROVIDE RESET CAPABILITY.

DIVISION 15 CONTRACTOR SHALL PROVIDE ALL CONTROLS NECESSARY FOR A COMPLETE OPERABLE SYSTEM INCLUDING THERMOSTATS, CONTROLLERS, LOW VOLTAGE CONTROL WIRING, DAMPER MOTORS, SENSORS, ETC. DIVISION 26 IS RESPONSIBLE FOR WIRING OVER 24 VOLTS. SUBMIT CONTROLS SHOP DRAWINGS FOR REVIEW. INCLUDE EQUIPMENT, SEQUENCE AND ANY REQUIRED SOFTWARE, SCHEMATICS, ETC.

INLET AND OUTLET SCHEDULE

ROOM #	ROOM NAME	SUPPLY					RETURN/EXHAUST			
		TYPE	NO.	CFM (EACH)	INLET	DESCRIPTION	TYPE	NO.	CFM	SIZE
101	FOOD PREP	SD-1	1	300	10	SEE BELOW	-	-	-	-
102	CONCESSION STORAGE	SD-1	1	100	6	SEE BELOW	-	-	-	-
103/104	CASHIER/DINING	SD-1	6	260	8	SEE BELOW	RG-1	1	-	24x24
105	PRO SHOP	SD-1	4	250	8	SEE BELOW	RG-1	1	-	24x24
106	HALLWAY	SD-1	1	100	6	SEE BELOW	-	-	-	-
107	OFFICE	SD-1	1	250	8	SEE BELOW	RG-2	1	-	10x10
108	MEN'S RESTROOM	SD-1	1	200	8	SEE BELOW	ER-1	1	300	12x12
109	FAMILY RESTROOM	SD-1	1	100	6	SEE BELOW	ER-1	1	75	6x6
110	WOMEN'S RESTROOM	SD-1	1	200	8	SEE BELOW	ER-1	1	375	12x12
111	DRESSING	SD-1	1	100	6	SEE BELOW	RG-2	1	-	8x8
112	DRESSING	SD-1	1	100	6	SEE BELOW	RG-2	1	-	8x8
113	CONFERENCE	SD-1	4	250	8	SEE BELOW	RG-1	1	-	24x24

ER-1 EQUAL TO TITUS 355 RL W/ OBD
SD-1 EQUAL TO TITUS PAS, 24"x24" NOMINAL, WHITE PERFORATED FACE, LAY IN CEILING W/ OBD
RG-1 EQUAL TO TITUS 50F, EGGCRATE
RG-2 EQUAL TO TITUS 355RL

EXHAUST FAN SCHEDULE

MARK	EQUAL TO	SERVES	TYPE	DRIVE	AIR FLOW (CFM)	E.S.P. (IN. WC)	MAX FAN POWER	VOLT/PH/HZ	CONTROLLED BY	REMARKS
EF-1	GREENHECK CSP 158	TOILETS	CENTRIFUGAL CABINET FAN	DIRECT	675	0.250	405 WATTS	120/1/60	ON-OFF	-
EF-2	GREENHECK SP6	FAMILY RESTROOM	CENTRIFUGAL CABINET FAN	DIRECT	75	0.125	40 WATTS	120/1/60	ON-OFF	-

COOLING/HEATING HEAT PUMP UNIT SCHEDULE

MARK	NOMINAL TONS	AIR SIDE DATA		COOLING COIL DATA						SUPPLY FAN DATA		ELECTRIC POWER			SUPPLEMENTAL HEATING DATA			FILTER DATA	
		CFM	MIN. CFM OUTSIDE AIR	TOTAL COOLING (MBTUH)	SENSIBLE COOLING (MBTUH)	AIR TEMP. (DEG. F DB/WB) ENT.	AIR TEMP. (DEG. F DB/WB) LVG.	AMBIENT °F	SEER	EXT. S.P. (IN. W.G.)	MAX. MOTOR HP	VOLTS	PHASE	HZ	MINIMUM HEATING OUTPUT KW	AIR TEMP. (DEG. F) ENT.	AIR TEMP. (DEG. F) LVG.	STAGES	TYPE	REMARKS
FC-1		1400	700	42	30	82	67			0.8	1/2	208	1	60	11.5	40		1	1" THROWAWAY	-
CU-1	3.5							105	13.0	-	-	480	3	60						-
FC-2		2000	200	60	48	82	67			0.7	3/4	208	1	60	14.0	55		2	1" THROWAWAY	-
CU-2	5.0							105	13.0	-	-	480	3	60						-
FC-3		2000	800	60	48	82	67			0.7	3/4	208	1	60	11.5	55		1	1" THROWAWAY	-
CU-3	5.0							105	13.0	-	-	480	3	60						-

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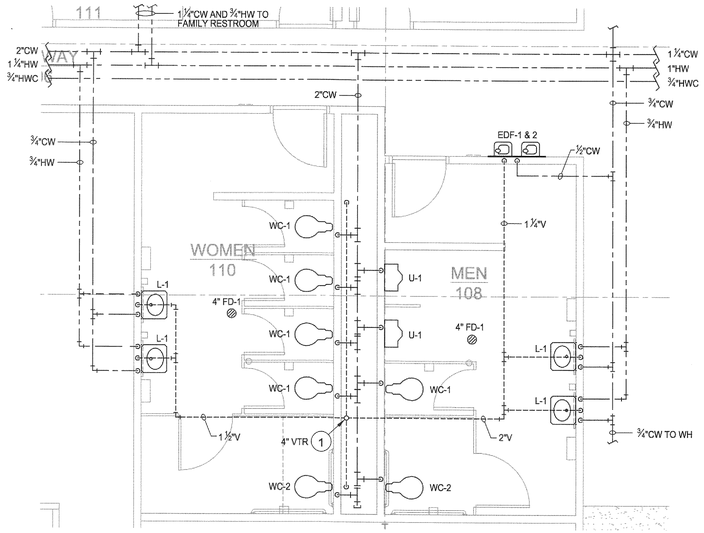
PROJECT NO. 20060924
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REVISIONS DATE
ISSUE DATE 7-03-07

ProShop Building Details and Schedules

M2.1

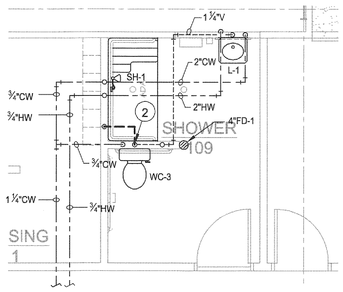
SHEET 56 OF 74

Drawing Name: Q:\2006-092\401-1st Project\MECH\Acad\M2.1.dwg Jul 03,2007 - 3:16pm



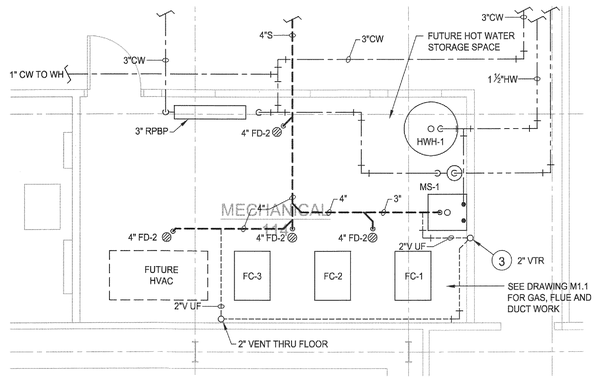
2 / P1.1 ENLARGED PLUMBING PLAN N

SCALE: 1/4" = 1'-0"



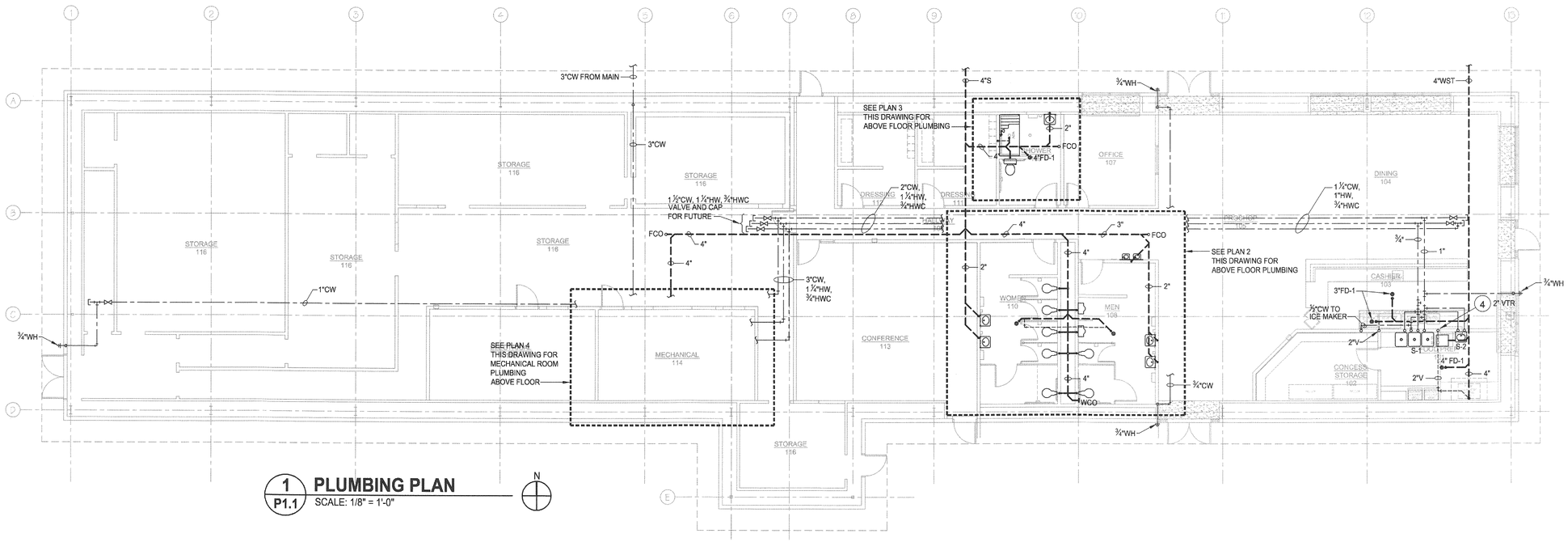
3 / P1.1 ENLARGED PLUMBING PLAN N

SCALE: 1/4" = 1'-0"



4 / P1.1 ENLARGED MECHANICAL ROOM PLAN N

SCALE: 1/4" = 1'-0"



1 / P1.1 PLUMBING PLAN N

SCALE: 1/8" = 1'-0"

LEGEND:

———	DOMESTIC COLD WATER (CW)
———	DOMESTIC HOT WATER (HW)
———	DOMESTIC HOT WATER CIRCULATION (HWC)
— — —	SANITARY PIPING (S)
- - - -	VENT PIPING (V)
1	VENT STACK
EDF-1	ELECTRIC DRINKING FOUNTAIN AND DESIGNATION
FD-1	FLOOR DRAIN AND DESIGNATION
HWH-1	WATER HEATER AND DESIGNATION
L-1	LAVATORY AND DESIGNATION
MS-1	MOP SINK AND DESIGNATION
S-1	SINK AND DESIGNATION
U-1	URINAL AND DESIGNATION
UF	UNDERFLOOR
VTR	VENT THRU ROOF
WC-1	WATER CLOSET AND DESIGNATION
WH-1	WALL HYDRANT AND DESIGNATION

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ISSUE DATE	7-11-07

ProShop Building
Plumbing Plan &
Enlarged Plumbing Plans

P1.1

SHEET 57 OF 74

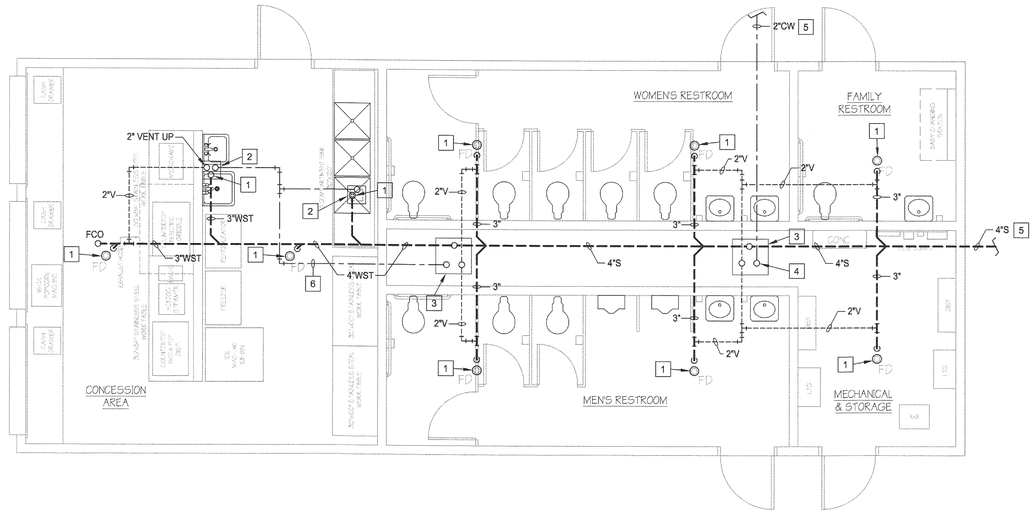
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MECHANICAL NOTES:

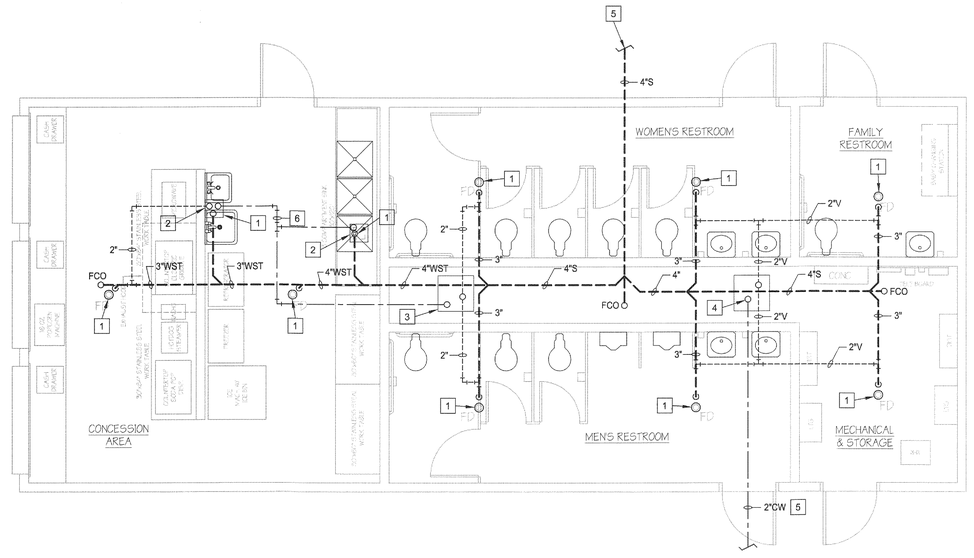
1. PROVIDE 3" WASTE. STUB UP FOR FUTURE CONNECTION BY BUILDING SUPPLIER. PROVIDE P-TRAP FOR FUTURE FLOOR DRAINS ONLY.
2. 12"x12" OPENING IN FLOOR WITH 3" STUB UP FOR WASTE AND 2" STUB UP FOR FUTURE VENT WHERE SHOWN.
3. 24"x24" OPENING IN FLOOR WITH 4" STUB UP FOR FUTURE SANITARY AND 2" STUB UP FOR FUTURE VENT.
4. 2" COLD WATER UP THRU OPENING. 2" COLD WATER SHALL BE PIPED TO A REDUCED PRESSURE BACKFLOW PREVENTER BY BUILDING SUPPLIER.
5. SEE CIVIL DRAWINGS FOR CONTINUATION OF 4" SANITARY AND 2" COLD WATER.
6. 1" COLD WATER UNDERGROUND FROM LARGE FLOOR OPENING IN CHASE TO SMALL OPENING IN KITCHEN. TO SUPPLY SINKS, PROVIDE ¾" STUB UPS AT EACH KITCHEN LOCATION.

GENERAL NOTES:

1. THE CONCESSION BUILDING IS BEING SUPPLIED BY A SEPARATE COMPANY UNDER THIS CONTRACT. THE RESPONSIBILITY OF PLUMBING FIXTURES, PLUMBING PIPING AND OTHER PLUMBING ITEMS ABOVE THE FLOOR WILL BE SUPPLIED BY THE CONCESSION BUILDING SUPPLIER. THIS SHEET SHOWS SUB-GRADE PIPING BASED ON PROSPECTIVE SUPPLIERS. A LAYOUT PROVIDED BY ONE OF THE PLUMBING CONTRACTS SHALL BID BASED ON THIS LAYOUT AND COORDINATE SUB-FLOOR PLUMBING WITH SUCCESSFUL SUPPLIER DURING CONSTRUCTION.



1 P1.2 **WEST CONCESSION UNDERFLOOR PLUMBING PLAN**
SCALE: 1/4" = 1'-0"



2 P1.2 **EAST CONCESSION UNDERFLOOR PLUMBING PLAN**
SCALE: 1/4" = 1'-0"

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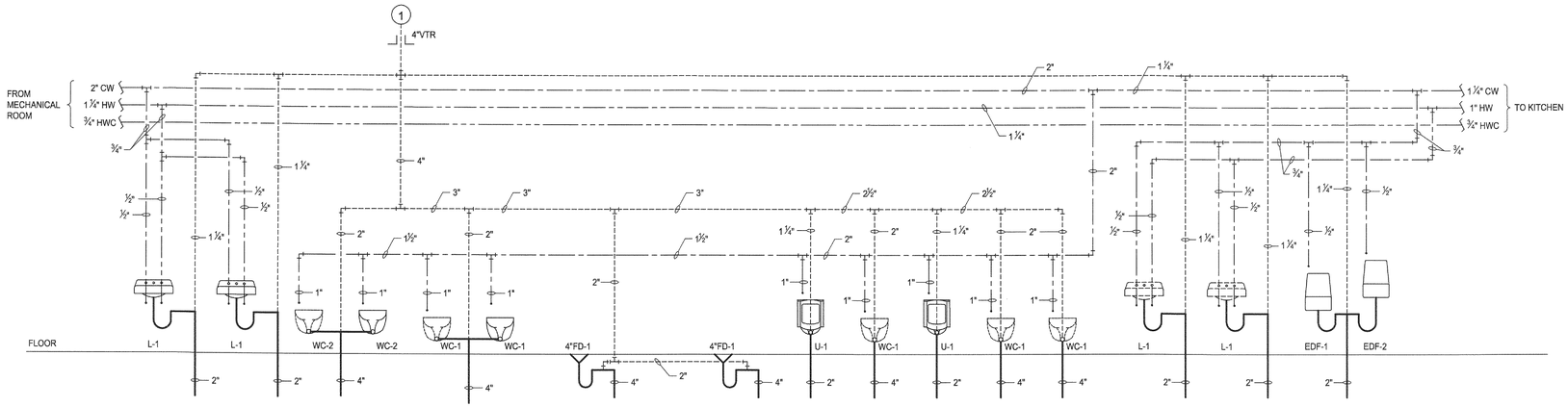
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DESIGNED BY	DATE
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REVISIONS	DATE
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Concession Building Plumbing Plans

P1.2

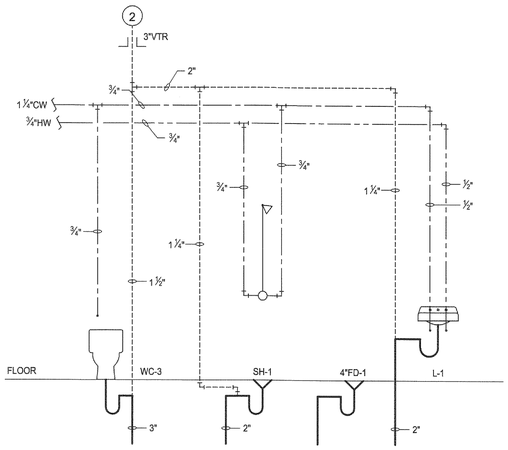
SHEET 58 OF 74

Drawing Name: Q:\2006-0924\01-1st Project\MECH\Acad\P1.2.dwg Jul 03,2007 - 3:19pm



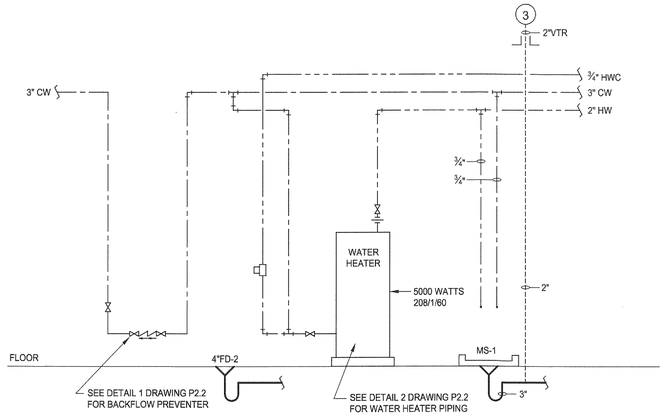
1 TOILET RISER DIAGRAM

SCALE: NONE



2 UNISEX RISER DIAGRAM

SCALE: NONE



3 MECHANICAL ROOM RISER DIAGRAM

SCALE: NONE

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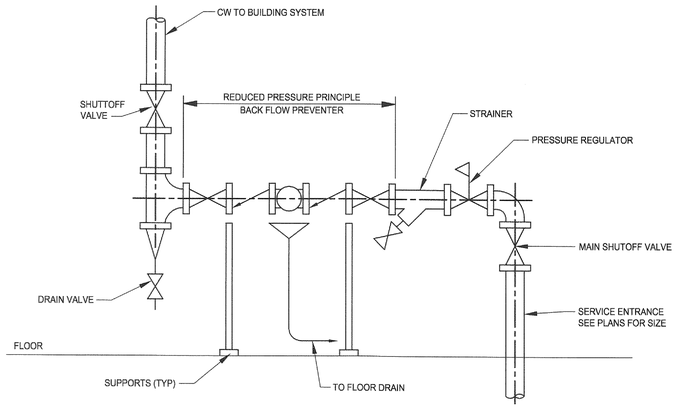
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ProShop Building
Riser Diagrams

