Oakton Community College District 535

Procurement Department, Room 1240
1600 E. Golf Rd., Des Plaines, IL 60016
847-635-1635

Invitation to Bid # 1221-22-02
Issue Date: December 21, 2022

Mandatory Pre-Bid Date: Wednesday, January 11, 2023 at 11:00 am

Bids will be received in the Procurement Office at the above address until
11:00 am on Wednesday, January 25, 2023
Bids will be publicly opened at this time. Late bids will not be accepted.

Courtyard Rehabilitation

The College is accepting bids for courtyard rehabilitation at the Des Plaines Campus.
This bid consists of 2 documents:

1) Business Specifications (this document)
2) Oakton Community College Courtyard Rehabilitation Plans
    a. Manhard Consulting Civil Plans dated 11/04/22
    b. ECT Landscaping Plans dated 11/04/22
    c. Kluber Electrical Plans dated 11/04/22

A mandatory pre-bid meeting will be held on Wednesday, January 11, 2023 starting at 11:00 am at the College's Des Plaines campus, 1600 E. Golf Road, Suite 1240.
Only contractors who attend the pre-bid meeting will be allowed to submit a bid.

Any questions regarding this bid must be submitted in writing via email by 11:00 am on January 18, 2023
Questions will be answered through an addendum and must be submitted to the following individuals:

Joe Scifo, Director of Facilities, jscifo@oakton.edu
Rich Schwass, Construction Manager at rschwass@oakton.edu
Jim Frayn, Manhard Consulting at jfrayn@manhard.com
Trinh Than, Purchasing Manager at tthan@oakton.edu

Oakton Community College District 535 is exempt from all Federal, State, and Municipal Taxes.
I have examined the specifications and instructions included herein and agree, provided I am awarded a contract within 60 days of the bid due date, to provide the specified items for the sum shown in accordance with the terms stated herein. All deviations from the specifications and terms are in writing and attached hereto. I offer the following discount terms _____

Company Name: _____ Date: _____

Address: _____ City/St/Zip: _____

Name: _____ Title: _____

Phone #: _____ Fax #: _____

Signature: _____ E-mail:_____

1. The Unit Price Bid Items Descriptions table on pages 27 and 28 will be deleted entirely and be replaced with the following:

UNIT PRICE BID ITEMS DESCRIPTIONS
COURTYARD REHABILITATION

The work includes providing all necessary labor, material and equipment to complete all the site improvements as detailed in the contract documents for the Des Plaines Campus of Oakton Community College, including, but not limited to full depth asphalt removal and replacement, mill and overlay, crack sealing, etc.