P2.1

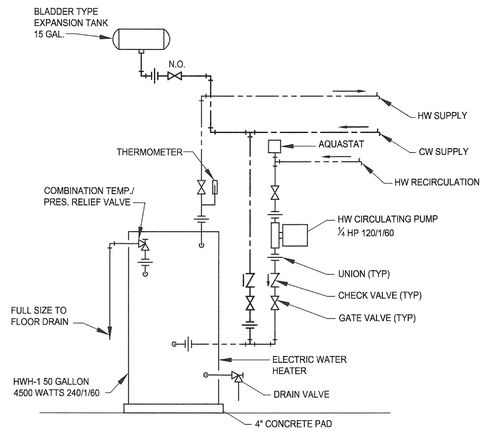
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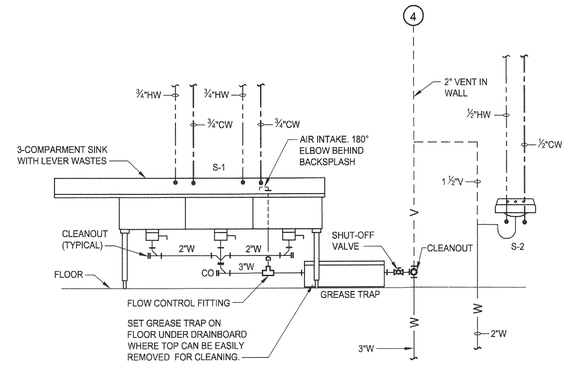
1 DOMESTIC WATER SERVICE ENTRANCE

SCALE: NONE



2 WATER HEATER PIPING DIAGRAM

SCALE: NONE



NOTE: 1. **ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS OR MEET LOCAL CODE REQUIREMENTS. HUBLESS CAST IRON PIPE, FITTINGS AND CONNECTORS ALL AROUND SINK AND TRAP. CONNECT TRAP FROM CENTER COMPARTMENT.**

3 UTILITY SINK/GREASE TRAP CONNECTION DETAIL

SCALE: NONE

PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	TYPE	CW (IN.)	HW (IN.)	WASTE (IN.)	VENT (IN.)
WC-1	WATER CLOSETS, FLUSH VALVES	1	-	4	2
WC-3	WATER CLOSETS, FLUSH TANK	3/4	-	3	1 1/2
U	URINALS	3/4	-	2	1 1/4
L	LAVATORIES	1/2	1/2	1 1/2	1 1/4
MS	MOP SINK	3/4	3/4	3	2
EDF	ELECTRIC DRINKING FOUNTAIN	1/2	-	1 1/2	1 1/4
SH	SHOWER	1/2	1/2	2	1 1/4
S-1	THREE COMPARTMENT SINK	3/4	3/4	3	1 1/2
S-2	SINGLE COMPARTMENT SINK	1/2	1/2	1 1/2	1 1/4

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Joplin Sports Complex - Phase One

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ISSUE DATE 7-11-07

ProShop Building Details

P2.2

SHEET 60 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\MECH\Acad\P2.2.dwg Jul 11,2007 - 5:13pm

1 ELECTRICAL PLAN SYMBOLS

NOT TO SCALE

GENERAL SYMBOLS

- (1) KEYED NOTE
- NEW DEVICE
- EXISTING EQUIPMENT

WIRING AND CONDUITS

- LP-3 — PANELBOARD CIRCUIT NUMBER
- BRANCH CIRCUIT HOMERUN
- EQUIPMENT GROUND
  NEUTRAL CONDUCTOR
  PHASE OR SWITCHLEG CONDUCTOR
- 2#12 W/#12 GRD IN 1/2"C. UNLESS OTHERWISE INDICATED.
- BREAK
- UNDERGROUND CIRCUIT
- J — JUNCTION BOX

POWER SYMBOLS

- OR — BRANCH CIRCUIT PANELBOARD
- TRANSFORMER
- HEAVY DUTY DISCONNECT SWITCH, NON-FUSED SIZE AS INDICATED ON PLANS
- HEAVY DUTY DISCONNECT SWITCH, FUSED SIZE AS INDICATED ON PLANS
- $ — TOGGLE SWITCH
  3 3-WAY
  4 4-WAY
- DUPLEX RECEPTACLE (NEMA 5-20R)
  GFI GROUND FAULT CIRCUIT INTERRUPTER
  WP WEATHERPROOF
  AC MOUNTED ABOVE COUNTER
  CLG MOUNTED IN CEILING
  48" 48" AFF TO TOP OF RECEPTACLE
- SINGLE RECEPTACLE
- SPECIAL PURPOSE RECEPTACLE
- QUADRAPLEX RECEPTACLE
- SPECIAL CONNECTION AS INDICATED ON PLANS

LIGHTING SYMBOLS

- 1X4 LUMINAIRE - FLUORESCENT
- 2X4 RECESSED LUMINAIRE - FLUORESCENT
  NL — CONNECTED FOR NIGHT LIGHT USE
  LUMINAIRE TYPE
- FLUORESCENT LUMINAIRE WITH EMERGENCY BALLAST CIRCUIT
- OPEN INDUSTRIAL FLUORESCENT/UNDER CABINET FLUORESCENT
- WALL MOUNTED LIGHT FIXTURE
- EXIT SIGN - SINGLE FACE
  ARROW INDICATES DIRECTION OF EXIT
- EMERGENCY LIGHTING - DUAL REMOTE HEAD
- LPX X — POLE MOUNTED SITE LIGHTING - SINGLE HEAD
  DISTRIBUTION TYPE
  DESIGNATION
- X LPX X — POLE MOUNTED SITE LIGHTING - DUAL HEAD
  DISTRIBUTION TYPE
  DESIGNATION
- SPX — SPORTS LIGHTING - POLE MOUNTED
  DESIGNATION
- PE — PHOTO CELL
- TC — TIME CLOCK
- C — LIGHTING CONTACTOR

TELECOMMUNICATIONS SYMBOLS

- COMMUNICATION OUTLET (DATA/TELE) - WALL MOUNTED. PROVIDE 4" SQUARE BOX, 2⅛" DEEP WITH (8) 1" CONDUIT KNOCKOUTS, APPLETON MODEL #4SD-1 (OR APPROVED EQUAL) & 1" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING.
  AC MOUNTED ABOVE COUNTER
- CABLE TELEVISION OUTLET - WALL MOUNTED. PROVIDE BOX & 3/4" CONDUIT WITH PULL STRING TO ABOVE ACCESSIBLE CEILING.
- TTB — TELEPHONE TERMINAL BACKBOARD

FIRE ALARM SYMBOLS

- S — SMOKE DETECTOR WITH AUDIO/VISUAL SIGNALING DEVICE AND BATTERY BACKUP

2 ELECTRICAL GENERAL NOTES

A. NOT ALL THE ELECTRICAL SYMBOLS LISTED MAY BE USED ON THE DRAWINGS.

B. THESE DRAWINGS INDICATE THE GENERAL EXTENT OF THE WORK AND ARE NOT INTENDED TO INDICATE OR DESCRIBE ALL WORK REQUIRED FOR THE FULL PERFORMANCE AND COMPLETION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

C. EXISTING CONDITIONS, WHEN SHOWN, ARE BASED ON INFORMATION OBTAINED FROM THE OWNER'S RECORD DRAWINGS AND FIELD OBSERVATIONS, AND SHALL NOT BE CONSIDERED "AS-BUILT" AND EXTREME ACCURACY IS NOT GUARANTEED. THE CONTRACTOR SHALL FIELD VERIFY EXISTING INSTALLATIONS BEFORE SUBMITTING THE BID AND PRIOR TO COMMENCING WORK TO ENSURE PROPER COORDINATION AND BE FULLY FAMILIAR WITH EXISTING CONDITIONS. NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES.

D. PROVIDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT REQUIRED FOR COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEMS AS SPECIFIED AND INDICATED ON THE DRAWINGS.

E. MAKE APPLICATION, OBTAIN, AND PAY FOR ALL LICENSES, PERMITS, INSPECTIONS, AND FEES REQUIRED BY ALL AUTHORITIES HAVING JURISDICTION.

F. PROMPTLY INFORM THE ENGINEER, IN WRITING, OF ANY DEVIATIONS IN THE CONTRACT DOCUMENTS FROM REQUIREMENTS OF LOCAL UTILITIES, LOCAL MUNICIPALITIES, STATE, OR FEDERAL LAWS AND REGULATIONS. PERFORM THE WORK IN ACCORDANCE WITH SUCH REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER.

G. ANY ELECTRICAL CIRCUITS AND DEVICES THAT PASS THROUGH THE CONSTRUCTION AREA, AND NOT SHOWN TO BE DEMOLISHED, SHALL REMAIN IN SERVICE WHEN THE PROJECT IS COMPLETE.

H. "PROVIDE", WHERE USED, SHALL MEAN FOR THE CONTRACTOR TO FURNISH AND INSTALL.

I. FIRE-STOP ALL PENETRATIONS OF RATED CONSTRUCTION, INCLUDING FLOORS, WALLS, AND CEILING. RE: ARCH. PLAN FOR RATED CONSTRUCTION.

J. INFORMATION REQUIRED FOR A SPECIFIC TRADE OR DISCIPLINE MAY BE CONTAINED THROUGHOUT THE ENTIRE SET OF DOCUMENTS.

K. COMPLETE ALL WORK IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRIC SAFETY CODE (NESC) AND LOCAL REGULATIONS.

L. ALL EQUIPMENT SHALL BE U.L. LISTED.

M. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

N. THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND SHOW RELATIVE LOCATIONS OF DEVICES AND EQUIPMENT. COORDINATE WITH ARCHITECTURAL PLANS AND THE ACTUAL EQUIPMENT INSTALLED.

O. COORDINATE ELECTRICAL WORK WITH THE WORK OF OTHER TRADES.

P. PROVIDE ALL CONTROL WIRING FOR BUILDING MANAGEMENT SYSTEM. THERMOSTAT AND ROOM TEMPERATURE SENSOR LOCATIONS ARE SHOWN ON THE MECHANICAL DRAWINGS. REFER TO THOSE DRAWINGS FOR LOCATIONS. PROVIDE DEVICE BOXES AND CONDUIT TO THOSE LOCATIONS. COORDINATE WITH MECHANICAL.

Q. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY LINES AND PIPING IN THE AREA UNDER CONSTRUCTION.

R. ALL CHARGES FROM EMPIRE ELECTRIC COMPANY TO PROVIDE AND/OR MODIFY ELECTRICAL SERVICE TO THESE FACILITIES WILL BE PAID BY THE CONTRACTOR.

S. ALL CHARGES FROM SOUTHWESTERN BELL TELEPHONE COMPANY TO PROVIDE AND/OR MODIFY TELEPHONE SERVICE TO THESE FACILITIES SHALL BE PAID BY THE CONTRACTOR.

T. ALL CHARGES FROM CABLE ONE CABLE TV COMPANY TO PROVIDE AND/OR MODIFY CABLE TV SERVICE TO THESE FACILITIES SHALL BE PAID BY THE CONTRACTOR.

U. WHERE THE PLANS INDICATE EQUIPMENT "BY OTHERS", CONTRACTOR SHALL COORDINATE LOCATIONS AND REQUIREMENTS WITH OTHER EQUIPMENT INSTALLERS BEFORE BID.

3 ELECTRICAL ABBREVIATIONS

AC	ABOVE COUNTER
AFF	ABOVE FINISHED FLOOR
AFC	AVAILABLE FAULT CURRENT
C	CONDUIT/CONDUCTOR
CONC	CONCESSION
CIRCUIT	CONDUIT AND CONDUCTORS
DP	DISTRIBUTION PANEL
DIST	DISTRIBUTION PANEL
DWG	DRAWING(S)
ELEC	ELECTRIC/ELECTRICAL
EM	EMERGENCY
GFI	GROUND FAULT CIRCUIT INTERRUPTER
G	GROUND/GROUNDING
KAIC	KILO-AMPS INTERRUPTING CAPACITY
NL	NIGHT LIGHT
PVC	POLYVINYL CHLORIDE
T	TRANSFORMER
TC	TIME CLOCK
TYP	TYPICAL
WP	WEATHERPROOF

4 UTILITY CONTACT INFORMATION

ELECTRIC COMPANY:
EMPIRE DISTRICT ELECTRIC CO.
602 SOUTH JOPLIN AVENUE
JOPLIN, MO 64802
PHONE 417-625-5181
CONTACT PERSON - RICK STOCKTON

TELEPHONE COMPANY:
AT&T SWB TELEPHONE
PHONE 417-625-8018
CONTACT PERSON - JOHN DIVINE

CABLE TV COMPANY:
CABLE ONE INC.
PHONE 417-206-5399
CONTACT PERSON - TERRY PEACOCK

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

ELECT. SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES

PROJECT NO. 2006-0924.01
DRAWN BY CKB DATE
CHECKED BY ARH DATE
DESIGNED BY CKB DATE
REVISIONS DATE
ISSUE DATE 7-11-07

E0

SHEET 61 OF 74

Drawing Name: Q:\2006-0924\01-1stProject\Electrical\ACAD\060924-E0.dwg Jul 11,2007 - 9:03am

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Scale in Feet

SITE LIGHTING FOOT-CANDLE SCHEDULE

AREA	AVERAGE FOOT-CANDLE LEVEL MAINTAINED
ENTRY ROADWAY	1 FOOT-CANDLE AVERAGE
PARKING LOTS	1 FOOT-CANDLE AVERAGE

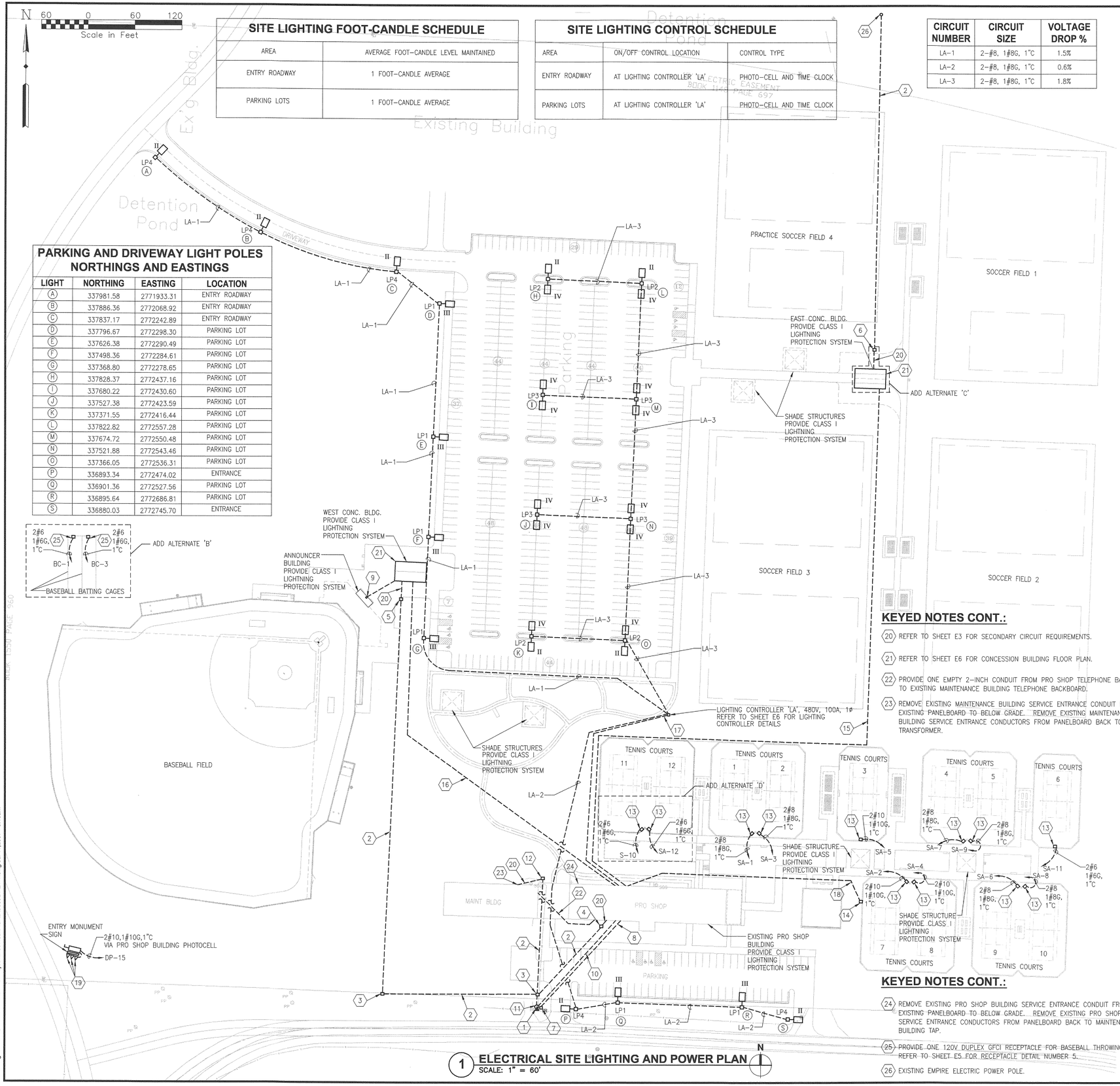
SITE LIGHTING CONTROL SCHEDULE

AREA	ON/OFF CONTROL LOCATION	CONTROL TYPE
ENTRY ROADWAY	AT LIGHTING CONTROLLER 'LA'	PHOTO-CELL AND TIME CLOCK
PARKING LOTS	AT LIGHTING CONTROLLER 'LA'	PHOTO-CELL AND TIME CLOCK

CIRCUIT NUMBER	CIRCUIT SIZE	VOLTAGE DROP %
LA-1	2-#8, 1#8G, 1"C	1.5%
LA-2	2-#8, 1#8G, 1"C	0.6%
LA-3	2-#8, 1#8G, 1"C	1.8%

PARKING AND DRIVEWAY LIGHT POLES NORTHINGS AND EASTINGS

LIGHT	NORTHING	EASTING	LOCATION
(A)	337981.58	2771933.31	ENTRY ROADWAY
(B)	337886.36	2772068.92	ENTRY ROADWAY
(C)	337837.17	2772242.89	ENTRY ROADWAY
(D)	337796.67	2772298.30	PARKING LOT
(E)	337626.38	2772290.49	PARKING LOT
(F)	337498.36	2772284.61	PARKING LOT
(G)	337368.80	2772278.65	PARKING LOT
(H)	337828.37	2772437.16	PARKING LOT
(I)	337680.22	2772430.60	PARKING LOT
(J)	337527.38	2772423.59	PARKING LOT
(K)	337371.55	2772416.44	PARKING LOT
(L)	337822.82	2772557.28	PARKING LOT
(M)	337674.72	2772550.48	PARKING LOT
(N)	337521.88	2772543.46	PARKING LOT
(O)	337366.05	2772536.31	PARKING LOT
(P)	336893.34	2772474.02	ENTRANCE
(Q)	336901.36	2772527.56	PARKING LOT
(R)	336895.64	2772686.81	PARKING LOT
(S)	336880.03	2772745.70	ENTRANCE



1 **ELECTRICAL SITE LIGHTING AND POWER PLAN**
SCALE: 1" = 60'

KEYED NOTES CONT.:

(20) REFER TO SHEET E3 FOR SECONDARY CIRCUIT REQUIREMENTS.

(21) REFER TO SHEET E6 FOR CONCESSION BUILDING FLOOR PLAN.

(22) PROVIDE ONE EMPTY 2-INCH CONDUIT FROM PRO SHOP TELEPHONE BACKBOARD TO EXISTING MAINTENANCE BUILDING TELEPHONE BACKBOARD.

(23) REMOVE EXISTING MAINTENANCE BUILDING SERVICE ENTRANCE CONDUIT FROM EXISTING PANELBOARD TO BELOW GRADE. REMOVE EXISTING MAINTENANCE BUILDING SERVICE ENTRANCE CONDUCTORS FROM PANELBOARD BACK TO UTILITY TRANSFORMER.

KEYED NOTES CONT.:

(24) REMOVE EXISTING PRO SHOP BUILDING SERVICE ENTRANCE CONDUIT FROM EXISTING PANELBOARD TO BELOW GRADE. REMOVE EXISTING PRO SHOP BUILDING SERVICE ENTRANCE CONDUCTORS FROM PANELBOARD BACK TO MAINTENANCE BUILDING TAP.

(25) PROVIDE ONE 120V DUPLEX GFCI RECEPTACLE FOR BASEBALL THROWING MACHINE. REFER TO SHEET E5 FOR RECEPTACLE DETAIL NUMBER 5.

(26) EXISTING EMPIRE ELECTRIC POWER POLE.

ADD ALTERNATE DESCRIPTION:

A. BASEBALL THROWING MACHINE RECEPTACLES AND ASSOCIATED MOUNTS, CIRCUITS, TRANSFORMER 'TT' AND PANELBOARD 'BC' ARE ADD ALTERNATE 'B' AND SEPARATE FROM BASE BID.

B. TENNIS COURTS 11 AND 12 TENNIS BALL THROWING MACHINE RECEPTACLES AND CIRCUITS ARE ADD ALTERNATE 'D' AND SEPARATE FROM BASE BID.

C. EAST CONCESSION BUILDING ELECTRICAL EQUIPMENT IS ADD ALTERNATE 'C'. THIS INCLUDES PANELBOARDS SLB, SLC, LIGHTING CONTROL PANELS B, C, TRANSFORMER ET, TELEPHONE BACKBOARD AND ASSOCIATED CONDUITS AND CONDUCTORS. CIRCUITS ASSOCIATED WITH KEYED NOTE 15 AND 20 AND PAD ASSOCIATED WITH KEYED NOTE 6 ARE ALSO INCLUDED IN ADD ALTERNATE 'C'.