BID - SCHEDULE OF PRICES

Date Prepared: 2022/10/27

Construction Pay Items

ITEM	DESCRIPTION	QUANTITY	UNIT	Unit Price[1]	UNIT PRICE	Extension
	SCHEDULE I - LANDSCAPING IMPROVEMENTS					
	SUBTOTAL A - PLANT REMOVALS AND PROTECTION (L1.0)					
1	PLANT/SOIL PROTECTION FENCE	505	LF			
2	TREE PRUNING FOR TREES TO REMAIN		LS			
3	REMOVE TREE AND GRIND STUMP	22	EA			
4	REMOVE/GRIND STUMP	6	EA			
5	REMOVE AND DISPOSE OF STEEL EDGING		LS			
6	REMOVE AND DISPOSE OF MISCELLANEOUS BRICK/CONCRETE BLOCK/ROCKS/POTTING SOIL		LS			
7	RELOCATE BUXUS X 'GREEN MOUNTAIN'	12	EA			
8	TOPSOIL IMPORT AND PLACEMENT	96	CY			
9	SUBGRADE PREPARATION FOR NEW PLANTING AREAS	2338	SF			
10	AMEND EXISTING TOPSOIL W/ COMPOST	82	CY			
11	CLEAR AND GRUB WOODY VEGETATION	29	SY			
12	RELOCATE STATUE		LS			
13	POWER WASH EXISTING CONCRETE SEATWALLS		LS			
14	HERBACEOUS PLANT REMOVAL (HERBICIDING)		LS			
	TOTAL SUBTOTAL A - PLANT REMOVALS AND PROTECTION (L1.0)					
	SUBTOTAL B - PLANTING PLAN (L2.0)					
15	MULCH - DBL. SHREDDED HARDWOOD BARK MULCH	231	CY			
16	MULCH - PARTIALLY DECOMPOSED LEAF MULCH	36	CY			
17	TURFGRASS SOD	49	SY			
18	COBBLE PAVING	27	SF			
19	2 YEAR PLANT WARRANTY/MAINTENANCE FOR HERBACEOUS PERENNEALS/GRASSES	1	LS			
20	1 YEAR PLANT WARRANTY/MAINTENANCE FOR WOODY TREES/SHRUBS	1	LS			
21	1 YEAR PLANT WARRANTY/MAINTENANCE FOR TURFGRASS	1	LS			
22	BENCH AND FOOTINGS	5	EA			
	TOTAL SUBTOTAL B - PLANTING PLAN (L2.0)					
	SUBTOTAL C - PLANTING PLAN (L2.1)					
	SMALL TREES					
23	AMELANCHIER LAEVIS, ALLEGHENY SERVICEBERRY (B&B, 8' HT)	4	EA			
24	CARPINUS CAROLINIANA, BLUE BEECH (B&B, 8' HT)	2	EA			
25	HAMAMELIS VIRGINIANA, WITCH HAZEL (B&B, 8' HT)	4	EA			
	SHRUBS					
26	AESCULUS PARVIFLORA, BOTTLEBRUSH BUCKEYE (CONT, 5 GAL)	9	EA			
27	HYDRANGEA PANICULATA 'LITTLE LIME', LITTLE LIME HYDRANGEA (CONT, 3 GAL)	8	EA			
28	ITEA VIRGINICA 'HENRY'S GARNET', HENRY'S GARNET VIRGINIA SWEETSPIRE (CONT, 4 GAL)	31	EA			
29	KERRIA JAPONICA, JAPANESE ROSE (CONT, 5 GAL)	5	EA			
30	LINDERA BENZOIN, SPICEBUSH (B&B, 5' HT)	1	EA			
31	RIBES ALPINUM 'GREEN MOUND', GREEN MOUND MOUNTAIN CURRANT (CONT, 3 GAL)	38	EA			
32	SEPHENANDRA INCISA 'CRISPA', LACE SHRUB (CONT, 3 GAL)	31	EA			
33	VIBURNUM ACERIFOLIUM, MAPLELEAF VIBURNUM (B&B, 4' HT)	19	EA			
	PERENNIALS					
34	ARALIA CORDATA 'SUN KING', GOLDEN JAPANESE SPIKENARD (CONT, 1 GAL)	10	EA			
35	ASARAM CANADENSE, WILD GINGER (CONT, 1 PT)	1549	EA			
36	ASTER DIVARICATUS, WHITE WOOD ASTER (CONT, 1 PT)	61	EA			
37	CAREX ELATA 'AUREA', BOWLES GOLDEN SEDGE (CONT, 1 QT)	73	EA			
38	CAREX LAXICULMIS 'HOBB' BUNNY BLUE, BUNNY BLUE CLAUSCOUS WOODLAND SEDGE	263	EA			
39	CAREX SPRENGELII, LONG BEAKED SEDGE (CONT, 1QT)	99	EA			
40	CAREX PENNSYLVANICA, PENN SEDGE (CONT, 1 QT)	30	EA			
41	CAULOPHYLLUM THALICTROIDES, BLUE COHOSH (CONT, 1 GAL)	12	EA			
42	CHELONE GLABRA, TURTLEHEAD (CONT, 1 GAL)	94	EA			
43	CROCUS CHRYSANTHUS 'CREAM BEAUTY', CREAM BEAUTY CROCUS (BULB, TOP SIZE)	549	EA			
44	DESCHAMPSIA CESPITOSA 'GOLDTAU', GOLDTAU TUFTED HAIR GRASS (CONT, 1 QT)	79	EA			
45	ECHINACEA PALLIDA, PALE PURPLE CONEFLOWER (CONT, 1 QT)	93	EA			
46	GERANIUM MACULATUM, WILD GERANIUM (CONT, 1 QT)	45	EA			
47	HEUCHERA VILLOSA, HAIRY ALLUMROOT (CONT, 1 PT)	72	EA			
48	HOSTA 'MAY', MAY HOSTA (CONT, 1 QT)	75	EA			
49	HOSTA 'ROYAL STANDARD', ROYAL STANDARD HOSTA (CONT, 1 GAL)	116	EA			
50	HOSTA TARDIANA 'JUNE', JUNE HOSTA (CONT, 1 QT)	48	EA			
51	LIGULARIA 'BRITT-MARIE CRAWFORD', LEOPARD PLANT (CONT, 1 GAL)	7	EA			
52	MONARDA FISTULOSA, BEE BALM (CONT, 1 GAL)	8	EA			
53	ONOCLEA SENSIBILIS, SENSITIVE FERN (CONT, 1 QT)	43	EA			
54	PHLOX DIVARICATA, WOODLAND PHLOX (CONT, 1 PT)	48	EA			
55	POLYGONATUM ODORATUM VAR. PLURIFLORUM 'VARIEGATUM', VARIEGATED SOLOMON'S SEAL (CONT, 1 QT)	482	EA			
56	RUDBECKIA FULGIDA V. FULGIDA, BLACK-EYED SUSAN (CONT, 1 QT)	34	EA			
57	RUELLIA HUMILIS, PRAIRIE PETUNIA (CONT, 1 QT)	61	EA			

ITEM	DESCRIPTION	QUANTITY	UNIT	Unit Price[1]	UNIT PRICE	Extension
58	SESLERIA AUTUMNALIS, AUTUMN MOOR GRASS (CONT, 2 QT)	141	EA			
59	SPOROBOLUS HETEROLEPIS, PRAIRIE DROPSEED (CONT, 1 QT)	218	EA			
60	STACHYS MONIERI 'HUMMELO', BETONY (CONT, 1 GAL)	20	EA			
	FERNS					
61	ASPLENIUM PLATYNEURON, EBONY SPLEENWORT (CONT, 1 PT)	13	EA			
62	MATTEUCCIA STRUTHIOPTERIS, OSTRITCH FERN (CONT, 1 PT)	19	EA			
63	ONOCLEA SENSIBILIS, SENSITIVE FERN (CONT, 1 QT)	43	EA			
64	OSMUNDASTRUM CINNAMOMEUM, CINNAMON FERN (CONT, 1 PT)	90	EA			
65	POLYSTICHUM ACROSTICHOIDES, CHRISTMAS FERN (CONT, 1 PT)	48	EA			
	VINES					
66	PARTHENOCISSUS QUINQUEFOLIA, VIRGINIA CREEPER (CONT, 1 QT)	43	EA			
	TOTAL SUBTOTAL C- PLANTING PLAN (L2.1)					
	TOTAL SCHEDULE I -LANDSCAPING IMPROVEMENTS					
	SCHEDULE II - SITE IMPROVEMENTS (CIVIL SCOPE)					
67	EXCESS SPOILS REMOVAL – PAVERS (INCLUDES REMOVAL OF OLD AGGREGATE AND OFFSITE DISPOSAL BY CONTRACTOR		LS			
68	EXCESS SPOILS REMOVAL – PAVEMENT		LS			
69	AGGREGATE FILL IN OLD CIRCULAR SEATING AREA		CY			
70	SAWCUT PAVEMENT, FULL DEPTH		LF			
71	MOBILIZATION		LS			
72	CONCRETE STAIR REMOVAL		LS			
73	EX. STAIR RAIL REMOVAL		LS			
74	TEMPORARY SEEDING		SY			
75	SUBGRADE PREPARATION - FINE GRADING		SY			
76	AGGREGATE BASE COURSE - 4"		SY			
77	AGGREGATE BASE COURSE - 6", CA-6 GRADE 9		SY			
78	PCC PAVEMENT 8"		SY			
79	CONCRETE BARRIER CURB		LF			
80	PAVEMENT REMOVAL, FULL DEPTH		SY			
81	BRUSSELS BLOCK XL UNILOCK PAVERS		SF			
82	BRUSSELS BLOCK UNILOCK PAVERS INSTALLATION		SF			
83	SANITARY FRAME ADJUSTMENT		EA			
84	TRENCH DRAIN FRAME AND GRATE AND UNDERGROUND APPURTENANCE ADJUSTMENT		LS			
85	INLET ABANDONED IN PLACE		LS			
86	STORM DRAIN ABANDONED IN PLACE		LS			
87	TEMPORARY INLET PROTECTION		EA			
88	FULL DEPTH PAVEMENT PATCHING		LS			
89	CRACK SEALING		LS			
90	ADJUST ELECTRICAL JUNCTION BOX TO GRADE		EA			
91	DRILL WEEP HOLES INTO CONCRETE WALL		LS			
92	6" TRENCH DRAIN FRAME AND GRATE		EA			
93	2'-0" DIAMETER INLET		EA			
94	8" PVC STORM SEWER PIPE AND TRENCH BACKFILL		LF			
	TOTAL SCHEDULE II -SITE IMPROVEMENTS (CIVIL SCOPE)					
	SCHEDULE III - ELECTRICAL IMPROVEMENTS					
95	Pole Mount Luminaires Types F1A and F1B with Concrete Foundations		LS			
96	Pole Mount Luminaires Type F1A with Helical Pile Foundation		LS			
97	In-Grade Flood Luminaire Type F2		LS			
98	Electrical Demolition		LS			
99	Branch Circuitry and Pull Boxes		LS			
100	Electrical Balance of Work		LS			
101	Painted Steel Wall/Post-Mounted Handrail		LS			
	TOTAL SCHEDULE III - ELECTRICAL IMPROVEMENTS					
	PERFORMANCE AND PAYMENT BOND		LS			
	CCDD Spoil Removal	10	CY			
	GRAND TOTAL					