D. IN BID SHEET SEPARATE OUT ADD ALTERNATE 'B', 'C' AND 'D' FROM BASE BID.

E. REMAINDER OF ELECTRICAL CONSTRUCTION TO BE IN BASE BID UNLESS OTHERWISE INDICATED.

GENERAL NOTES:

A. REFER TO SHEET E5 FOR SPORTS LIGHT POLE DETAIL AND PARKING & ROADWAY LIGHT POLE DETAIL.

B. PROVIDE A CLASS I LIGHTNING PROTECTION SYSTEM PER NFPA 780 FOR PRO SHOP, EAST CONCESSION BUILDING, WEST CONCESSION BUILDING, ANNOUNCER BUILDING AND ALL SHADE STRUCTURES.

C. PROVIDE PULLBOXES FOR CONDUIT RUNS GREATER THAN 250 FEET. PULLBOXES SHALL BE SPACED EVENLY. PULLBOX SPACINGS SHALL NOT EXCEED 250 FEET. REFER TO PULLBOX DETAIL '5' SHEET E5 FOR PULLBOX REQUIREMENTS.

D. REFER TO SHEET E0 FOR SYMBOLS, ABBREVIATIONS AND OTHER GENERAL NOTES.

KEYED NOTES:

(1) EXISTING EMPIRE ELECTRIC POWER POLE AND POLE MOUNTED TRANSFORMERS.

(2) NEW UNDERGROUND PRIMARY CIRCUIT BY EMPIRE ELECTRIC.

(3) NEW PRIMARY CIRCUIT PULLBOX BY EMPIRE ELECTRIC.

(4) NEW PAD MOUNTED UTILITY TRANSFORMER FOR PRO SHOP BY EMPIRE ELECTRIC. TOTAL CONNECTED LOAD = 346KVA. TRANSFORMER SECONDARY - 480V, 3ø, 4W. CONTRACTOR SHALL PROVIDE PAD, PRIMARY SWEEP CONDUIT AND GROUND ROD PER EMPIRE ELECTRIC REQUIREMENTS. CONTRACTOR SHALL FURNISH METER SOCKET. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH RICK STOCKTON AT EMPIRE ELECTRIC. METER WILL BE MOUNTED TO TRANSFORMER.

(5) NEW PAD MOUNTED UTILITY TRANSFORMER FOR WEST CONCESSION BY EMPIRE ELECTRIC. TOTAL CONNECTED LOAD = 224KVA. TRANSFORMER SECONDARY - 480V, 3ø, 4W. PER EMPIRE ELECTRIC REQUIREMENTS. CONTRACTOR SHALL FURNISH METER SOCKET. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH RICK STOCKTON AT EMPIRE ELECTRIC. METER WILL BE MOUNTED TO TRANSFORMER.

(6) NEW PAD MOUNTED UTILITY TRANSFORMER FOR EAST CONCESSION BY EMPIRE ELECTRIC. TOTAL CONNECTED LOAD = 206KVA. TRANSFORMER SECONDARY - 480V, 3ø, 4W. PER EMPIRE ELECTRIC REQUIREMENTS. CONTRACTOR SHALL FURNISH METER SOCKET. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH RICK STOCKTON AT EMPIRE ELECTRIC. METER WILL BE MOUNTED TO TRANSFORMER.

(7) EXISTING AT&T SOUTHWESTERN BELL TELEPHONE PEDESTAL.

(8) NEW 3-INCH UNDERGROUND PVC CONDUIT FROM EXISTING TELEPHONE PEDESTAL TO NEW TELEPHONE BACKBOARD IN PRO SHOP. REFER TO SHEET E2, KEYED NOTE (35).

(9) ANNOUNCER STAND PANELBOARD 'AS', 100A, 120/240V, 1ø BY OTHERS. PROVIDE 3#1,1#8,2"C TO TRANSFORMER 'BT' AT WEST CONCESSION STAND.

(10) NEW 3-INCH UNDERGROUND PVC CONDUIT FROM EXISTING CABLE ONE POLE TO NEW TELEPHONE BACKBOARD IN PRO SHOP. REFER TO SHEET E2, KEYED NOTE (36).

(11) EXISTING CABLE ONE POLE. (ALSO EMPIRE ELECTRIC POWER POLE).

(12) NEW PAD MOUNTED UTILITY TRANSFORMER FOR MAINTENANCE BUILDING BY EMPIRE ELECTRIC. CONTRACTOR SHALL PROVIDE PAD, PRIMARY SWEEP CONDUIT AND GROUND ROD PER EMPIRE ELECTRIC REQUIREMENTS. CONTRACTOR SHALL FURNISH METER SOCKET. CONTRACTOR SHALL VERIFY EXACT REQUIREMENTS WITH RICK STOCKTON AT EMPIRE ELECTRIC. METER WILL BE MOUNTED TO TRANSFORMER.

(13) PROVIDE ONE 120V DUPLEX GFCI RECEPTACLE FOR TENNIS BALL MACHINE. REFER TO SHEET E5 FOR RECEPTACLE DETAIL NUMBER 5.

(14) PANELBOARD 'SA', 225A, 120/208V, 3ø, 4W IN NEMA 3R ENCLOSURE FOR TENNIS COURT BALL MACHINE RECEPTACLES. REFER TO SHEET E5 FOR PANELBOARD 'SA' MOUNT DETAIL NUMBER 6.

(15) PROVIDE ONE EMPTY 2-INCH CONDUIT WITH PULL STRING FROM PRO SHOP TELEPHONE BACKBOARD TO EAST CONCESSION BUILDING TELEPHONE BACKBOARD. REFER TO SHEET E2, KEYED NOTE (2).

(16) PROVIDE ONE EMPTY 2-INCH CONDUIT WITH PULL STRING FROM PRO SHOP TELEPHONE BACKBOARD TO WEST CONCESSION BUILDING TELEPHONE BACKBOARD. REFER TO SHEET E2, KEYED NOTE (2).

(17) LIGHTING CONTROLLER 'LA' FEEDER CIRCUIT 2#1, 1#6G, 2"C TO PRO SHOP PANELBOARD 'DP' CIRCUIT 13.

(18) PANELBOARD 'SA' FEEDER CIRCUIT 4#1, 1#6G, 2"C TO PANEL 'A' CIRCUIT 26 IN PRO SHOP.

(19) PROVIDE THREE LIGHT FIXTURES TYPE 'G' FOR ENTRY MONUMENT SIGN LIGHTING. SPACE EVENLY IN FRONT OF SIGN AND 4 FEET IN FRONT OF SIGN. COORDINATE EXACT LOCATION OF SIGN WITH SIGN INSTALLER. PROVIDE 30A NEMA 3R DISCONNECT ON UNISTRUT AND CONCRETE BASE BEHIND SIGN FOR ON/OFF CONTROL. REFER TO DETAIL 2, SHEET E4 FOR MOUNTING.

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

ELECTRICAL SITE LIGHTING AND POWER PLAN

PROJECT NO.	2006-0924.01
DRAWN BY	DATE
CKB	
CHECKED BY	DATE
ARH	
DESIGNED BY	DATE
CKB	
REVISIONS	DATE
ISSUE DATE	7-11-07

E1.1

SHEET 62 OF 74

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*SPORTS LIGHTING CIRCUITS

CIRCUIT NUMBER	CIRCUIT SIZE	CIRCUIT ROUTING
1	3#8, 1#8G, 1"C	FROM BALL FIELD POLE A1 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
2	3#8, 1#8G, 1"C	FROM BALL FIELD POLE A2 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
3	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE B1 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
4	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE B2 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
5	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE C1 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
6	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE C2 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
7	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE D1 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
8	3#4, 1#6G, 1.5"C	FROM BALL FIELD POLE D2 TO CONTROL AND MONITORING CABINET 'A' AT WEST CONCESSION BUILDING
9	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S1 TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
10	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S2 TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
11	3#8, 1#8G, 1"C	FROM SOCCER FIELD POLE S3 WEST BANK TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
12	3#8, 1#8G, 1"C	FROM SOCCER FIELD POLE S3 EAST BANK TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
13	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S4 WEST BANK TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
14	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S4 EAST BANK TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
15	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S5 TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
16	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S6 TO CONTROL AND MONITORING CABINET 'B' AT EAST CONCESSION BUILDING
17	3#10, 1#10G, 1"C	FROM SOCCER FIELD POLE S7 WEST BANK TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING

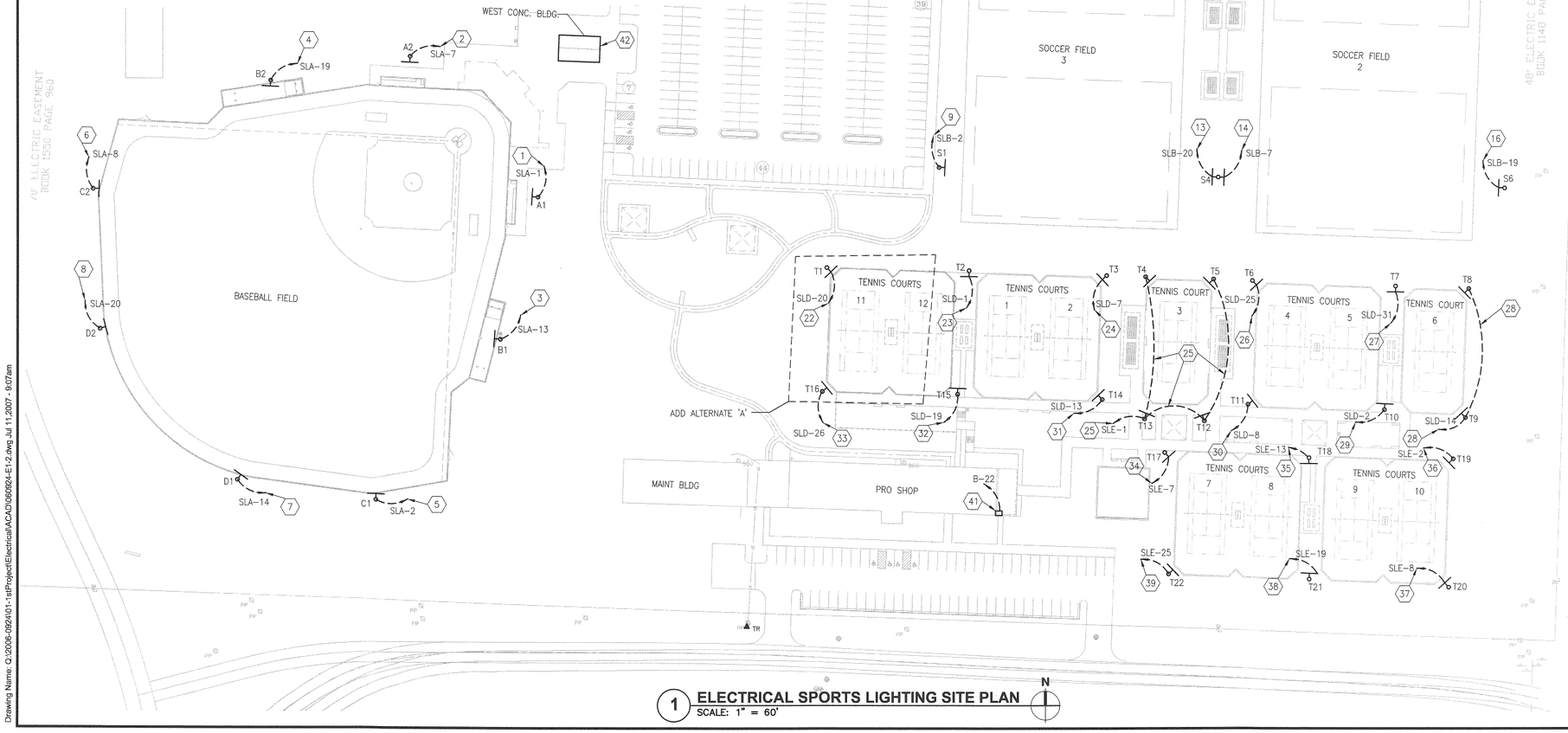
*SPORTS LIGHTING CIRCUITS

CIRCUIT NUMBER	CIRCUIT SIZE	CIRCUIT ROUTING
18	3#10, 1#10G, 1"C	FROM SOCCER FIELD POLE S7 EAST BANK TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING
19	3#10, 1#10G, 1"C	FROM SOCCER FIELD POLE S8 WEST BANK TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING
20	3#6, 1#6G, 1.5"C	FROM SOCCER FIELD POLE S9 TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING
21	3#8, 1#8G, 1"C	FROM SOCCER FIELD POLE S10 TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING
22	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T1 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
23	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T2 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
24	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T3 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
25	3#4, 1#4G, 1.5"C	FROM TENNIS COURT POLE T4,T5,T12,T13 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
26	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T6 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
27	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T7 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
28	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T8,T9 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
29	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T10 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
30	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T11 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
31	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T14 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
32	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T15 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
33	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T16 TO CONTROL AND MONITORING CABINET 'D' AT PRO SHOP BUILDING
34	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T17 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING

*SPORTS LIGHTING CIRCUITS

CIRCUIT NUMBER	CIRCUIT SIZE	CIRCUIT ROUTING
35	3#6, 1#6G, 1.5"C	FROM TENNIS COURT POLE T18 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
36	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T19 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
37	3#8, 1#8G, 1"C	FROM TENNIS COURT POLE T20 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
38	3#6, 1#6G, 1.5"C	FROM TENNIS COURT POLE T21 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
39	3#10, 1#10G, 1"C	FROM TENNIS COURT POLE T22 TO CONTROL AND MONITORING CABINET 'E' AT PRO SHOP BUILDING
40	3#10, 1#10G, 1"C	FROM SOCCER FIELD POLE S8 EAST BANK TO CONTROL AND MONITORING CABINET 'C' AT EAST CONCESSION BUILDING

***EXTEND CIRCUIT FROM LIGHT POLE TO CONTROL AND MONITORING CABINET AND TO INDICATED PANELBOARD CIRCUIT NUMBER.**



SPORTS LIGHTING FOOT-CANDLE SCHEDULE

SPORTS FIELD(S)	AVERAGE FOOT-CANDLE LEVEL
TENNIS COURTS	60 FOOT-CANDLES AVERAGE
SOCCER FIELDS	30 FOOT-CANDLES AVERAGE - MAIN FIELDS 10 FOOT-CANDLES AVERAGE - SMALL PRACTICE FIELD
BASEBALL FIELD	70 FOOT-CANDLES AVERAGE - INFIELD 50 FOOT-CANDLES AVERAGE - OUTFIELD

*SPORTS LIGHTING CONTROL SCHEDULE

SPORTS FIELD(S)	ON/OFF CONTROL LOCATION	CONTROL TYPE
TENNIS COURTS	PRO SHOP ACCESSIBLE ONLY BY EMPLOYEES	MANUAL HAND SWITCH AND REMOTE BY COMPUTER LINE
SOCCER FIELDS	EAST CONCESSION BUILDING ACCESSIBLE ONLY BY EMPLOYEES	MANUAL HAND SWITCH AND REMOTE BY COMPUTER LINE
BASEBALL FIELD	WEST CONCESSION BUILDING ACCESSIBLE ONLY BY EMPLOYEES	MANUAL HAND SWITCH AND REMOTE BY COMPUTER LINE

***REFER TO SHEET E7 FOR CONTROL DIAGRAMS**

ADD ALTERNATE DESCRIPTION:

A. T1 & T16 SPORTS LIGHTING POLES AND CIRCUITS FROM POLES TO 5 FEET OUTSIDE OF PRO SHOP BUILDING IS ADD ALTERNATE 'A' AND SEPARATE FROM BASE BID.

B. IN BID SHEET, SEPARATE OUT SPORTS LIGHTING POLES T1 & T16 AND CIRCUITS TO 5 FEET OUTSIDE PRO SHOP BUILDING AS INDICATED ON THIS SHEET BY DASHED AREA 'A'.

C. REMAINDER OF ELECTRICAL CONSTRUCTION TO BE IN BASE BID UNLESS OTHERWISE INDICATED.

GENERAL NOTES:

A. MUSCO SPORTS LIGHTING GREEN SYSTEM HAS BEEN SPECIFIED TO ESTABLISH PERFORMANCE, QUALITY AND APPEARANCE. SUBSTITUTIONS MUST BE SUBMITTED FOR PRE-APPROVAL 10 DAYS BEFORE BID. REFER TO SPORTS FIELD LIGHTING SPECIFICATION REQUIREMENTS FOR SUBSTITUTION SUBMITTAL REQUIREMENTS.

B. REFER TO SHEET E4 FOR SPORTS LIGHTING FIXTURE SCHEDULE.

C. PROVIDE PULLBOXES FOR CONDUIT RUNS GREATER THAN 250 FEET. PULLBOXES SHALL BE SPACED EVENLY. PULLBOX SPACINGS SHALL NOT EXCEED 250 FEET. REFER TO PULLBOX DETAIL '5' SHEET E5 FOR PULLBOX REQUIREMENTS.

D. REFER TO SHEET E0 FOR SYMBOLS, ABBREVIATIONS AND OTHER GENERAL NOTES.

KEYED NOTES:

(41) CARD READER FOR TENNIS COURT GATE LOCK. PROVIDE CONTROL POWER TRANSFORMER PER GATE LOCK MANUFACTURERS REQUIREMENTS. COORDINATE INSTALLATION WITH GATE LOCK INSTALLER.

(42) REFER TO SHEET E6 FOR PANEL LOCATIONS.

SPORTS LIGHT POLES NORTHINGS AND EASTINGS

LIGHT #	NORTHING	EASTING	LOCATION
A1	337309.75	2772221.78	BASEBALL FIELD
A2	337445.57	2772097.88	BASEBALL FIELD
B1	337172.12	2772185.43	BASEBALL FIELD
B2	337421.74	2771962.86	BASEBALL FIELD
C1	337015.62	2772065.13	BASEBALL FIELD
C2	337316.52	2771790.64	BASEBALL FIELD
D1	337034.80	2771930.87	BASEBALL FIELD
D2	337181.07	2771797.44	BASEBALL FIELD
S1	337338.97	2772610.40	SOCCER FIELD 3
S2	337577.82	2772618.81	SOCCER FIELD 3
S3	337574.27	2772883.86	SOCCER FIELDS 2&3
S4	337329.21	2772881.22	SOCCER FIELDS 2&3
S5	337564.79	2773167.84	SOCCER FIELD 2
S6	337318.94	2773159.17	SOCCER FIELD 2
S7	337746.38	2772904.58	SOCCER FIELDS 1&4
S8	337956.24	2772912.14	SOCCER FIELDS 1&4
S9	337946.52	2773181.97	SOCCER FIELD 1
S10	337736.66	2773174.41	SOCCER FIELD 1
T1	337241.81	2772501.68	TENNIS COURT 11
T2	337238.97	2772639.66	TENNIS COURTS 12&1
T3	337234.18	2772773.08	TENNIS COURT 2
T4	337232.82	2772810.80	TENNIS COURT 3
T5	337230.45	2772876.76	TENNIS COURT 3
T6	337229.09	2772914.49	TENNIS COURT 4
T7	337224.10	2773053.40	TENNIS COURTS 5&6
T8	337221.50	2773124.53	TENNIS COURT 6
T9	337096.58	2773121.23	TENNIS COURT 6
T10	337104.41	2773042.58	TENNIS COURTS 5&6
T11	337109.17	2772910.18	TENNIS COURT 4
T12	337093.06	2772867.84	TENNIS COURT 3
T13	337095.15	2772809.80	TENNIS COURT 3
T14	337114.25	2772768.77	TENNIS COURT 2
T15	337119.35	2772628.60	TENNIS COURTS 1&12
T16	337121.89	2772497.37	TENNIS COURT 11
T17	337062.37	2772829.44	TENNIS COURT 7
T18	337057.37	2772969.38	TENNIS COURTS 8&9
T19	337056.36	2773109.41	TENNIS COURT 10
T20	336931.44	2773104.92	TENNIS COURT 10
T21	336939.31	2772969.49	TENNIS COURTS 8&9
T22	336944.21	2772833.20	TENNIS COURT 7

1 **ELECTRICAL SPORTS LIGHTING SITE PLAN**
SCALE: 1" = 60'

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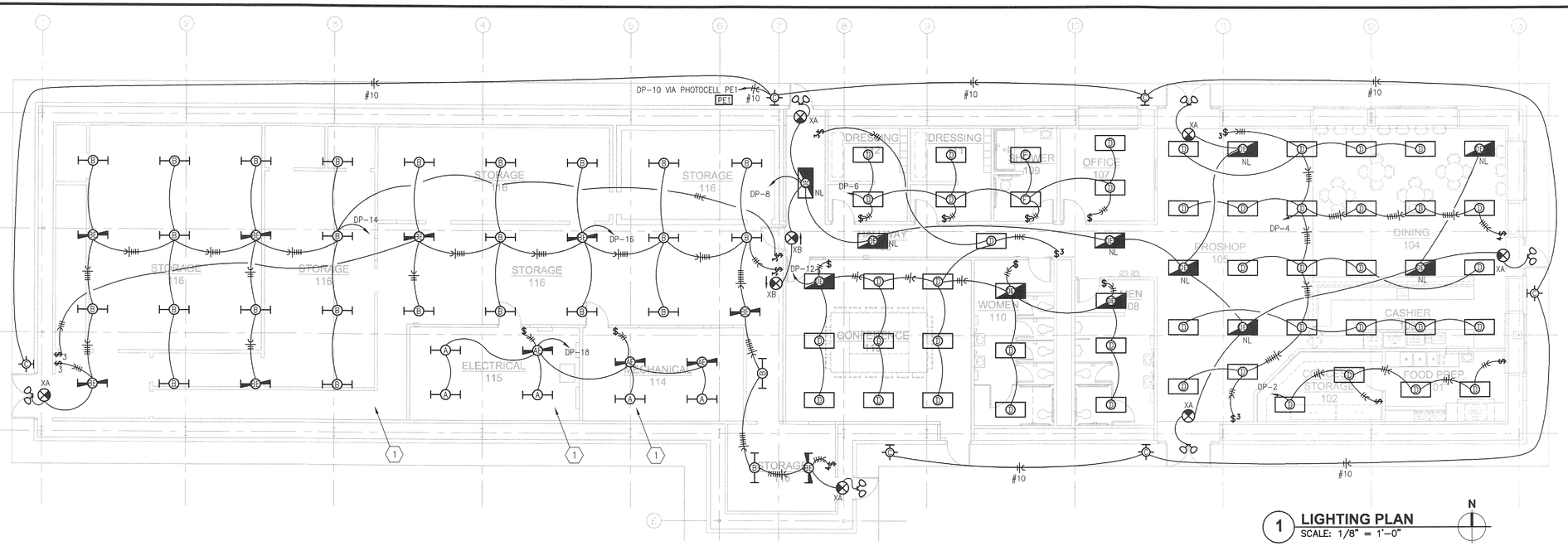
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Parks and Recreation Department
Joplin Sports Complex - Phase One