Use Quantities where shown above. Provide quantities where not shown. . All bid items are lump sum.

Company: _____

Signature: _____ Email: _____

2. The Oakton Community College Courtyard Rehabilitation Plans will be deleted entirely and replaced with the following:

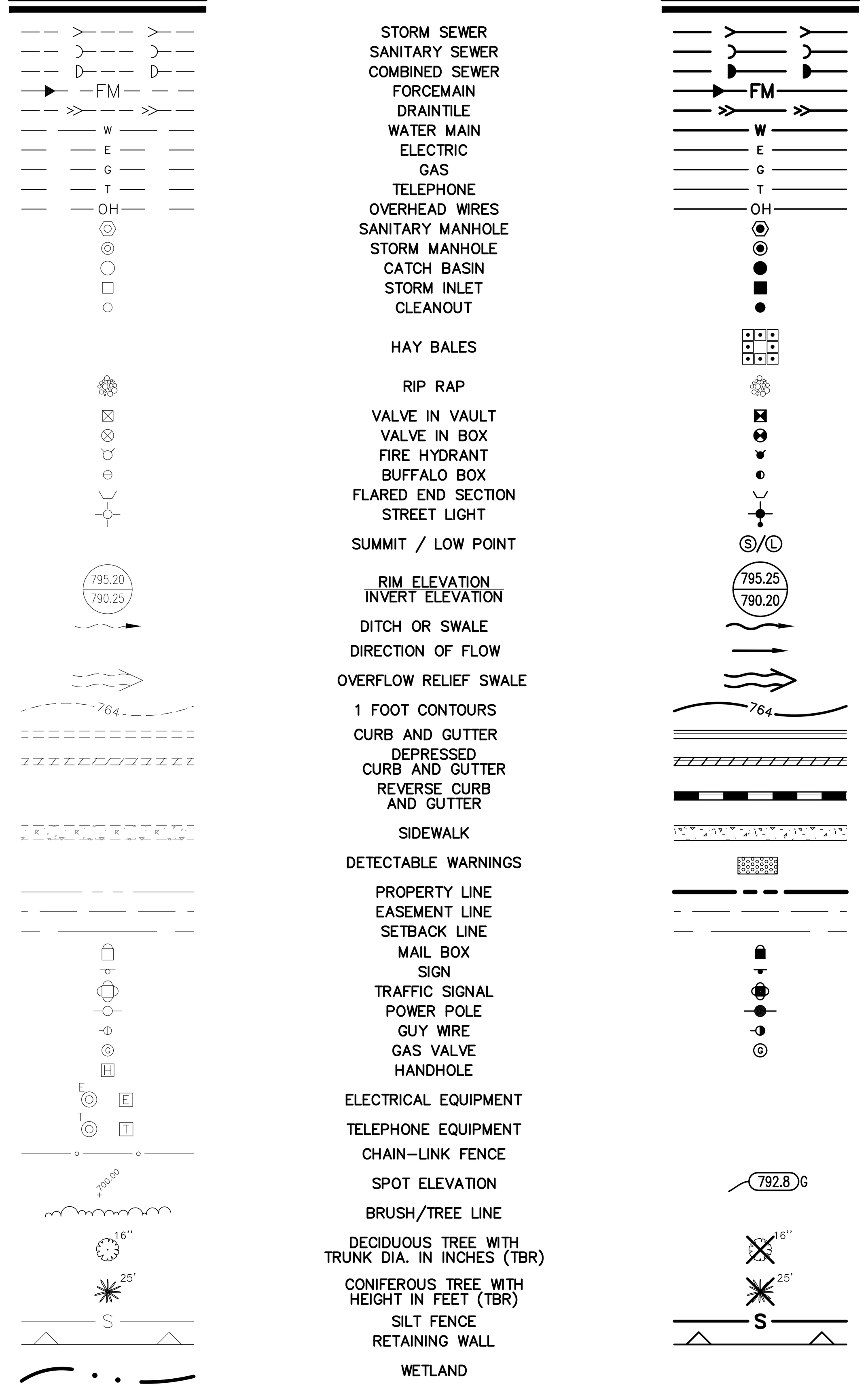
OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

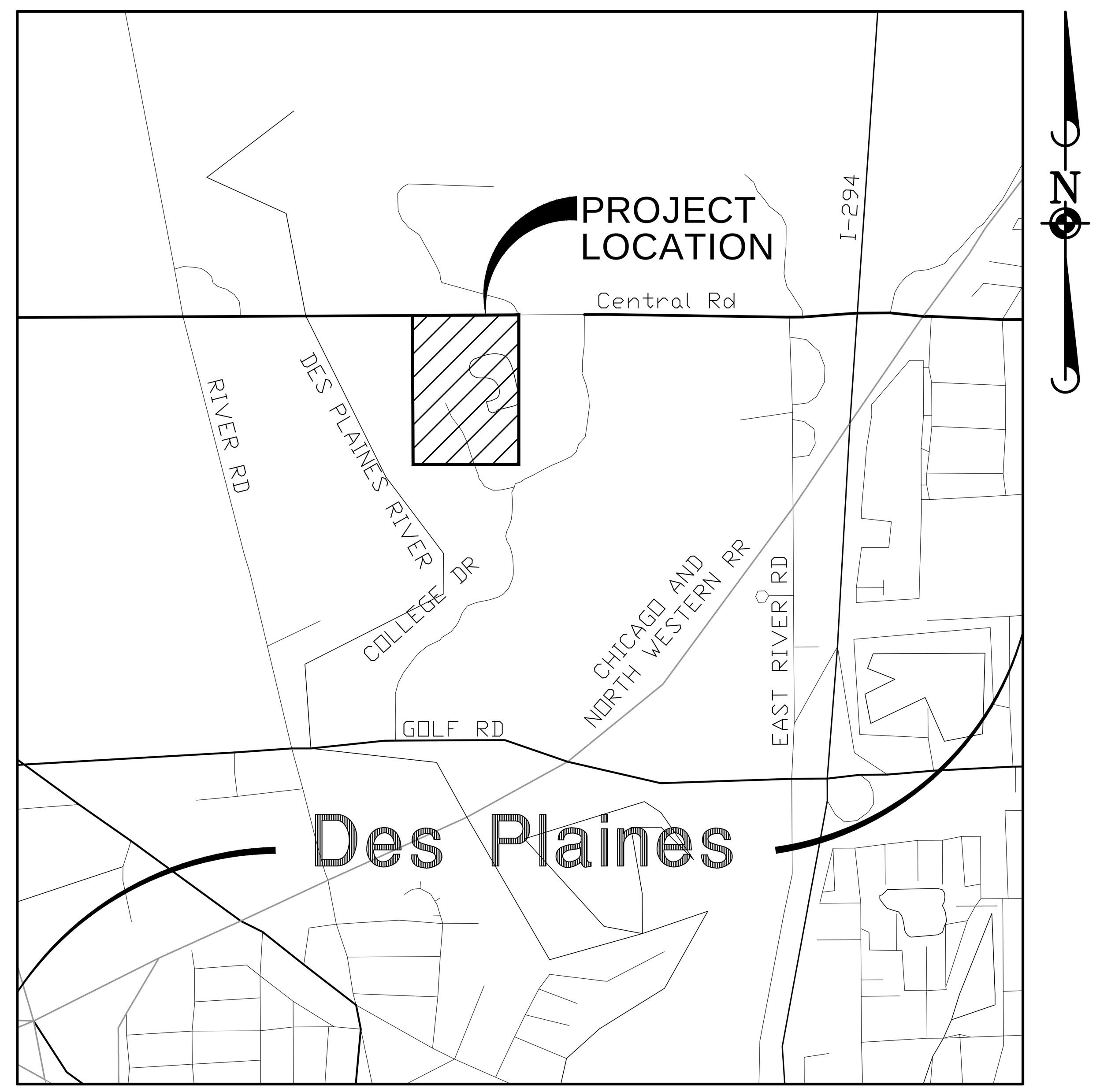
1600 EAST GOLF ROAD
DES PLAINES, ILLINOIS