ELECTRICAL SPORTS LIGHTING SITE PLAN

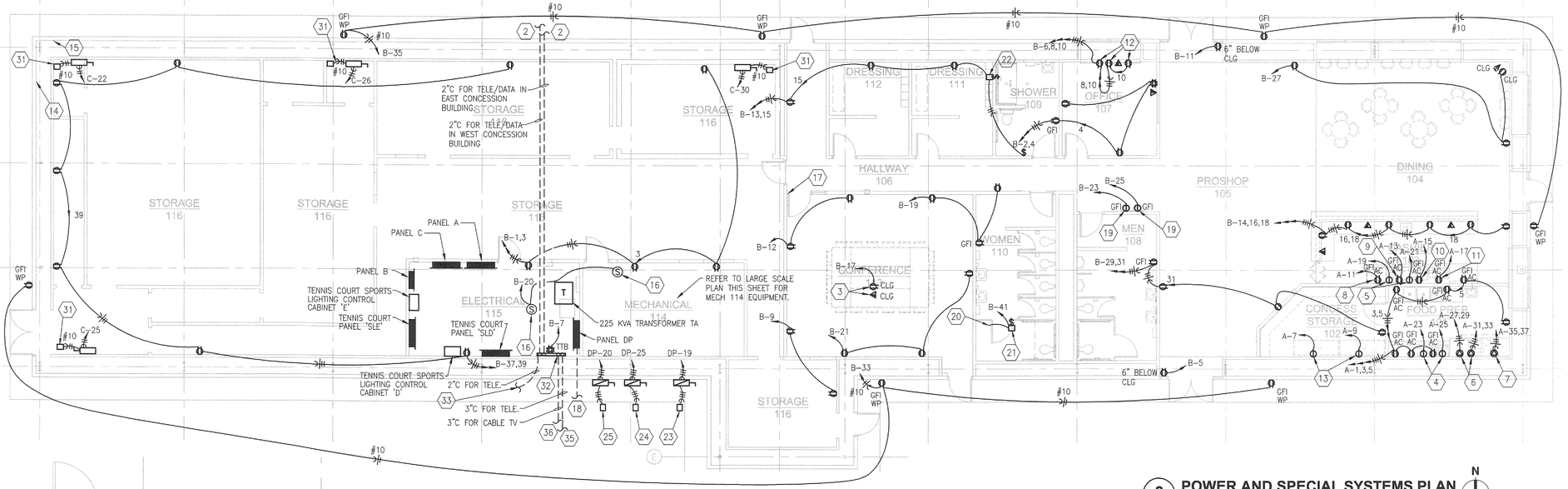
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DRAWN BY CKB DATE
CHECKED BY ARH DATE
DESIGNED BY CKB DATE
REVISIONS DATE
ISSUE DATE 7-11-07

E1.2

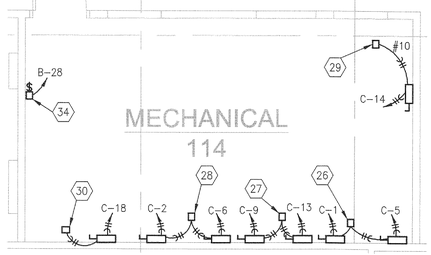
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1 **LIGHTING PLAN**
SCALE: 1/8" = 1'-0"



2 **POWER AND SPECIAL SYSTEMS PLAN**
SCALE: 1/8" = 1'-0"



3 **ENLARGED MECHANICAL ROOM 114 POWER PLAN**
SCALE: 1/4" = 1'-0"

GENERAL NOTES:

A. REFER TO SHEET E0 FOR SYMBOLS, ABBREVIATIONS AND OTHER GENERAL NOTES.

B. REMOVE ALL EXISTING JUNCTION BOXES AND ASSOCIATED CONDUIT, WIRING AND ADDITIONAL EQUIPMENT INDICATED BY KEYED NOTE.

C. PROVIDE A CLASS 1 LIGHTNING PROTECTION SYSTEM PER NFPA 780 REQUIREMENTS.

D. FOR RECEPTACLES OTHER THAN 120V, 20A, COORDINATE EXACT RECEPTACLE REQUIREMENTS WITH EQUIPMENT INSTALLER.

KEYED NOTES:

1. MOUNT BOTTOM OF FIXTURES AT 9'-0" AFF IN THIS ROOM.
2. SEE SHEET E1.1, KEYED NOTES 15 AND 16 FOR CONTINUATION.
3. RECEPTACLE AND DATA OUTLET FOR PROJECTOR. LOCATE APPROXIMATELY 12'-0" FROM EAST WALL.
4. RECEPTACLE FOR MICROWAVE IN UPPER SHELF.
5. RECEPTACLE FOR REFIGERATOR UNDER COUNTER.
6. RECEPTACLE FOR FRYER.
7. RECEPTACLE FOR GRILL.
8. RECEPTACLE FOR ICE CREAM MACHINE.
9. RECEPTACLE FOR SODA MACHINE.
10. RECEPTACLE FOR POPCORN MACHINE.
11. RECEPTACLE FOR HOT DOG MACHINE.
12. RECEPTACLE FOR FAX MACHINE, COPIER AND PRINTER.
13. RECEPTACLE FOR FREEZER.
14. REMOVE EXISTING ELECTRICAL SERVICE AND ALL ASSOCIATED CONDUIT AND WIRING. SEE PHOTO DETAIL 1, SHEET E4.
15. REMOVE EXISTING TELEPHONE SERVICE AND ALL ASSOCIATED CONDUIT AND WIRING. SEE PHOTO DETAIL 1, SHEET E4.
16. PROVIDE HARDWIRED PHOTOELECTRIC SMOKE DETECTOR WITH MONITORED BATTERY BACK-UP AND AUDIO/VISUAL SIGNALING APPLIANCE. PROVIDE GENTEX MODEL 7109CS-C OR APPROVED EQUAL.
17. REMOVE EXISTING PANELBOARDS AND ALL ASSOCIATED CONDUIT AND WIRING. SEE PHOTO DETAIL 2, SHEET E4.
18. TO UTILITY POWER POLE. SEE SHEET E1.1 KEYED NOTE 1 FOR CONTINUATION.
19. DRINK FOUNTAIN, 120V. INSTALL RECEPTACLE PER MANUFACTURERS REQUIREMENTS.
20. EXTEND CIRCUIT TO MECHANICAL ROOM 114. AT MECHANICAL ROOM PROVIDE HAND-OFF-AUTO SWITCH FOR EXHAUST FAN CONTROL.
21. EXHAUST FAN EF-1, 120V, 405W. REFER TO KEYED NOTE 20 FOR ON/OFF CONTROL REQUIREMENTS.
22. EXHAUST FAN EF-2, 120V, 40W.
23. CONDENSING UNIT CU-1, 480V, 3ø, 7A. PROVIDE 30A, 3P DISCONNECT IN NEMA 3R ENCLOSURE FUSED AT 15 AMP.
24. CONDENSING UNIT CU-2, 480V, 3ø, 11A. PROVIDE 30A, 3P DISCONNECT IN NEMA 3R ENCLOSURE FUSED AT 15 AMP.
25. CONDENSING UNIT CU-3, 480V, 3ø, 11A. PROVIDE 30A, 3P DISCONNECT IN NEMA 3R ENCLOSURE FUSED AT 15 AMP.
26. FAN COIL UNIT FC-1, 208V, 1ø, REQUIRES 2 SEPARATE CIRCUITS AND 2 SEPARATE DISCONNECTS. FOR 47A CIRCUIT ONE, PROVIDE 2#6, 1#10G, 1"C AND A 60A, 1ø DISCONNECT. FOR 26A CIRCUIT TWO, PROVIDE 2#10, 1#10G, 1/2"C AND A 30A, 1ø DISCONNECT.
27. FAN COIL UNIT FC-2, 208V, 1ø, REQUIRES 2 SEPARATE CIRCUITS AND 2 SEPARATE DISCONNECTS. FOR 39A CIRCUIT ONE, PROVIDE 2#8, 1#10G, 3/4"C AND A 60A, 1ø DISCONNECT. FOR 52A CIRCUIT TWO, PROVIDE 2#4, 1#10G, 1"C AND A 60A, 1ø DISCONNECT.
28. FAN COIL UNIT FC-3, 208V, 1ø, REQUIRES 2 SEPARATE CIRCUITS AND 2 SEPARATE DISCONNECTS. FOR 39A CIRCUIT ONE, PROVIDE 2#8, 1#10G, 3/4"C AND A 60A, 1ø DISCONNECT. FOR 52A CIRCUIT TWO, PROVIDE 2#4, 1#10G, 1"C AND A 60A, 1ø DISCONNECT.
29. WATER HEATER, 208V, 1ø, 5KW. PROVIDE 30A DISCONNECT.
30. UNIT HEATER, 208V, 1ø, 3KW. PROVIDE 30A DISCONNECT.
31. UNIT HEATER, 208V, 1ø, 5KW. PROVIDE 30A DISCONNECT.
32. 4'X8' PAINTED PLYWOOD TELEPHONE TERMINAL BACKBOARD.
33. SEE SHEET E1.1, KEYED NOTE 22 FOR CONTINUATION.
34. DDC CONTROL PANEL 120V, 20A.
35. SEE SHEET E1.1, KEYED NOTE 8 FOR CONTINUATION.
36. SEE SHEET E1.1, KEYED NOTE 10 FOR CONTINUATION.

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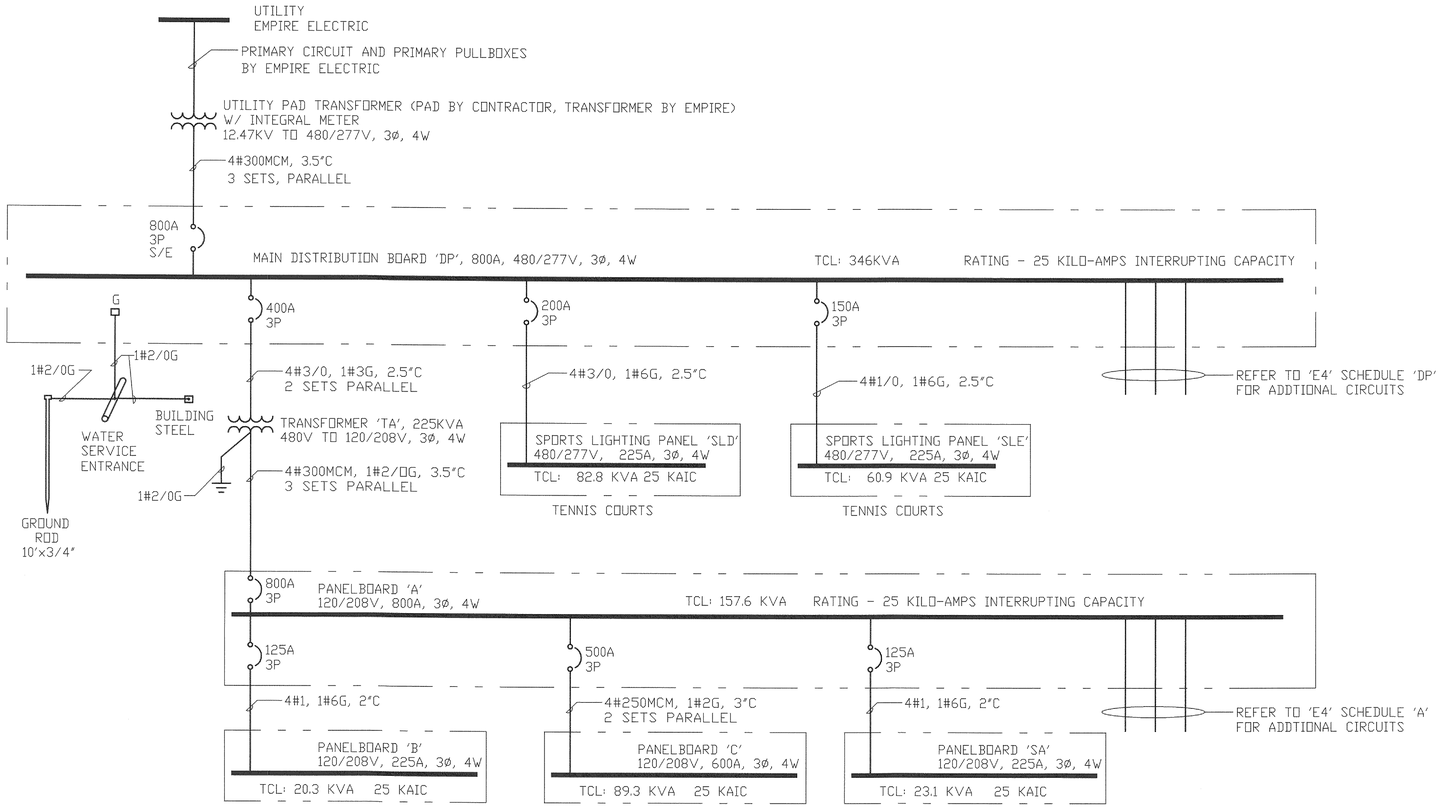
City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One
PRO SHOP ELECTRICAL PLANS

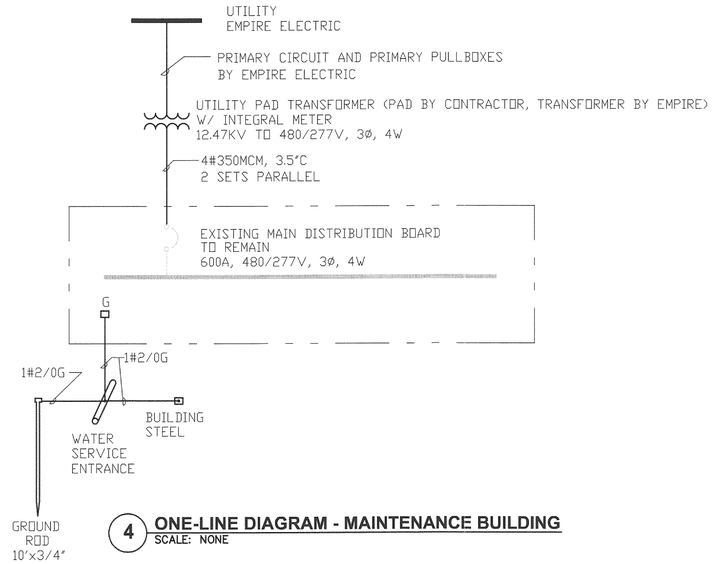
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DESIGNED BY CKB — DATE
REVISIONS — DATE
ISSUE DATE 7-11-07

E2
SHEET 64 OF 74

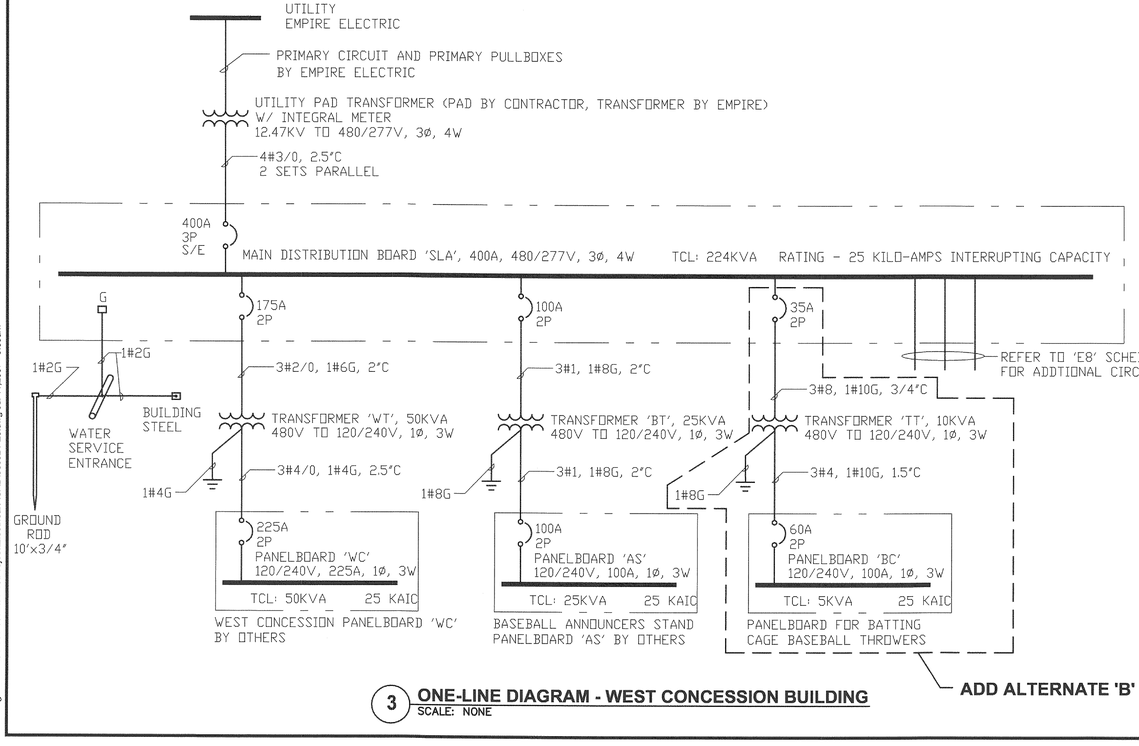
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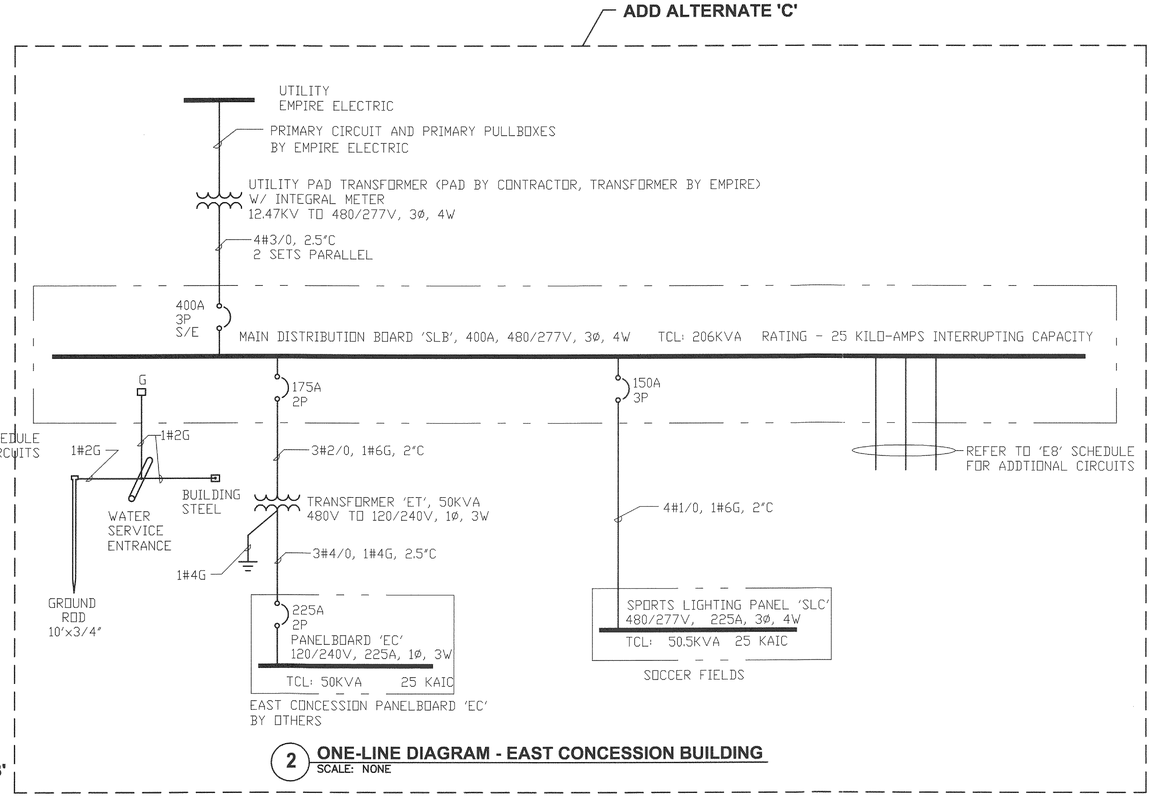
1 **ONE-LINE DIAGRAM - PRO SHOP**
SCALE: NONE



4 **ONE-LINE DIAGRAM - MAINTENANCE BUILDING**
SCALE: NONE



3 **ONE-LINE DIAGRAM - WEST CONCESSION BUILDING**
SCALE: NONE



2 **ONE-LINE DIAGRAM - EAST CONCESSION BUILDING**
SCALE: NONE

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City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

ELECTRICAL ONE-LINE DIAGRAMS

PROJECT NO.	2006-0924.01
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DATE	
CHECKED BY	ARH
DATE	
DESIGNED BY	CKB
DATE	
REVISIONS	
DATE	
ISSUE DATE	7-11-07

E3

SHEET 65 OF 74

Drawing Name: Q:\2006-0924\01 - 1st Project\Electrical\ACAD\060924-E3.dwg Jul 11,2007 - 9:09am

PRO SHOP PANELBOARD DP

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

BUS MAINS: 800A
MAIN C/B: 800A
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
TRANSFORMER TA	61200			400	1	2	20	400			LTG – CONC STOR 102, FOOD PREP 101
		54300			3	4	20		2000		LTG – DINING 104, PRO SHOP 105
			42100		5	6	20			800	LTG – OFFICE 107, SHOWER 109, DRESSING 111 & 112
SPORTS LIGHTING PANEL SLD FOR TENNIS COURTS	27600			200	7	8	20	800			LTG–EMERGENCY
		27600			9	10	20		600		LTG–EXTERIOR
			27600		11	12	20			1500	LTG – MEN 108, WOMEN 110, CONF 113
PARKING LOT/ROADWAY LIGHTING CONTROLLER	4200			100	13	14	20	2400			LTG – STORAGE WEST 116
		4200			15	16	20		2850		LTG – STORAGE EAST 116
SPACE					17	18	20			600	LTG – ELEC 115, MECH 114
HVAC UNIT CU–1	1940			15	19	20	15	3047			HVAC UNIT CU–3
		1940			21	22			3047		
			1940		23	24				3047	
HVAC UNIT CU–2	3047			15	25	26	150	20300			SPORTS LIGHTING PANEL 'SLE' FOR TENNIS COURTS
		3047			27	28			20300		
			3047		29	30				20300	
SPACE					31	32	20	300			SITE ENTRY MONUMENT SIGN
SPACE					33	34	20				SPARE
SPACE					35	36	20				SPARE
SPACE					37	38	20				SPARE
SPACE					37	40	20				SPARE
SPACE					41	42	20				SPARE

CONNECTED LOADS:
Aø 125 KVA, Bø 120 KVA, Cø 101 KVA, TOTAL 346 KVA

PRO SHOP PANELBOARD A

VOLTS: 120/208V, 3ø, 4W
MOUNTING: SURFACE

BUS MAINS: 800A
MAIN C/B: 800A
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
REC–FOOD PREP 101	600			20	1	2	20	–			SPARE
REC–FOOD PREP 101		400		20	3	4	20		–		SPARE
REC–FOOD PREP 101, CASHIER 103			400	20	5	6	20			–	SPARE
REC–CONCESSION STORAGE 102 FREEZER	1600			20	7	8	20	–			SPARE
REC–CONCESSION STORAGE 102 FREEZER		1600		20	9	10	20		–		SPARE
REC–CASHIER 103 ICE CREAM MACHINE			1600	20	11	12	20			–	SPARE
REC–CASHIER 103 SODA MACHINE	1600			20	13	14	20	–			SPARE
REC–CASHIER 103 POPCORN MACHINE		1600		20	15	16	20		–		SPARE
REC–CASHIER 103 HOT DOG MACHINE			1600	20	17	18	20			–	SPARE
REC–CASHIER 103 UNDERCOUNTER REFRIG.	1600			20	19	20	20	–			SPARE
REC–CASHIER 103 UNDERCOUNTER REFRIG.		1600		20	21	22	20		–		SPARE
REC–FOOD PREP 101 MICROWAVE			1600	20	23	24	20			–	SPARE
REC–FOOD PREP 101 MICROWAVE	1600			20	25	26	125	7700			PANEL 'SA'
REC–FOOD PREP 101 FRYER		1248		20	27	28			7700		
–			1248		29	30				7700	
REC–FOOD PREP 101 FRYER	1248			20	31	32	500	37400			PANEL 'C'
–		1248			33	34			31200		
REC–FOOD PREP 101 GRILL			1248	20	35	36				20700	
	1248				37	38	125	6600			PANEL 'B'
SPARE		–		20	39	40			7700		
SPARE			–	20	41	42				6000	

CONNECTED LOADS:
Aø 61.2 KVA, Bø 54.3 KVA, Cø 42.1 KVA, TOTAL 157.6 KVA

SITE PANELBOARD 'SA'

VOLTS: 120/208V, 3ø, 4W
MOUNTING: SURFACE

BUS MAINS: 225A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
RECEPT BALL MACHINE TENNIS COURT 1	1920			20	1	2	20	1920			RECEPT BALL MACHINE TENNIS COURT 7
RECEPT BALL MACHINE TENNIS COURT 2		1920		20	3	4	20		1920		RECEPT BALL MACHINE TENNIS COURT 8
RECEPT BALL MACHINE TENNIS COURT 3			1920	20	5	6	20			1920	RECEPT BALL MACHINE TENNIS COURT 9
RECEPT BALL MACHINE TENNIS COURT 4	1920			20	7	8	20	1920			RECEPT BALL MACHINE TENNIS COURT 10
RECEPT BALL MACHINE TENNIS COURT 5		1920		20	9	10	20		1920		RECEPT BALL MACHINE TENNIS COURT 11
RECEPT BALL MACHINE TENNIS COURT 6			1920	20	11	12	20			1920	RECEPT BALL MACHINE TENNIS COURT 12
SPARE				20	13	14	20	–			SPARE
SPARE				20	15	16	20		–		SPARE
SPARE				20	17	18	20			–	SPARE
SPARE				20	19	20	20	–			SPARE
SPARE				20	21	22	20		–		SPARE
SPARE				20	23	24	20			–	SPARE
SPARE				20	25	26	20	–			SPARE
SPARE				20	27	28	20		–		SPARE
SPARE				20	29	30	20			–	SPARE
SPARE				20	31	32	20	–			SPARE
SPARE				20	33	34	20		–		SPARE
SPARE				20	35	36	20			–	SPARE
SPARE				20	37	38	20	·			SPARE
SPARE			–	20	39	40	20		·		SPARE
SPARE				–	20	41	42	20			· SPARE

IN NEMA 3R ENCLOSURE

CONNECTED LOADS:
Aø 7.7 KVA, Bø 7.7 KVA, Cø 7.7 KVA, TOTAL 23.1 KVA

PRO SHOP PANELBOARD B

VOLTS: 120/208V, 3ø, 4W
MOUNTING: SURFACE

BUS MAINS: 225A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
REC–MECH 114, ELEC 115	400			20	1	2	20	200			REC–SHOWER 109
REC–MECH 114, STORAGE 116		400		20	3	4	20		800		REC–OFFICE 107
REC–SOUTH ENTRANCE			200	20	5	6	20			1600	REC–OFFICE 107 COPIER
REC–TELE. TERM. BACKBOARD	400			20	7	8	20	1600			REC–OFFICE 107 PRINTER
REC–CONF 113, STORAGE 116		400		20	9	10	20		1600		REC–OFFICE 107 FAX MACHINE
REC–NORTH ENTRANCE			200	20	11	12	20			400	REC–CONF 113
REC–HALLWAY 106	200			20	13	14	20	400			REC–CASHIER 103
REC–DRESSING 111, 112 AND EF–2		440		20	15	16	20		400		REC–CASHIER 103
REC–CONF 113, PROJECTOR			200	20	17	18	20			400	REC–CASHIER 103
REC–CONF 113, WOMEN 110, HALLWAY 106	600			20	19	20	20	200			SMOKE DETECTORS–MECH 119, ELEC 120
REC–CONF 113		400		20	21	22	20		100		TENNIS COURT GATE LOCK
REC–DRINKING FOUNTAIN PROSHOP 105			400	20	23	24	20			1000	LIGHTING CABINET 'D'
REC–DRINKING FOUNTAIN PROSHOP 105	400			20	25	26	20	1000			LIGHTING CABINET 'E'
REC–DINING 104		800		20	27	28	20		1000		DDC CONTROL PANEL
REC–MEN 108, PROSHOP 105			400	20	29	30	20			–	SPARE
REC–PROSHOP 105, CONC ST 102	600			20	31	32	20	–			SPARE
REC–SOUTH & WEST EXTERIOR		600		20	33	34	20		–		SPARE
REC–NORTH & EAST EXTERIOR			800	20	35	36	20			–	SPARE
REC–STORAGE 116	600			20	37	38	20	–			SPARE
REC–STORAGE 116		800		20	39	40	20		–		SPARE
EF–1			405	20	41	42	20			–	SPARE

CONNECTED LOADS:
Aø 6.6 KVA, Bø 7.7 KVA, Cø 6.0 KVA, TOTAL 20.3 KVA

SPORTS LIGHTING FIXTURE SCHEDULE

POLES QTY	DESIGNATION	SIZE	LUMINAIRES MOUNTING HEIGHT	LAMP TYPE	QTY/ POLE	MANUF.	TYPE	VOLT.
2	A1–A2	80'	80'	1500W MH	7	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	B1–B2	80'	80'	1500W MH	14	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	C1–C2	80'	80'	1500W MH	9	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	D1–D2	80'	80'	1500W MH	8	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
4	S1–S2	70'	70'	1500W MH	7	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	S5–S6	70'	70'	1500W MH	7	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	S3–S4	70'	70'	1500W MH	7/7*	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	S7–S8	70'	70'	1500W MH	5/3*	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	S10–S9	70'	70'	1500W MH	6	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
10	T1, T11	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T3, T6	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T14	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T16–T17	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T19–T20	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T22	40'	40'	1500W MH	3	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
4	T2	40'	40'	1500W MH	6	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T15	40'	40'	1500W MH	6	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T18	40'	40'	1500W MH	6	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T21	40'	40'	1500W MH	6	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
6	T4–T5	40'	40'	1500W MH	2	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T8–T9	40'	40'	1500W MH	2	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
	T12–T13	40'	40'	1500W MH	2	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
2	T10, T7	40'	40'	1500W MH	5	MUSCO LIGHTING	LIGHT STRUCTURE GREEN SYSTEM	480
40	← TOTALS →				236			

* THIS STRUCTURE UTILIZES A BACK–TO–BACK MOUNTING CONFIGURATION.

SPORTS LIGHTING FIXTURE SCHEDULE NOTES:

A. PRODUCTS LISTED ARE TO ESTABLISH PERFORMANCE, QUALITY, AND PHYSICAL APPEARANCE. SUBSTITUTIONS MUST BE SUBMITTED FOR PRE–APPROVAL AT LEAST 10 DAYS BEFORE BID PER SPORTS FIELD LIGHTING SPECIFICATION REQUIREMENTS.

B. MH = METAL HALIDE

PRO SHOP, PARKING AND DRIVEWAY LIGHTING FIXTURE SCHEDULE

MARK	MANUF.	CATALOG NUMBER	LAMPS NO.	LAMPS TYPE	VOLT.	MOUNTING	REM.
A	HE WILLIAMS	82–4–2–32–WG11–EB2–277	2	F32T8/841	277	CHAIN	2
AE	HE WILLIAMS	82–4–2–32–WG11–EM5/2–EB2–277	2	F32T8/841	277	CHAIN	2, 3
B	HE WILLIAMS	82–4–3–32–WG11–EB3–277	3	F32T8/841	277	CHAIN	2
BE	HE WILLIAMS	82–4–3–32–WG11–EM5/2–EB3–277	3	F32T8/841	277	CHAIN	2, 3
C	GARDCO	104–WT–70MH–277–NP	1	70W MH	277	WALL	
D	HE WILLIAMS	50G–S24–232–SA12125–EB2–277	2	F32T8/841	277	RECESSED, GRID	
DE	HE WILLIAMS	50G–S24–232–SA12125–EM5/2–EB2–277	2	F32T8/841	277	RECESSED, GRID	1, 3
F	CD LIGHTING	CGE–2–32–277–EB–12PA	2	F32T8/841	277	RECESSED, GRID	
G	GREEN LEE RDB	RDB–70MH–277–SWW	1	70W MH	277	FLUSH WITH GRADE	
XA	DUAL–LITE	LTURW3–0–OMSDW0605	–	LED	277	UNIVERSAL	1
			2	5.4W, 6V			
XB	DUAL–LITE	LXURWE	–	LED	277	UNIVERSAL	1
LP1–III	GARDCO LIGHTING	G–18–1–3XL–250MH–480–BRP	1	250W MH	480	POLE, 30' MH	6,8
LP2–II,IV	GARDCO LIGHTING	G–18–2–2XL/4XL–250MH–480–BRP	2	250W MH	480	POLE, 30' MH, 180 DEGREE	6,7,9
LP3–IV,IV	GARDCO LIGHTING	G–18–2–4XL–250MH–480–BRP	2	250W MH	480	POLE, 30' MH, 180 DEGREE	6,7,10
LP4–II	GARDCO LIGHTING	G–18–1–2XL–250MH–480–BRP	1	250W MH	480	POLE, 30' MH	6,8

PRO SHOP, PARKING AND ROADWAY LIGHTING FIXTURE SCHEDULE NOTES:

A. PRODUCTS LISTED ARE TO ESTABLISH PERFORMANCE, QUALITY, AND PHYSICAL APPEARANCE. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE EITHER THE NAMED PRODUCT OR AN "APPROVED EQUAL" PRODUCT.

PRO SHOP, PARKING AND ROADWAY LIGHTING FIXTURE SCHEDULE REMARKS:

1. PROVIDE W/ UNSWITCHED POWER.
2. PROVIDE CHAIN KIT. MOUNT BOTTOM OF FIXTURE AT 9'–0" AFF.
3. PROVIDE 1350 LUMEN EMERGENCY BALLAST FOR 2 LAMP OPERATION.
4. NOT USED.
5. NOT USED.
6. COLOR = DARK BRONZE.
7. STEEL SQUARE POLE, TWIN DRILLED, DARK BRONZE, GARDCO LIGHTING MODEL #SS30–5–11–D2–BRP, OR APPROVED EQUAL.
8. STEEL SQUARE POLE, SINGLE DRILLED, DARK BRONZE, GARDCO LIGHTING MODEL #SS30–5–11–D1–BRP, OR APPROVED EQUAL.
9. DISTRIBUTION TYPE II AND IV MOUNTED ON SAME POLE IN 180 DEGREE ARRANGEMENT. ONE TYPE II DISTRIBUTION AND ONE TYPE IV DISTRIBUTION PER POLE. REFER TO DRAWING E1.1 FOR PLAN VIEW OF FIXTURE COMBINATIONS.
10. TWO (2) DISTRIBUTION TYPE IV'S MOUNTED ON SAME POLE IN 180 DEGREE ARRANGEMENT. REFER TO DRAWING E1.1 FOR PLAN VIEW OF FIXTURE COMBINATIONS.

EXISTING ELECTRICAL SERVICE

EXISTING TELEPHONE SERVICE

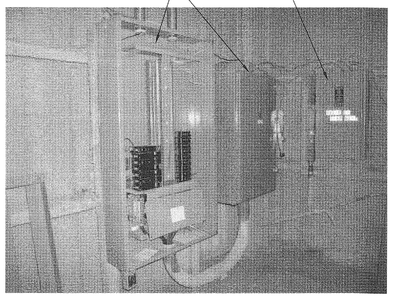


PHOTO DETAIL 1
SCALE: NONE

EXISTING ELECTRICAL PANEL

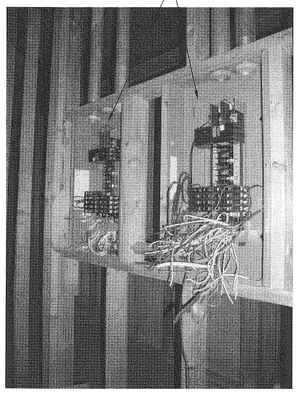
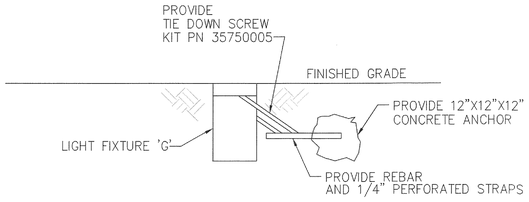
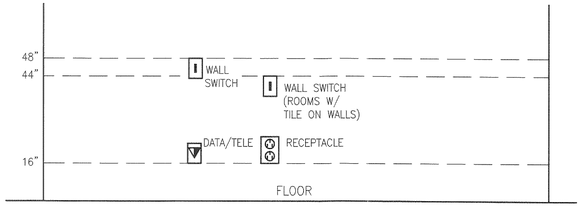


PHOTO DETAIL 2
SCALE: NONE



NOTE: MOUNT FIXTURE 4 FEET FROM FACE OF MONUMENT.

2 DETAIL - FLUSH MOUNTED LIGHT FIXTURE 'G'
SCALE: NONE



1 MOUNTING SCHEDULE
SCALE: NONE
(TYP. UNLESS OTHERWISE NOTED)

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Parks and Recreation Department

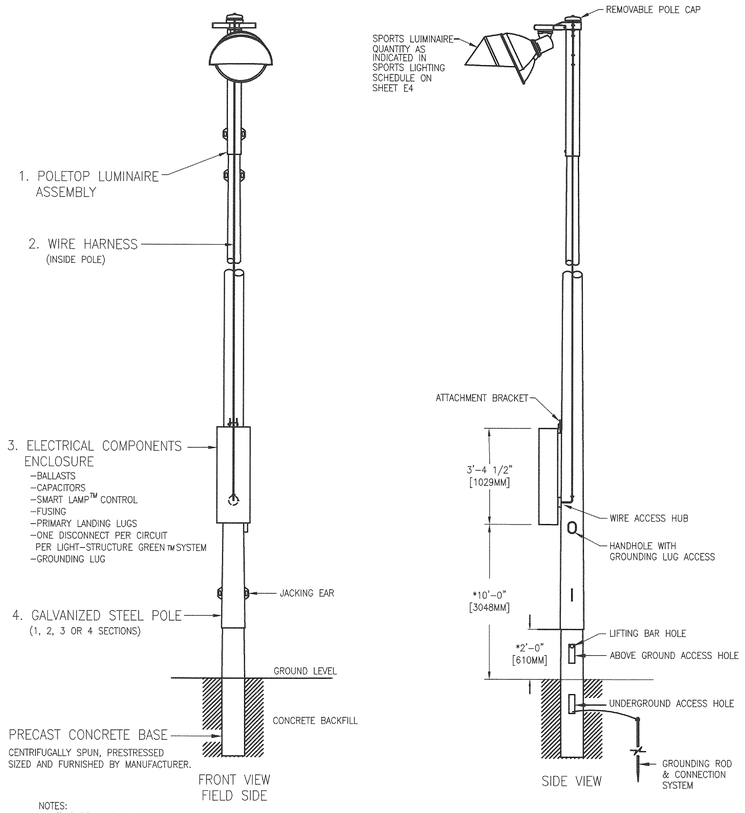
Joplin Sports Complex - Phase One
ELECTRICAL SCHEDULES & DETAILS

PROJECT NO. 2006-0924.01
DRAWN BY CKB DATE
CHECKED BY ARH DATE
DESIGNED BY CKB DATE
REVISIONS DATE
ISSUE DATE 7-11-07

E4

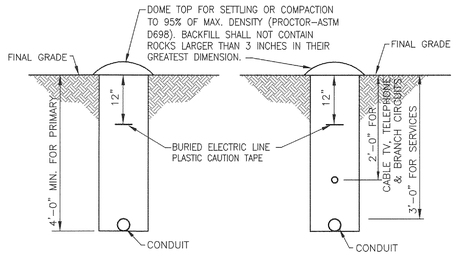
SHEET 66 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\Electrical\ACAD\060924-E4.dwg Jul 11,2007 - 9:10am



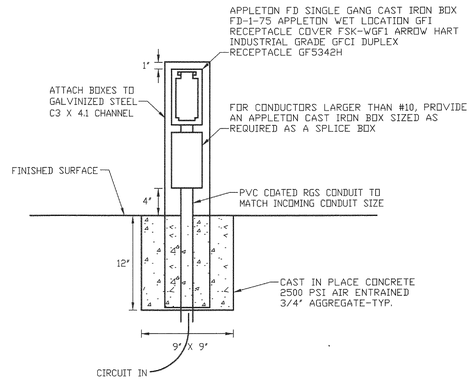
NOTES:
1. THIS DRAWING IS NOT TO SCALE.
2. * THIS DIMENSION FOR REFERENCE ONLY. VARIANCES MAY OCCUR DEPENDING ON STEEL POLE TOLERANCES, CONCRETE TOLERANCES, GALVANIZING THICKNESS HOLE DEPTH ACCURACY.
3. PROVIDE A BASE INSTALLATION BAR, AN INSTALLATION LEVEL MODIFIED FOR TAPER, AND INSTALLATION WEDGES.
4. BASED ON MUSCO SPORTS LIGHTING SYSTEM.