STANDARD SYMBOLS

06-01-16

EXISTING / PROPOSED





LOCATION MAP
N.T.S.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS AND DEMOLITION PLAN
3	SITE DIMENSIONAL AND PAVING PLAN
4	GRADING PLAN
5	UTILITY PLAN
6	CONSTRUCTION DETAILS
7	CONSTRUCTION SPECIFICATIONS
L1.0	PLANT REMOVAL AND PROTECTION
L2.0	PLANTING PLAN
L2.1	PLANT SCHEDULE
L3.0	LANDSCAPE DETAILS
E1.0	ELECTRICAL SITE PLANS – UPPER COURTYARD
E2.0	ARCHITECTURAL AND ELETRICAL PLANS – LOWER COURTYARD

NOTES:

1. THE BOUNDARY LINES AND TOPOGRAPHY FOR THIS PROJECT ARE BASED ON A FIELD SURVEY COMPLETED BY MANHARD CONSULTING, LTD. ON APRIL 14, 2022. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF THE EXISTING CONDITIONS PRIOR TO CONSTRUCTION AND SHALL IMMEDIATELY NOTIFY MANHARD CONSULTING AND THE CLIENT IN WRITING OF ANY DIFFERING CONDITIONS.
2. CITY OF DES PLAINES NOTES AND PLAN DETAILS SUPERCEDE ALL OTHERS.
3. CONTRACTOR TO FIELD VERIFY ALL HANDICAP ACCESSIBLE ROUTES ARE IN CONFORMANCE WITH ALL ADA AND IAC REQUIREMENTS AND GUIDELINES PRIOR TO COMMENCEMENT OF WORK ON SITE. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES.

BENCHMARKS:

REFERENCE BENCHMARK:
CITY OF DES PLAINES BENCHMARK#65: CHISELED SQUARE ON TOP OF HEADWALL ON THE SOUTH SIDE OF CENTRAL ROAD AND THE WEST SIDE OF DES PLAINES RIVER.

ELEVATION=639.60 DATUM=NAVD88

SITE BENCHMARK 10:
CUT SQUARE ON THE WEST SIDE OF A CONCRETE LIGHT POLE BASE AT THE NORTHEAST ENTRANCE TO PRESIDENT'S COURTYARD IN THE MAIN BUILDING AT OAKTON COMMUNITY COLLEGE. APPROXIMATELY 17 FEET EAST OF THE NORTHWEST BUILDING CORNER OF THE ENTRANCE AND APPROXIMATELY 28 FEET NORTHWEST OF THE SOUTHEAST BUILDING CORNER OF THE ENTRANCE.

ELEVATION=637.38 DATUM=NAVD88

SITE BENCHMARK 11:
NORTHWEST FLANGE BOLT ON A FIRE HYDRANT ON THE NORTH SIDE OF THE MAIN BUILDING AT OAKTON COMMUNITY COLLEGE. APPROXIMATELY 200 FEET EAST OF THE NORTHEAST ENTRANCE TO PRESIDENT'S COURTYARD AND APPROXIMATELY 15 FEET SOUTHEAST OF THE SOUTHEAST EDGE OF WATER OF OAKTON LAKE.

ELEVATION=634.24 DATUM=NAVD88

SITE BENCHMARK 12:
SOUTH ARROW BOLT ON A FIRE HYDRANT NEAR THE NORTHEAST CORNER OF THE MAIN BUILDING AT OAKTON COMMUNITY COLLEGE, APPROXIMATELY 125 FEET SOUTHWEST OF THE SOUTHWEST CORNER OF THE MARGARET BURKE LEE SCIENCE AND HEALTH CAREERS CENTER BUILDING AND APPROXIMATELY 40 FEET SOUTHEAST OF THE SOUTHEAST EDGE OF WATER OF OAKTON LAKE.