2 SPORTS LIGHT POLE DETAIL (TYPICAL)
SCALE: NONE



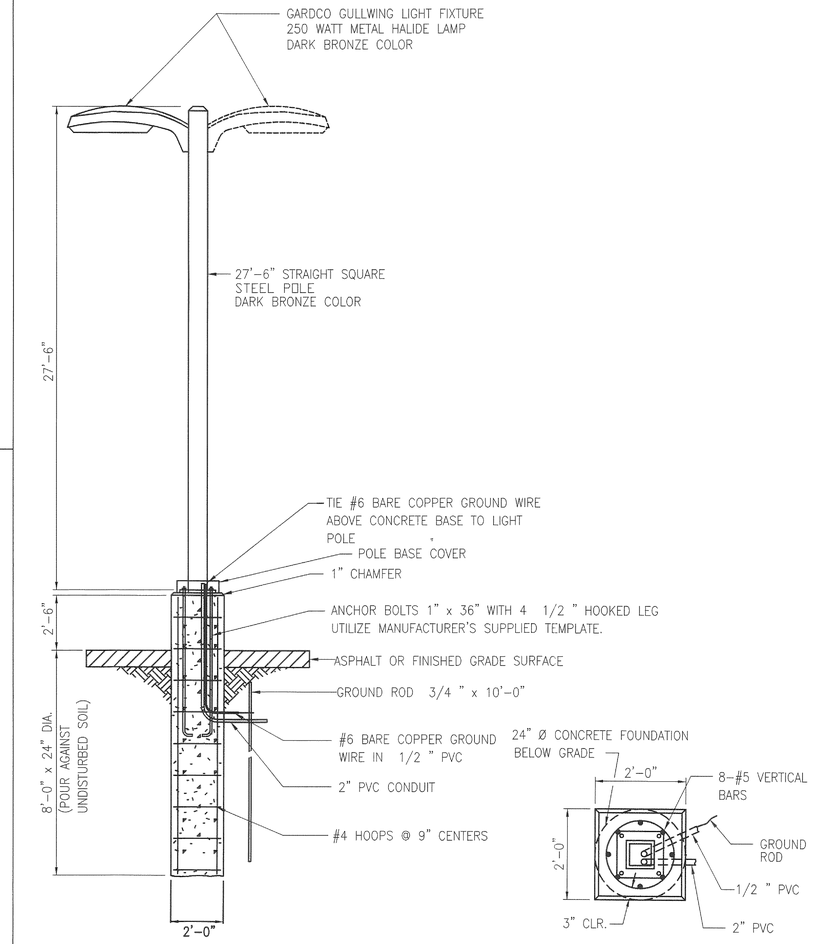
NOTES:
1. CONDUIT SHALL BE NATIONAL ELECTRICAL CODE (NEC) APPROVED RIGID CONDUIT, SUCH AS UL LISTED RIGID METAL OR UL LISTED NON–METALLIC GRAY PVC SCHEDULE 40. THE CONDUITS SHALL BE FREE OF BURRS AND HAVE CLEAN BORES.
2. PRIMARY CONDUIT BENDS SHALL BE NEC APPROVED RIGID METAL CONDUIT AND SHALL HAVE A 36" RADIUS SWEEP. SECONDARY AND SERVICE CONDUIT BENDS SHALL BE NEC APPROVED RIGID CONDUIT AND SHALL HAVE A 24" RADIUS SWEEP.
3. CONDUITS SHALL BE LAID STRAIGHT, BOTH VERTICALLY AND HORIZONTALLY.
4. A 1/4" PULL ROPE SHALL BE INSTALLED IN EACH CONDUIT BY THE CONTRACTOR. IF THE CONTRACTOR PULL ROPE BREAKS, IT IS CONTRACTOR'S RESPONSIBILITY TO PULL IN A NEW ONE.
5. BURIED ELECTRIC LINES YELLOW PLASTIC CAUTION TAPE SHALL BE INSTALLED 12" BELOW FINAL GRADE TO WARN OTHERS OF CABLE INSTALLATION.

4 TRENCH DETAIL
SCALE: NONE



NOTE: UTILIZE APPLETON, ARROWHART COMBINATION OR APPROVED EQUAL.

5 OUTDOOR RECEPTACLE DETAIL FOR TENNIS COURT BALL MACHINE
SCALE: NONE

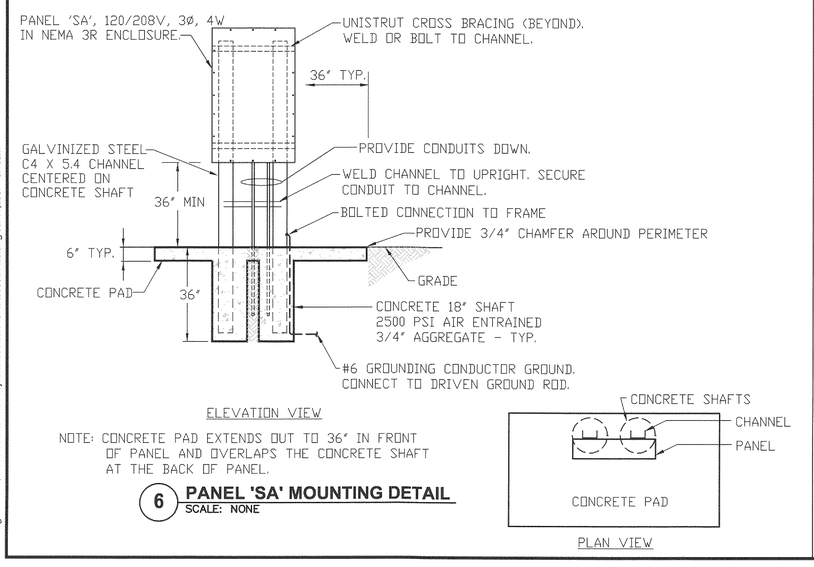


ELEVATION PLAN VIEW

3 PARKING AND DRIVEWAY LIGHT POLE DETAIL (TYPICAL)
SCALE: NONE

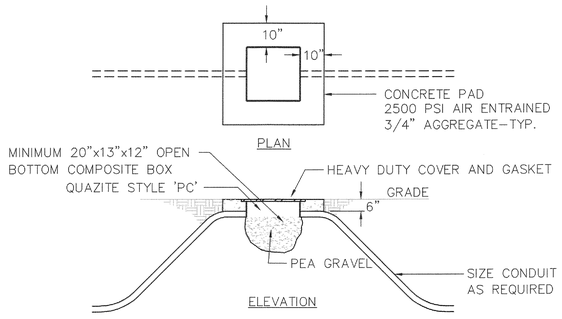
POLE FOUNDATION NOTES:

1. CONCRETE COMPRESSIVE STRENGTH 4000 PSI AT 28 DAYS.
2. REINFORCING STEEL: ASTM A615, GRADE 60.
3. UTILIZE MANUFACTURER'S SETTING TEMPLATES TO POSITION ANCHOR BOLTS PRIOR TO PLACING CONCRETE. ACCURATELY POSITION BOLTS TO ASSURE CORRECT VERTICAL AND HORIZONTAL LOCATION TO MATCH STEEL OR EQUIPMENT BOLT PATTERN.
4. DO NOT PERFORM ANY OPERATIONS NEAR POLE FOUNDATION WHICH COULD CAUSE VIBRATION OR SETTLEMENT OF THE SUPPORTING SOIL FOR AT LEAST 7 DAYS AFTER FOUNDATION IS PLACED.
5. CONFORM WITH ACI 318 AND ACI STANDARD FOR DETAILS AND DETAILING OF CONCRETE REINFORCEMENT.
6. POLE DETAIL FOR ONE, TWO, THREE AND FOUR LIGHT FIXTURE APPLICATIONS.



NOTE: CONCRETE PAD EXTENDS OUT TO 36" IN FRONT OF PANEL AND OVERLAPS THE CONCRETE SHAFT AT THE BACK OF PANEL.

6 PANEL 'SA' MOUNTING DETAIL
SCALE: NONE



PROVIDE SIZES AS REQUIRED TO MEET SPECIFIC REQUIREMENTS. INSTALL BOXES PER MANUFACTURER'S REQUIREMENTS. PROVIDE DIVIDERS IN PULLBOXES TO SEPARATE CONTROL WIRING AND POWER WIRING. PROVIDE STAINLESS STEEL PEST SCREEN AT BOTTOM OF PULLBOX. PROVIDE TEXT ON PULLBOX COVER INDICATING 'ELECTRIC' OR 'COMMUNICATIONS'. PULL BOX DESIGN SHALL BE A MINIMUM OF 15,000 POUNDS OVER A 10" SQUARE.

1 PULLBOX - DETAIL
SCALE: NONE

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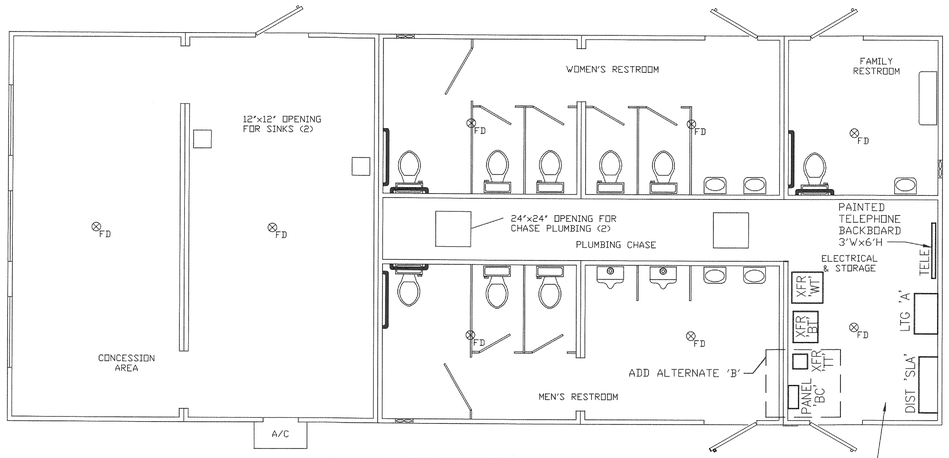
City of Joplin, Missouri
Parks and Recreation Department
Joplin Sports Complex - Phase One
ELECTRICAL DETAILS

PROJECT NO. 2006-0924.01
DRAWN BY CKB DATE
CHECKED BY ARH DATE
DESIGNED BY CKB DATE
REVISIONS DATE
ISSUE DATE 7-11-07

E5

SHEET 67 OF 74

Drawing Name: Q:\2006-0924\01 - 1st Project\Electrical\ACAD\060924-E5.dwg Jul 11,2007 - 9:10am

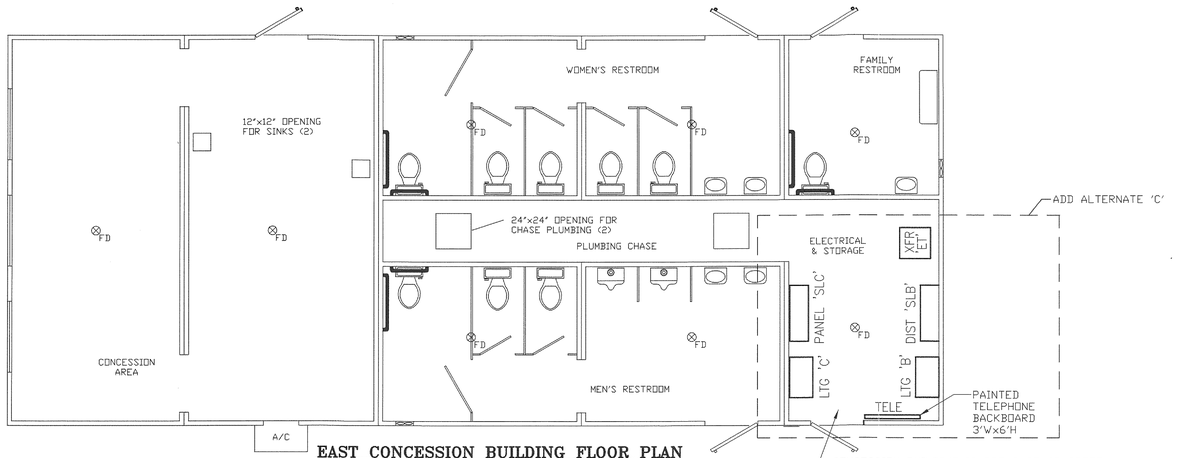


WEST CONCESSION BUILDING FLOOR PLAN

SCALE: 1/4" = 1'

NOTE: CONCESSION BUILDING PANELBOARD BY BLDG INSTALLER IN CONCESSION AREA. VERIFY EXACT LOCATION WITH INSTALLER. REFER TO SHEET E3 FOR ONE-LINE DIAGRAM.

CONCESSION BUILDING IS PRE-CAST CONCRETE. COORDINATE CONDUIT PENETRATION LOCATIONS AND SIZES WITH BUILDING MANUFACTURER PRIOR TO PRE-CASTING.



EAST CONCESSION BUILDING FLOOR PLAN

SCALE: 1/4" = 1'

NOTE: CONCESSION BUILDING PANELBOARD BY BLDG INSTALLER IN CONCESSION AREA. VERIFY EXACT LOCATION WITH INSTALLER. REFER TO SHEET E3 FOR ONE-LINE DIAGRAM.

CONCESSION BUILDING IS PRE-CAST CONCRETE. COORDINATE CONDUIT PENETRATION LOCATIONS AND SIZES WITH BUILDING MANUFACTURER PRIOR TO PRE-CASTING.

PACIFIC UTILITY PRODUCTS (PUP) OR APPROVED EQUAL

LIGHTING CONTROLLER 'LA' WIRING DIAGRAM

INDUSTRIAL CONTROL-

BONDED NEUTRAL REMOVE BONDING MEANS FOR TEST PURPOSES ONLY

CAT. NO. USPU-M100-100-MODOT (OR APPROVED EQUAL) 277/480VAC 1PH 3WIRE 100AMPS

*SHORT CIRCUIT RATING: 25,000 RMS SYMMETRICAL AMPS @ 480VAC MAXIMUM.

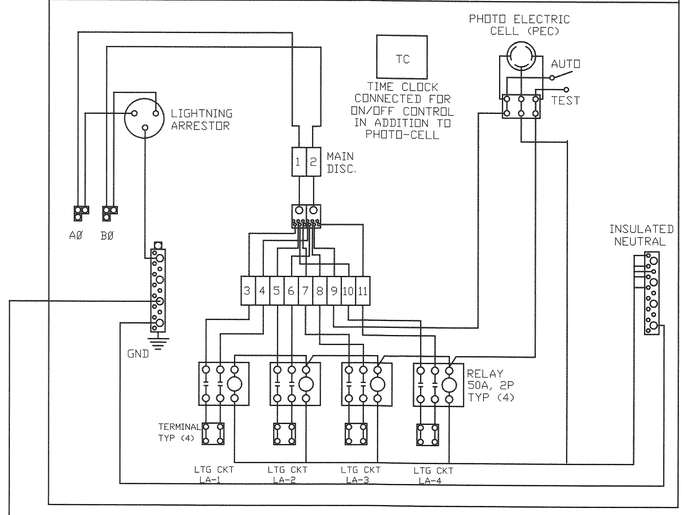
*MAIN SERVICE DISCONNECT: 100 AMPS TYPE FDB

*CIRCUIT BREAKERS 200 AMPS OR LESS: CUTLER-HAMMER TYPE FDB, FD REPLACEMENT BREAKERS MUST BE SAME TYPE AND RATING.

*AUTOMATIC TRIP IS INDICATED BY HANDLE POSITION MIDWAY BETWEEN (ON) AND (OFF). TO RESTORE POWER MOVE HANDLE TO (OFF), THEN (ON).

*IN ADDITION TO PHOTO ELECTRIC CELL, PROVIDE TIME CLOCK FOR ON/OFF CONTROL.

*SHIPPING TENDS TO LOOSEN ELECTRICAL CONNECTIONS - TIGHTEN ALL CONNECTIONS BEFORE ENERGIZING UNIT.

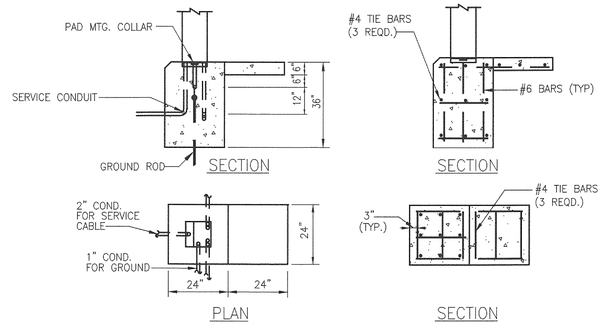


#2 GND CONDUCTOR

GROUND ROD 10'x3/4"

277/480V FEATURES:

PDB BLOCKS
BOLT ON C/B's
4 CONTACTORS (QTY. OPTION)
4 2P SPLICE BLOCKS (QTY. OPTION)
5th CLIP METER SOCKET
NO TEST BLOCKS
NAMEPLATES
EXT. ADHESIVE LABEL (480V) PER SPECS.
FOLDING DOOR STOP
BASE
FDB's 2P & 3P ONLY (600V)
ALUMINUM NATURAL WHEN SPECIFIED
5-10-04 LIGHTNING ARRESTOR
5-10-04 CORBIN LOCK



LIGHTING CONTROLLER 'LA' FOUNDATION

NOT TO SCALE

1) PROVIDE GROUND ROD(S) AS REQUIRED FOR MAXIMUM OF 25 OHMS RESISTANCE TO GROUND. EXOTHERMIC WELD ONE END OF NO. 2 AWG GROUND CONDUCTOR TO THE GROUND ROD(S) AND BRUSH ON 2 COATS OF AN INSULATING VARNISH TO THE WELDED AREAS.
2) CONCRETE SLAB TO PROVIDE SEMI-DRY WORKING AREA IN FRONT OF CONTROLLER CABINET.

LIGHTING CONTROLLER 'LA' SCHEDULE

CONTACTOR NO.	CKT NO.	AMP.	POLE	DESCRIPTION	LOAD KVA
	1-2	100A	2	MAIN CIRCUIT BREAKER	8.4 KVA
LA-1	3-4	20A	2	LIGHTING CIRCUIT	2.2 KVA
LA-2	5-6	20A	2	LIGHTING CIRCUIT	1.3 KVA
LA-3	7-8	20A	2	LIGHTING CIRCUIT	4.9 KVA
	9	15A	1	CONTROL	
LA-4	10-11	20A	2	SPARE	0 KVA

277/480V, 1Ø, 3W

*** TORQUE INFORMATION
□ 250MCM - 6 CU/AL 275 IN.LB.
△ #14-1/0 CU/AL 50 IN.LB.
*** NEUTRAL & EQUIPMENT GROUND-SINGLE CONDUCTOR
○ #14-1/0 CU/AL #3-1/0 50 IN.LB.
#6-4 45 IN.LB.
#8 40 IN.LB.
#14-10 25 IN.LB.
◦ #14-6 CU/AL #6 35 IN.LB.
#8 25 IN.LB.
#14-10 20 IN.LB.
*** EQUIPMENT GROUND-MULTIPLE CONDUCTOR
○ (2 OR 3) #10,12,14 CU/AL 45 IN.LB.
◦ (2) #12,14 CU/AL 20 IN.LB.
*** FIELD INSTALLED DEVICES-TORQUE TO VALUES INDICATED ON OR WITH DEVICE

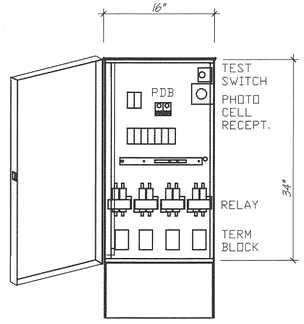
PUP USPU M100-100-MODOT MODEL OR APPROVED EQUAL LIGHTING CONTROLLER 'LA'

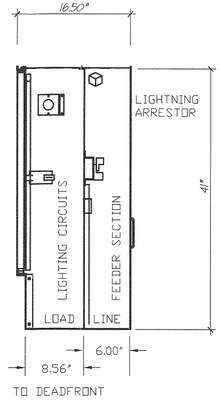
100 AMPS 1Ø 277/480 VOLTS 25,000 AIC

UL

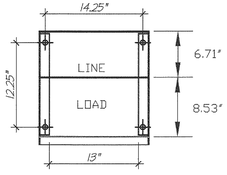
RIGHT SIDE VIEW

FRONT VIEW





TO DEADFRONT



FRONT MOUNTING PLAN

UNMETERED SERVICE PEDESTAL

PROVIDE CONCRETE BASE FOUNDATION REFER TO LIGHTING CONTROLLER FOUNDATION DETAIL THIS SHEET.

STANDARD FEATURES

METER SOCKET 4 JAW OR 5 JAW
UTILITY LANDING LUGS 250 KCMIL
CIRCUIT BREAKER INTERIOR COPPER BUS 12 CIRCUIT
LIGHTNING ARRESTOR 650 VAC
MERCURY RELAY AND TERMINAL BLOCK SIZED FOR EACH LIGHTING CIRCUIT AS REQUIRED
DOOR STOP TO PREVENT CUSTOMER DOOR SWINGING CLOSED
PHOTOELECTRIC SOCKET

SPECIFICATIONS

* NEMA 3R CONSTRUCTION
* 0.125 ALUMINUM CONSTRUCTION
* POLYESTER POWDER-COATED FINISH EXECEEDS ASTM B-117 SPECIFICATIONS
* PROVIDE DARK GREEN COLOR (THIS IS THE STANDARD COLOR)
* ALL FACTORY WIRING 600 VOLT RATED COPPER
* ALL COMPONENTS UL LISTED
* ALL EXTERIOR DOORS AND COVERS PADLOCKABLE
* UTILITY COVERS SEALABLE

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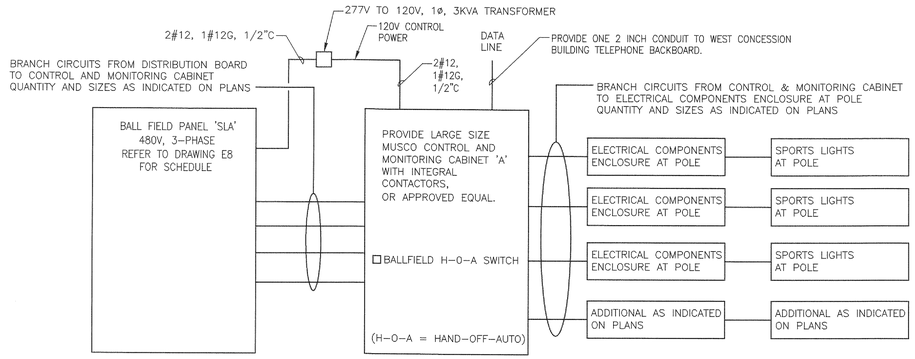
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E6

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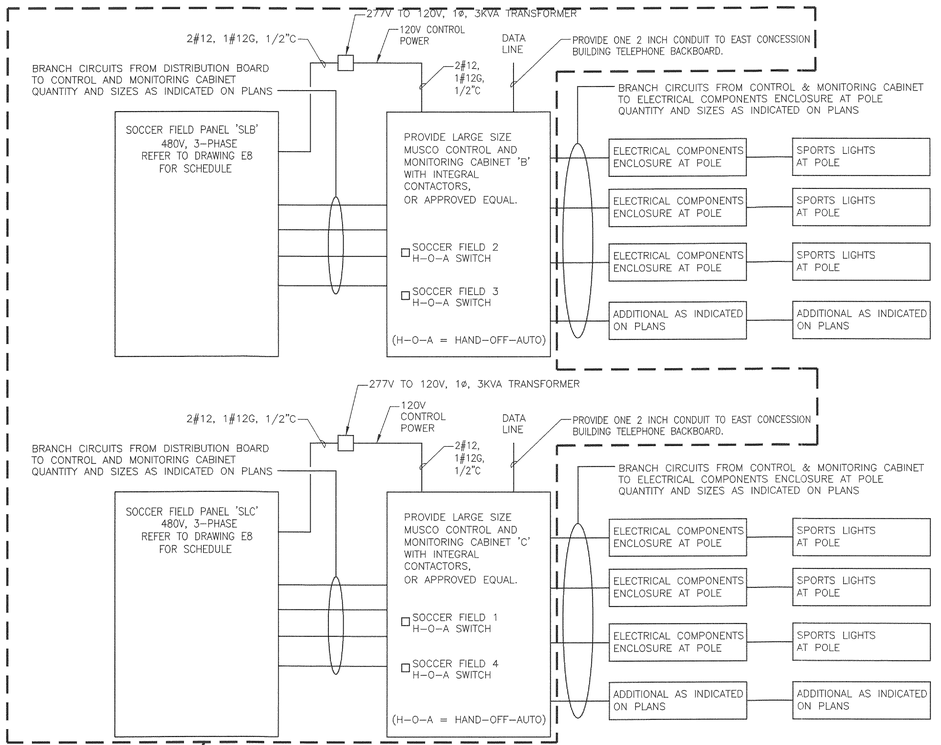


1 BASE BALL FIELD - SPORTS LIGHTING CONTROL DIAGRAM

SCALE: NONE — PANELS AND CABINETS LOCATED IN WEST CONCESSION BUILDING

NOTES:

1. SPORTS LIGHTING ON/OFF CONTROL BY HAND AND REMOTE DATA LINE.
2. CONTROL AND MONITORING CABINET 'A' SHALL CONTAIN CONTACTORS AS INDICATED BELOW–
   - FOR POLE A1 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE A2 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE B1 CIRCUIT – ONE 3–POLE 60A 480V LIGHTING CONTACTOR.
   - FOR POLE B2 CIRCUIT – ONE 3–POLE 60A 480V LIGHTING CONTACTOR.
   - FOR POLE C1 CIRCUIT – ONE 3–POLE 60A 480V LIGHTING CONTACTOR.
   - FOR POLE C2 CIRCUIT – ONE 3–POLE 60A 480V LIGHTING CONTACTOR.
   - FOR POLE D1 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE D2 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.

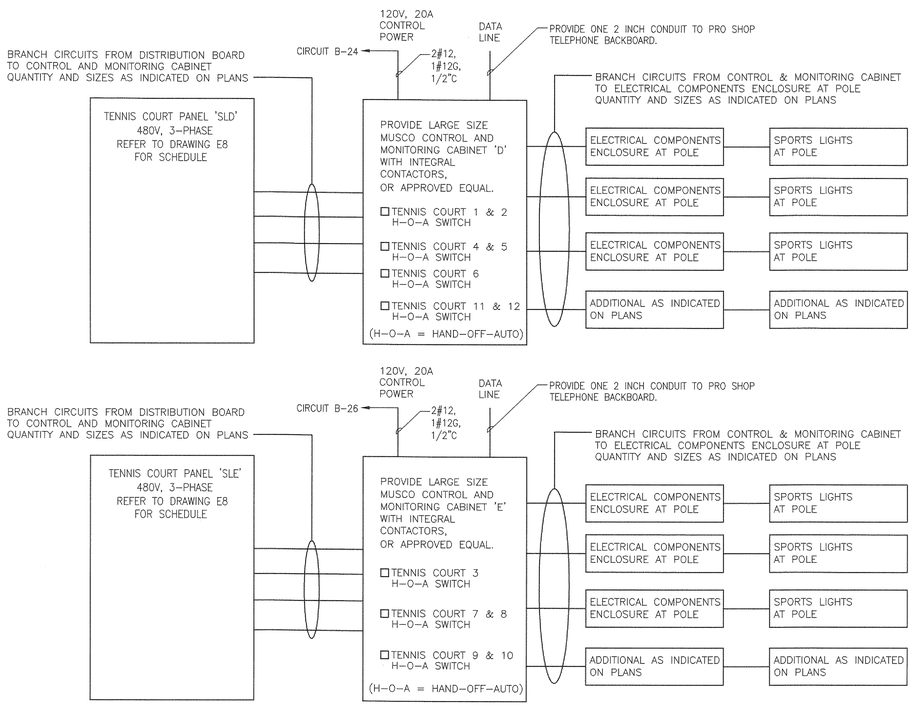


2 SOCCER FIELDS - SPORTS LIGHTING CONTROL DIAGRAM

SCALE: NONE — PANELS AND CABINETS LOCATED IN EAST CONCESSION BUILDING

NOTES:

1. SPORTS LIGHTING ON/OFF CONTROL BY HAND AND REMOTE DATA LINE.
2. CONTROL AND MONITORING CABINET 'B' SHALL CONTAIN CONTACTORS AS INDICATED BELOW–
   - FOR POLE S1 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S2 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S3 WEST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S3 EAST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S4 WEST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S4 EAST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S5 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S6 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
3. CONTROL AND MONITORING CABINET 'C' SHALL CONTAIN CONTACTORS AS INDICATED BELOW–
   - FOR POLE S7 WEST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S7 EAST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S8 WEST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S8 EAST BANK CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S9 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE S10 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.



3 TENNIS COURTS - SPORTS LIGHTING CONTROL DIAGRAM

SCALE: NONE — PANELS AND CABINETS LOCATED IN PRO SHOP ELECTRICAL ROOM

NOTES:

1. SPORTS LIGHTING ON/OFF CONTROL BY HAND AND REMOTE DATA LINE.
2. CONTROL AND MONITORING CABINET 'D' SHALL CONTAIN CONTACTORS AS INDICATED BELOW–
   - FOR POLE T1 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T2 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T3 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T6 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T7 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLES T8, T9 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T10 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T11 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T14 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T15 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T16 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
3. CONTROL AND MONITORING CABINET 'E' SHALL CONTAIN CONTACTORS AS INDICATED BELOW–
   - FOR POLES T4, T12, T5, T13 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T17 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T18 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T19 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T20 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T21 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.
   - FOR POLE T22 CIRCUIT – ONE 3–POLE 30A 480V LIGHTING CONTACTOR.

CONTROL AND MONITORING CABINET	H–O–A SWITCH IN CABINET	SPORTS LIGHTING POLES ON/OFF CONTROLLED BY H–O–A SWITCH
CABINET 'A' AT WEST CONCESSION BUILDING	☐BALLFIELD H–O–A SWITCH	A1, A2, B1, B2, C1, C2, D1, D2
CABINET 'B' AT EAST CONCESSION BUILDING	☐SOCCER FIELD 2 H–O–A SWITCH	S3 EAST BANK, S4 EAST BANK, S5, S6
CABINET 'B' AT EAST CONCESSION BUILDING	☐SOCCER FIELD 3 H–O–A SWITCH	S1, S2, S3 WEST BANK, S4 WEST BANK
CABINET 'C' AT EAST CONCESSION BUILDING	☐SOCCER FIELD 1 H–O–A SWITCH	S7 EAST BANK, S8 EAST BANK, S9, S10
CABINET 'C' AT EAST CONCESSION BUILDING	☐SOCCER FIELD 4 H–O–A SWITCH	S7 WEST BANK, S8 WEST BANK
CABINET 'D' AT PRO SHOP BUILDING	☐TENNIS COURT 1 & 2 H–O–A SWITCH	T2, T3, T14, T15
CABINET 'D' AT PRO SHOP BUILDING	☐TENNIS COURT 4 & 5 H–O–A SWITCH	T6, T7, T10, T11
CABINET 'D' AT PRO SHOP BUILDING	☐TENNIS COURT 6 H–O–A SWITCH	T7, T8, T9, T10
CABINET 'D' AT PRO SHOP BUILDING	☐TENNIS COURT 11 & 12 H–O–A SWITCH	T1, T2, T15, T16
CABINET 'E' AT PRO SHOP BUILDING	☐TENNIS COURT 3 H–O–A SWITCH	T4, T5, T12, T13
CABINET 'E' AT PRO SHOP BUILDING	☐TENNIS COURT 7 & 8 H–O–A SWITCH	T17, T18, T21, T22
CABINET 'E' AT PRO SHOP BUILDING	☐TENNIS COURT 9 & 10 H–O–A SWITCH	T18, T19, T20, T21

4 SPORTS LIGHTING - HAND-OFF-AUTO FIELD/COURT CONTROL MATRIX

SCALE: NONE

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Parks and Recreation Department

Joplin Sports Complex - Phase One

ELECTRICAL DETAILS

PROJECT NO. 2006-0924.01
DRAWN BY CKB — DATE
CHECKED BY ARH — DATE
DESIGNED BY CKB — DATE
REVISIONS — DATE
ISSUE DATE 7-11-07

E7

SHEET 69 OF 74

Drawing Name: Q:\2006-0924\01 - 1st Project\Electrical\ACAD\060924-E7.dwg Jul 11,2007 - 9:11am

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

BALLFIELD LIGHTING PANELBOARD 'SLA'

BUS MAINS: 400A
MAIN C/B: 400A
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
BALLFIELD LIGHT POLE A1	4433			25	1	2	40	5700			BALLFIELD LIGHT POLE C1
–		4433			3	4			5700		–
–			4433		5	6				5700	–
BALLFIELD LIGHT POLE A2	4433			25	7	8	40	5700			BALLFIELD LIGHT POLE C2
–		4433			9	10			5700		–
–			4433		11	12				5700	–
BALLFIELD LIGHT POLE B1	8866			50	13	14	30	5066			BALLFIELD LIGHT POLE D1
–		8866			15	16			5066		–
–			8866		17	18				5066	–
BALLFIELD LIGHT POLE B2	8866			50	19	20	30	5066			BALLFIELD LIGHT POLE D2
–		8866			21	22			5066		–
–			8866		23	24				5066	–
BASEBALL FIELD ANNOUNCER STAND	12500			70	25	26	175	25000			CONCESSION STAND TRANSFORMER 'WT'
TRANSFORMER 'BT'		12500			27	28			25000		
SPACE			·		29	30	15			1000	CABINET 'A' CONTROL POWER TRANSFORMER
SPACE	·				31	32	30	1920			BASEBALL CAGE PANELBOARD 'BC'
SPACE		·			33	34			1920		
SPACE			·		35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - WEST CONCESSION BUILDING

CONNECTED LOADS:
Aø 87.6KVA, Bø 87.6KVA, Cø 49.1 KVA, TOTAL 224 KVA

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

SOCCER FIELD LIGHTING PANELBOARD 'SLB'

BUS MAINS: 400A
MAIN C/B: 400A
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
SOCCER FIELD LIGHT POLE	4433			25	1	2	25	4433			SOCCER FIELD LIGHT POLE S1
S3 EAST BANK		4433			3	4			4433		–
–			4433		5	6				4433	–
SOCCER FIELD LIGHT POLE	4433			25	7	8	25	4433			SOCCER FIELD LIGHT POLE S2
S4 EAST BANK		4433			9	10			4433		–
–			4433		11	12				4433	–
SOCCER FIELD LIGHT POLE S5	4433			25	13	14	25	4433			SOCCER FIELD LIGHT POLE
–		4433			15	16			4433		S3 WEST BANK
–			4433		17	18				4433	–
SOCCER FIELD LIGHT POLE S6	4433			25	19	20	25	4433			SOCCER FIELD LIGHT POLE
–		4433			21	22			4433		S4 WEST BANK
–			4433		23	24				4433	–
SOCCER FIELD LIGHTING	16500			150	25	26	175	25000			CONCESSION STAND TRANSFORMER 'ET'
PANELBOARD 'SLC'		16500			27	28			25000		·
–			16500		29	30	15			1000	CABINET 'B' CONTROL POWER TRANSFORMER
SPACE	·				31	32	20	·			SPARE
SPACE		·			33	34	20		·		SPARE
SPACE			·		35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - EAST CONCESSION BUILDING

CONNECTED LOADS:
Aø 77KVA, Bø 77KVA, Cø 52KVA, TOTAL 206 KVA

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

SOCCER FIELD LIGHTING PANELBOARD 'SLC'

BUS MAINS: 225A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
SOCCER FIELD LIGHT POLE	3166			20	1	2	15	1900			SOCCER FIELD LIGHT POLE
S7 EAST BANK		3166			3	4			1900		S7 WEST BANK
–			3166		5	6				1900	–
SOCCER FIELD LIGHT POLE	1900			20	7	8	15	1900			SOCCER FIELD LIGHT POLE
S8 EAST BANK		1900			9	10			1900		S8 WEST BANK
–			1900		11	12				1900	–
SOCCER FIELD LIGHT POLE S9	3800			25	13	14	15	1000			CABINET 'C' CONTROL POWER TRANSFORMER
–		3800			15	16	20				SPARE
–			3800		17	18	20				SPARE
SOCCER FIELD LIGHT POLE S10	3800			25	19	20	20				SPARE
–		3800			21	22	20				SPARE
–			3800		23	24	20				SPARE
SPACE	·				25	26	20	·			SPARE
SPACE		·			27	28	20		·		SPARE
SPACE			·		29	30	20			·	SPARE
SPACE	·				31	32	20	·			SPARE
SPACE		·			33	34	20		·		SPARE
SPACE			·		35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - EAST CONCESSION BUILDING

CONNECTED LOADS:
Aø 17.5KVA, Bø 16.5KVA, Cø 16.5KVA, TOTAL 50.5 KVA

ADD ALTERNATE 'C'

VOLTS: 120/208V, 3ø, 4W
MOUNTING: SURFACE

PRO SHOP PANELBOARD 'C'

BUS MAINS: 600A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
HVAC UNIT FC-1	5640			50	1	2	40	4680			HVAC UNIT FC-3
–		5640			3	4			4680		–
HVAC UNIT FC-1			3120	30	5	6	60			6240	HVAC UNIT FC-3
–	3120				7	8		6240			–
HVAC UNIT FC-2		4680		40	9	10	20				SPARE
–			4680		11	12	20				SPARE
HVAC UNIT FC-2	6240			60	13	14	30	2500			WATER HEATER MECH 114
–		6240			15	16			2500		–
SPARE				20	17	18	20			1500	UNIT HEATER MECH 114
SPARE				20	19	20		1500			–
SPARE				20	21	22	30		2500		UNIT HEATER STOR 116
SPARE				20	23	24				2500	NORTHWEST
WATER HEATER STOR 116	2500			30	25	26	30	2500			UNIT HEATER STOR 116
SOUTH WEST		2500			27	28			2500		NORTH MIDDLE
EXH FAN MEN 108			120	15	29	30	30			2500	UNIT HEATER STOR 116
SPACE					31	32		2500			NORTHEAST
SPACE					33	34	20		·		SPARE
SPACE					35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - PRO SHOP BUILDING

CONNECTED LOADS:
Aø 37.4 KVA, Bø 31.2 KVA, Cø 20.7 KVA, TOTAL 89.3 KVA

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

TENNIS COURT LIGHTING PANELBOARD 'SLD'

BUS MAINS: 225A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
TENNIS COURT LIGHT POLE T2	3666			25	1	2	20	3166			TENNIS COURT LIGHT POLE T10
–		3666			3	4			3166		–
–			3660		5	6				3166	–
TENNIS COURT LIGHT POLE T3	1833			15	7	8	15	1900			TENNIS COURT LIGHT POLE T11
–		1833			9	10			1900		–
–			1833		11	12				1900	–
TENNIS COURT LIGHT POLE T14	1900			15	13	14	20	2533			TENNIS COURT LIGHT POLES
–		1900			15	16			2533		T8 AND T9
–			1900		17	18				2533	–
TENNIS COURT LIGHT POLE T15	3800			25	19	20	15	1833			TENNIS COURT LIGHT POLE T1
–		3800			21	22			1833		–
–			3800		23	24				1833	–
TENNIS COURT LIGHT POLE T6	1900			15	25	26	15	1900			TENNIS COURT LIGHT POLE T16
–		1900			27	28			1900		–
–			1900		29	30				1900	–
TENNIS COURT LIGHT POLE T7	3166			20	31	32	20	·			SPARE
–		3166			33	34	20		·		SPARE
–			3166		35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - PRO SHOP BUILDING

CONNECTED LOADS:
Aø 27.6 KVA, Bø 27.6 KVA, Cø 27.6 KVA, TOTAL 82.8 KVA

VOLTS: 480/277V, 3ø, 4W
MOUNTING: SURFACE

TENNIS COURT LIGHTING PANELBOARD 'SLE'

BUS MAINS: 225A
MAIN C/B: NONE
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	Cø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	Cø	DESCRIPTION
TENNIS COURT LIGHT POLES	5066			30	1	2	15	1900			TENNIS COURT LIGHT POLE T19
T4,T5,T12, AND T13		5066			3	4			1900		–
–			5066		5	6				1900	–
TENNIS COURT LIGHT POLES	1900			15	7	8	15	1900			TENNIS COURT LIGHT POLE T20
–		1900			9	10			1900		–
–			1900		11	12				1900	–
TENNIS COURT LIGHT POLE T18	3800			25	13	14	20				SPARE
–		3800			15	16	20				SPARE
–			3800		17	18	20				SPARE
TENNIS COURT LIGHT POLE T21	3800			25	19	20	20				SPARE
–		3800			21	22	20				SPARE
–			3800		23	24	20				SPARE
TENNIS COURT LIGHT POLE T22	1900			15	25	26	20				SPARE
–		1900			27	28	20				SPARE
–			1900		29	30	20				SPARE
SPACE					31	32	20	·			SPARE
SPACE					33	34	20		·		SPARE
SPACE					35	36	20			·	SPARE
SPACE	·				37	38	20	·			SPARE
SPACE		·			39	40	20		·		SPARE
SPACE			·		41	42	20			·	SPARE

LOCATION - PRO SHOP BUILDING

CONNECTED LOADS:
Aø 20.3 KVA, Bø 20.3 KVA, Cø 20.3 KVA, TOTAL 60.9 KVA

ADD ALTERNATE 'B'

VOLTS: 120/240V, 1ø, 3W
MOUNTING: SURFACE

BASEBALL CAGE PANELBOARD 'BC'

BUS MAINS: 100A
MAIN C/B: 60A
25 kA AVAILABLE FAULT

DESCRIPTION	CONNECTED LOAD (VA) Aø	Bø	CKT. BKR.	NO.	NO.	CKT. BKR.	CONNECTED LOAD (VA) Aø	Bø	DESCRIPTION
BASE BALL THROWING MACHINE ONE	1920		20	1	2	20	·		SPARE
BASE BALL THROWING MACHINE TWO		1920	20	3	4	20		·	SPARE
SPARE			20	5	6	20			SPARE
SPARE			20	7	8	20	·		SPARE
SPARE			20	9	10	20		·	SPARE
SPARE			20	11	12	20			SPARE

LOCATION - WEST CONCESSION BUILDING

CONNECTED LOADS:
Aø 1.9 KVA, Bø 1.9 KVA, TOTAL 3.8 KVA

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Joplin Sports Complex - Phase One

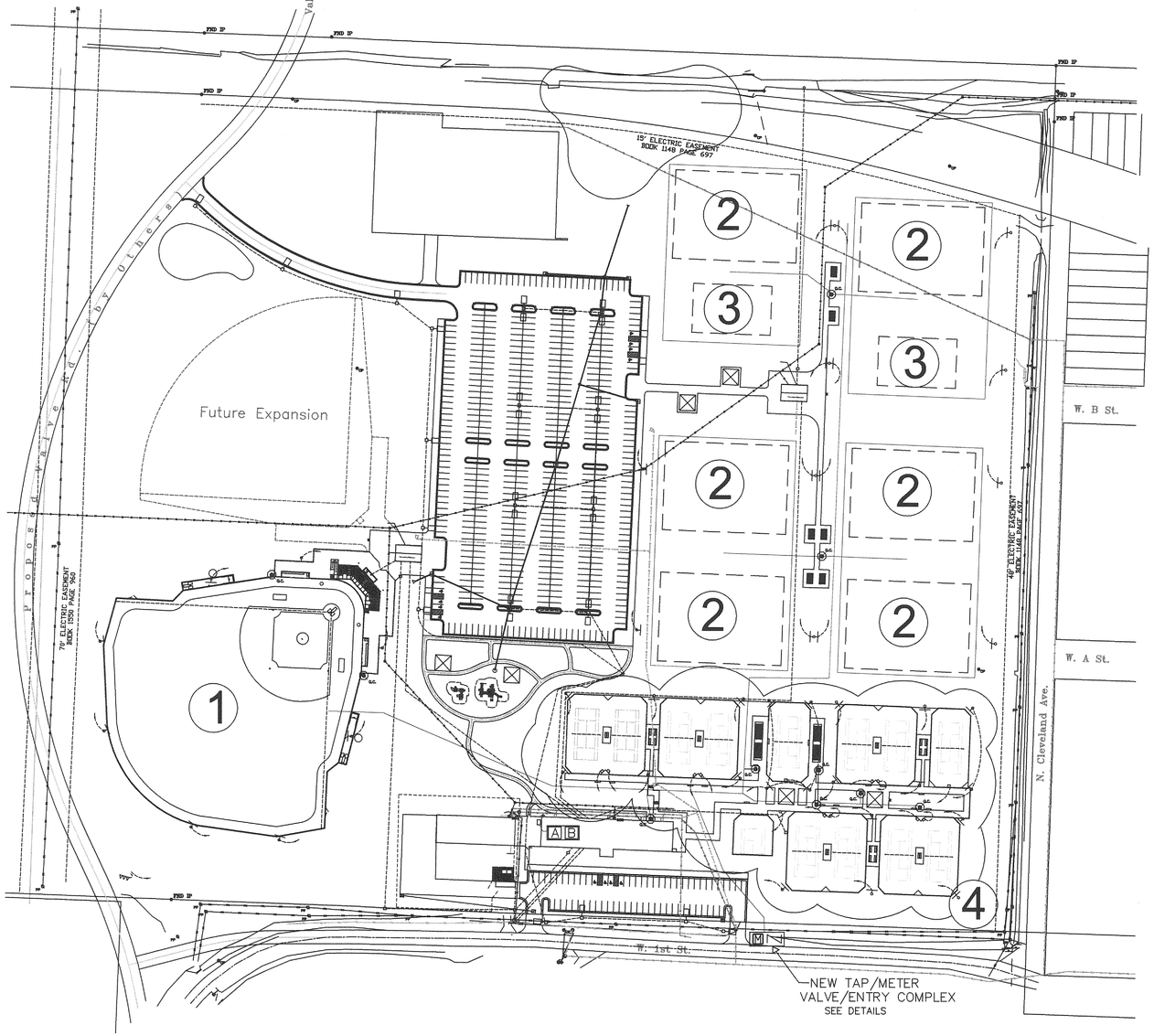
ELECTRICAL SCHEDULES

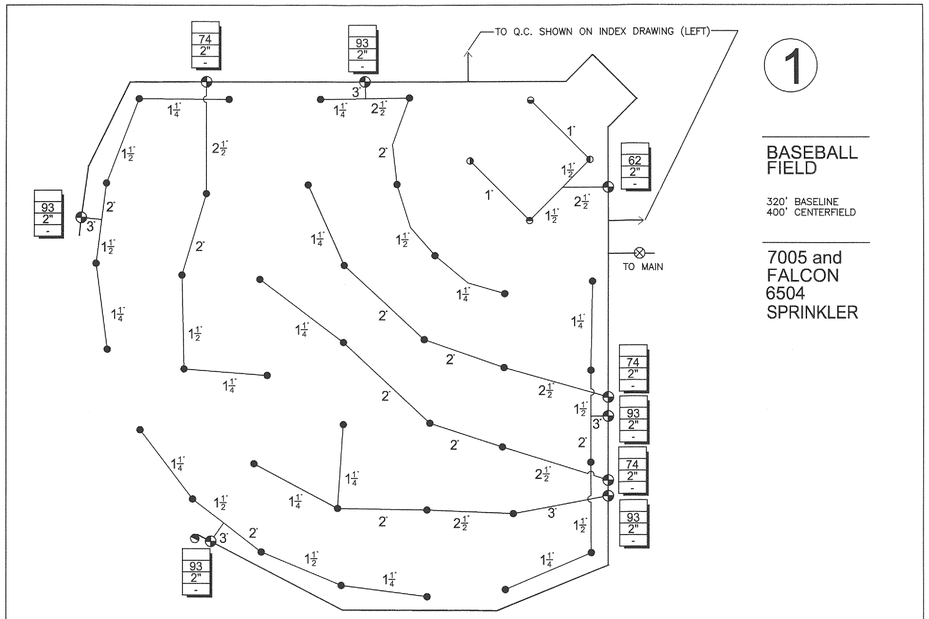
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DRAWN BY CKB DATE
CHECKED BY ARH DATE
DESIGNED BY CKB DATE
REVISIONS DATE
ISSUE DATE 7-11-07

E8

SHEET 70 OF 74

Drawing Name: Q:\2006-0924\01-1st\Project\Electrical\ACAD\060924-E8.dwg Jul 11,2007 - 9:12am





1

BASEBALL FIELD

320' BASELINE
400' CENTERFIELD

7005 and FALCON 6504 SPRINKLER

LEGEND

		QUANTITY
⊗	MAIN SHUT–OFF VALVE	1
⊕	RAIN BIRD ELECTRIC REMOTE CONTROL VALVE (SIZED AS SHOWN)	9
●	RAIN BIRD 8005 W/20 NOZZLE PRESSURE = 50 PSI RADIUS = 65 FEET FLOW = 18.6 GPM	37
◓	RAIN BIRD FALCON 6504 PC W/18 NOZZLE PRESSURE = 50 PSI RADIUS = 59 FEET FLOW = 15.4 GPM	4
——	MAINLINE PIPE: CLASS 200 PVC (3–INCH SIZE)	
——	LATERAL PIPE: CLASS 160 PVC (SIZED AS SHOWN)	

A1 — INDICATES CONTROLLER AND CONTROLLER STATION NUMBER (TO BE FILLED IN BY CONTRACTOR)
74 — INDICATES LATERAL DISCHARGE IN GPM
2" — INDICATES REMOTE CONTROL VALVE SIZE
- — INDICATES REMOTE CONTROL VALVE SIZE

GENERAL NOTES

1. DESIGN IS BASED UPON A MINIMUM FLOW OF 93 GPM AND A MINIMUM PRESSURE OF 70 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE.
2. ADDITIONAL LATERALS OUTSIDE PLAY FIELD AREA MAY BE INSTALLED PROVIDED HYDRAULIC CAPABILITY OF SUPPLY IS NOT EXCEEDED.
3. SPRINKLER LOCATIONS ARE TO SCALE. PIPE LOCATIONS ARE DIAGRAMMATIC.

North

1" = 50'

1 SEE BASEBALL DETAIL (THIS SHEEET)

2 SEE SOCCER DETAIL (SHEET IR2)

3 SEE YOUTH SOCCER DETAIL (SHEET IR2)

4 SEE TENNIS COMPLEX DETAIL (SHEET IR3)

LEGEND

MW — WATTS 009M2QT 2" RPZA BACKFLOW PREVENTER AND METER – SEE VALVE/VAULTE ENTRY DETAILS

AB — A – RAINBIRD ESP–MC 36 CONTROLLER (FOR ALL SOCCER FIELDS)
B – RAINBIRD ESP–MC 12 (FOR BASEBALL AND TENNIS COMPLEX)*

4" SCH. 40 PVC MAIN

RAINBIRD 3/4" #33DLRC QUICK COUPLER
(NOTE: LATERALS FROM MAIN TO Q.C. MAY BE 2" SCH. 40 PVC)

* MAY USE LARGER FOR FUTURE ZONES

INDEX DRAWING

SCALE: 1" = 100'

0 100 200 300

North

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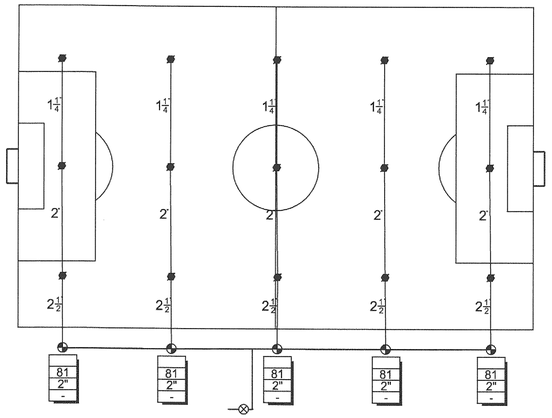
PROJECT NO.	20060924
DRAWN BY	DATE 07/05/07
CHECKED BY SCO	DATE 07/05/07
DESIGNED BY SCO	DATE 07/05/07
REVISIONS	DATE
ISSUE DATE	07/05/07

IRRIGATION INDEX

IR1

SHEET 71 OF 74

Drawing Name: Q:\2006-0924\01-1st Proje\IRRIGATION\IR1.dwg Jul 05,2007 - 9:24am



SCALE: 1" = 50'

0 50 100 150

LEGEND

	QUANTITY
⊗ MAIN SHUT-OFF VALVE	1
RAIN BIRD ELECTRIC REMOTE CONTROL VALVE (SIZED AS SHOWN)	5
RAIN BIRD 8005 W/24 NOZZLE PRESSURE = 70 PSI RADIUS = 75 FEET FLOW = 27 GPM	15

— MAINLINE PIPE: CLASS 200 PVC (3-INCH SIZE)

— LATERAL PIPE: CLASS 200 PVC (SIZED AS SHOWN)

A1	INDICATES CONTROLLER AND CONTROLLER STATION NUMBER*
81	INDICATES LATERAL DISCHARGE IN GPM
2"	INDICATES REMOTE CONTROL VALVE SIZE
-	

* CONTRACTOR TO FILL IN CONTROLLER AND STATION NUMBERS

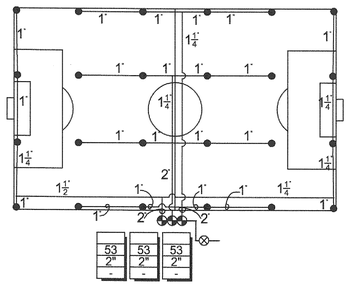
GENERAL NOTES

1. DESIGN IS BASED UPON A MINIMUM FLOW OF 81 GPM AND A MINIMUM PRESSURE OF 85 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE.
2. ADDITIONAL LATERALS OUTSIDE PLAY FIELD AREA MAY BE INSTALLED PROVIDED HYDRAULIC CAPABILITY OF SUPPLY IS NOT EXCEEDED.
3. SPRINKLER LOCATIONS ARE TO SCALE. PIPE LOCATIONS ARE DIAGRAMMATIC.

2

SOCCER FIELD (TYPICAL)

8005 SPRINKLERS



SCALE: 1" = 50'

0 50 100 150

LEGEND

	QUANTITY
⊗ MAIN SHUT-OFF VALVE	1
RAIN BIRD ELECTRIC REMOTE CONTROL VALVE (SIZED AS SHOWN)	3
RAIN BIRD 7005 W/8 NOZZLE PRESSURE = 50 PSI RADIUS = 49 FEET FLOW = 6.6 GPM	24

— MAINLINE PIPE: CLASS 200 PVC (2-INCH SIZE)

— LATERAL PIPE: CLASS 200 PVC (SIZED AS SHOWN)

A1	INDICATES CONTROLLER AND CONTROLLER STATION NUMBER*
53	INDICATES LATERAL DISCHARGE IN GPM
2"	INDICATES REMOTE CONTROL VALVE SIZE
-	

* CONTRACTOR TO FILL IN CONTROLLER AND STATION NUMBERS

GENERAL NOTES

1. DESIGN IS BASED UPON A MINIMUM FLOW OF 53 GPM AND A MINIMUM PRESSURE OF 65 PSI DOWNSTREAM OF BACKFLOW PREVENTION DEVICE.
2. ADDITIONAL LATERALS OUTSIDE PLAY FIELD AREA MAY BE INSTALLED PROVIDED HYDRAULIC CAPABILITY OF SUPPLY IS NOT EXCEEDED.
3. SPRINKLER LOCATIONS ARE TO SCALE. PIPE LOCATIONS ARE DIAGRAMMATIC.

3

YOUTH SOCCER FIELD (TYPICAL)

7005 SPRINKLERS

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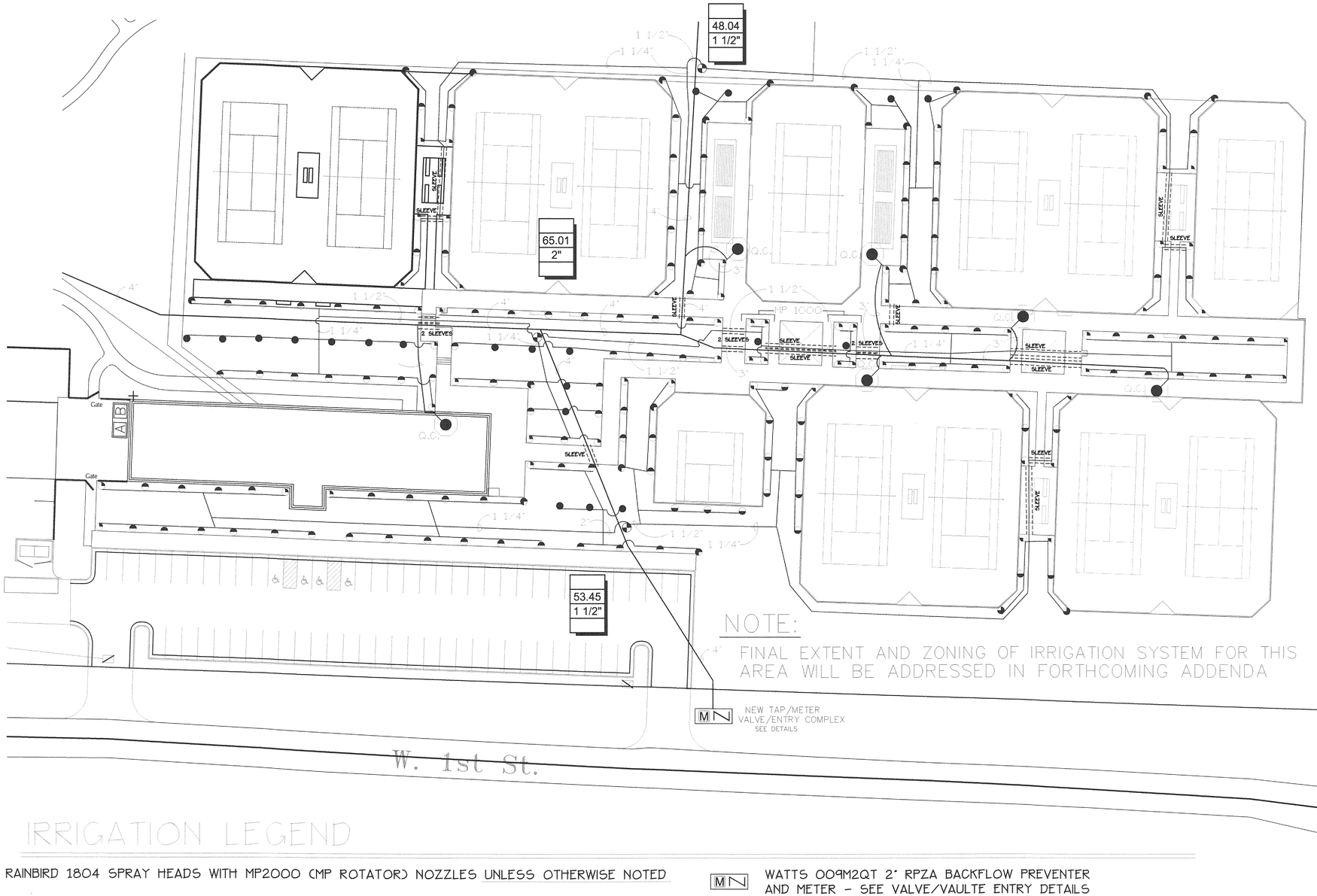
City of Joplin, Missouri
Parks and Recreation Department

Joplin Sports Complex - Phase One

PROJECT NO.	20060824
DRAWN BY	DATE 07/05/07
CHECKED BY SCO	DATE 07/05/07
DESIGNED BY SCO	DATE 07/05/07
REVISIONS	DATE
ISSUE DATE	07/05/07

SOCCER FIELD IRRIGATION

IR2



NOTE:

4' FINAL EXTENT AND ZONING OF IRRIGATION SYSTEM FOR THIS AREA WILL BE ADDRESSED IN FORTHCOMING ADDENDA

IRRIGATION LEGEND

RAINBIRD 1804 SPRAY HEADS WITH MP2000 (MP ROTATOR) NOZZLES UNLESS OTHERWISE NOTED

- MP2000 360 NOZZLE
- MP2000 210-270 NOZZLE
- MP2000 90-210 NOZZLE
- MP CORNER NOZZLE
- RAINBIRD PGA VALVE W/PRS-D REGULATOR (SIZE AS NOTED ON PLAN)
- RAINBIRD 3/4" #33DLRC QUICK COUPLER

- 4" SCH. 40 PVC MAIN
- 2" or 3" SCH. 40 PVC MAIN (AS LABELED)
- POLYETHYLENE OR CLASS 200 PVC LATERALS (1" OR AS LABELED)
- RAINBIRD BLACK STRIPE POLYETHYLENE TUBING (.705 O.D.) OR EQUAL
- RAINBIRD LANDSCAPE DRIPLINE (LD-09-24)

M N — WATTS 009M2QT 2" RPZA BACKFLOW PREVENTER AND METER - SEE VALVE/VAULTE ENTRY DETAILS

A B — A - RAINBIRD ESP-MC 36 CONTROLLER (FOR ALL SOCCER FIELDS)
B - RAINBIRD ESP-MC 12 (FOR BASEBALL AND TENNIS COMPLEX)*

48.04 / 1 1/2" — INDICATES CONTROLLER AND CONTROLLER STATION NUMBER*
INDICATES LATERAL DISCHARGE IN GPM
INDICATES REMOTE CONTROL VALVE SIZE
NOTES
* CONTRACTOR TO FILL IN CONTROLLER AND STATION NUMBERS

NOTES

1) LOCATION OF PIPE AND VALVES ON PLAN IS FOR CLARITY ONLY. ANY ATYPICAL OR UNUSUAL LAYOUT TO BE FIELD APPROVED BY ARCHITECT PRIOR TO INSTALLATION.

2) ALL PIPE SHOWN TO PASS UNDER WALKS OR DRIVES WITHOUT AN EXISTING SLEEVE SHOWN IS TO BE BORED IN.

3) LARGER PIPE THAN WHAT IS INDICATED ON THE PLAN MAY BE USED IF OF THE SAME QUALITY.

4) ALL UNLABELED LATERALS TO BE 1" POLYETHELENE OR CLASS 200 PVC.

5) LABELED LATERALS MAY BE EITHER CLASS 200 PVC OR POLYETHELENE OF SIZE NOTED.

6) ALL MAINS TO BE 2" SCH. 40 PVC.

North

SCALE: 1" = 30'

0 30 60 90

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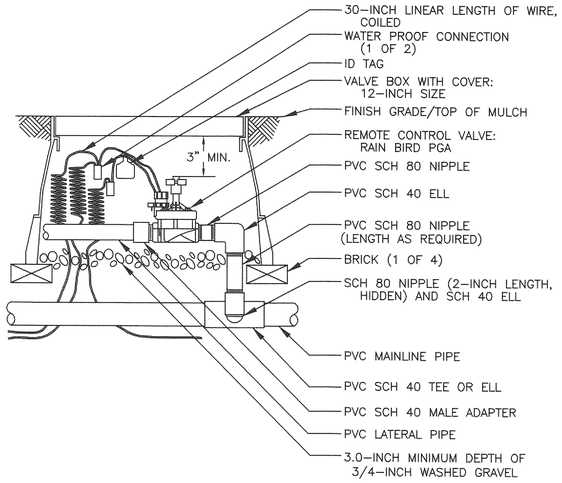
PROJECT NO.	20060924
DRAWN BY	DATE 07/03/07
CHECKED BY	SCO DATE 07/03/07
DESIGNED BY	SCO DATE 07/03/07
REVISIONS	DATE
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TENNIS COMPLEX IRRIGATION

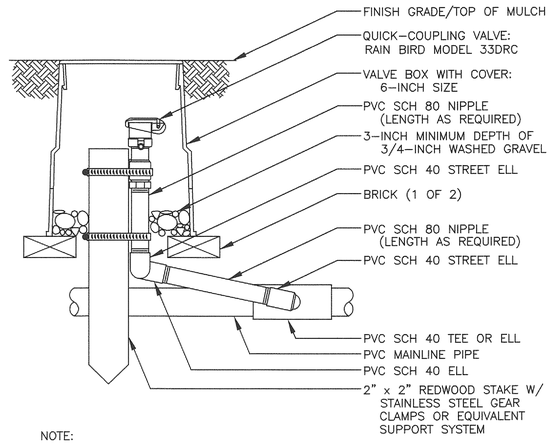
IR3

SHEET 3 OF 4

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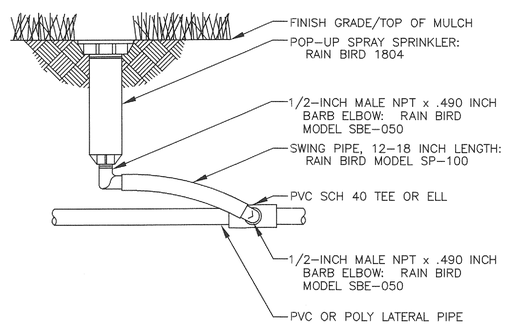


REMOTE CONTROL VALVE (AS PER PLANS)

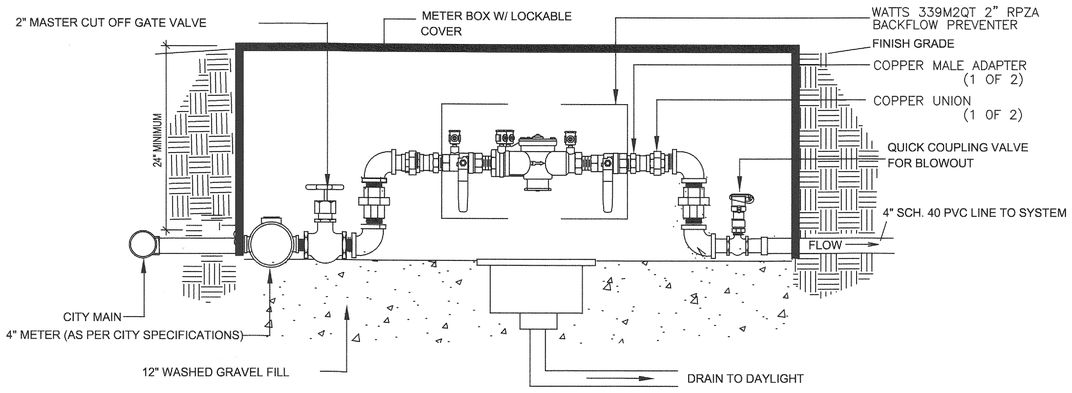


NOTE:
1. FURNISH FITTINGS AND PIPING NOMINALLY SIZED IDENTICAL TO NOMINAL QUICK COUPLING VALVE INLET SIZE.

QUICK–COUPLING VALVE



POP–UP SPRAY SPRINKLER



VAULT/ENTRY VALVE COMPLEX

GENERAL CONSTRUCTION NOTES:

IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE ACTUAL HORIZONTAL AND VERTICAL LOCATION OF ANY UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS PRIOR TO INTSTALLING NEW IMPROVEMENTS. iF CLEARANCE CANNOT BE MAINTAINED, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR INSTRUCTIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AND REPAIR TO SUCH UTILITIES OR OBSTRUCTION DUE TO HIS OPERATIONS.

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IRRIGATION DETAILS

IR4

SHEET 74 OF 74

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