ELEVATION=637.61 DATUM=NAVD88

OWNER/CLIENT:
OAKTON COMMUNITY COLLEGE
1600 E. GOLF ROAD
DES PLAINES, ILLINOIS
(847) 635-1600
CONTACT:
RICHARD SCHWASS
SENIOR MANAGER OF CAMPUS FACILITIES

ABBREVIATIONS

06-01-16

ADJ	ADJUST
AGG.	AGGREGATE
ARCH	ARCHITECT
B.A.M.	BITUMINOUS AGGREGATE MIXTURE
B-B	BACK TO BACK
B/C	BACK OF CURB
B/P	BOTTOM OF PIPE
B/W	BACK OF WALK
B-BOX	BUFFALO BOX
BIT.	BITUMINOUS
BM	BENCHMARK
B.O.	BY OTHERS
C.E.	COMMERCIAL ENTRANCE
CB	CATCH BASIN
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CNTRL	CONTROL
C.O.	CLEANOUT
CONC.	CONCRETE
CY	CUBIC YARD
D	DITCH
DIA.	DIAMETER
DIP	DUCTILE IRON PIPE
DIWM	DUCTILE IRON WATER MAIN
DS	DOWNSPOUT
DT	DRAIN TILE
E	ELECTRIC
E-E	EDGE TO EDGE
ELEV.	ELEVATION
E/P	EDGE OF PAVEMENT
EX.	EXISTING
F.E.	FIELD ENTRANCE
F-F	FACE TO FACE
F.F.	FINISHED FLOOR
FES	FLARED END SECTION
F/L	FLOW LINE
FM	FORCE MAIN
G	GROUND
G/F	GRADE AT FOUNDATION
GW	GUY WIRE
HDWL	HEADWALL
HH	HANDHOLE
HWL	HIGH WATER LEVEL
HYD.	HYDRANT
INL	INLET
INV.	INVERT
IP	IRON PIPE
LT	LEFT
MAX.	MAXIMUM
MB	MAILBOX
M/E	MEET EXISTING
MH	MANHOLE
MIN.	MINIMUM
NWL	NORMAL WATER LEVEL
P.E.	PRIVATE ENTRANCE
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVE
PGL	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
⅊	PROPERTY LINE
PP	POWER POLE
PROP.	PROPOSED
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PIPE
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
P	PAVEMENT
P.U.D.E.	PUBLIC UTILITY & DRAINAGE EASEMENT
R	RADIUS
R.O.W.	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
REM	REMOVAL
REV	REVERSE
RR	RAILROAD
RT	RIGHT
SAN	SANITARY
SF	SQUARE FOOT
SHLD.	SHOULDER
SL	STREET LIGHT
SMH	SANITARY MANHOLE
ST	STORM
STA.	STATION
STD	STANDARD
SW	SIDEWALK
SY	SQUARE YARDS
TBR	TO BE REMOVED
T	TELEPHONE
T-A	TYPE A
T/C	TOP OF CURB
T/F	TOP OF FOUNDATION
T/P	TOP OF PIPE
T/W	TOP OF WALK
T/WALL	TOP OF WALL
TEMP	TEMPORARY
TRANS	TRANSFORMER
V.B.	VALVE BOX
VCP	VITRIFIED CLAY PIPE
V.V.	VALVE VAULT
WL	WATER LEVEL
WM	WATER MAIN

MANHARD CONSULTING, LTD. IS NOT RESPONSIBLE FOR THE SAFETY OF ANY PARTY AT OR ON THE CONSTRUCTION SITE. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND ANY OTHER PERSON OR ENTITY PERFORMING WORK OR SERVICES. NEITHER THE OWNER NOR ENGINEER ASSUMES ANY RESPONSIBILITY FOR THE JOB SITE SAFETY OF PERSONS ENGAGED IN THE WORK OR THE MEANS OR METHODS OF CONSTRUCTION.

Manhard CONSULTING
One Overlook Point, Suite 290, Lincolnshire, IL 60069 ph:847.634.5550 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resources Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

ECT
Environmental Consulting & Technology Inc
403 W. St. Charles Road, Lombard, IL 60148
(630)559-2000
www.ectinc.com

UTILITY CONTACTS

ELECTRIC COMED 4712 REILAND DRIVE JOLIET, IL 60433 (630) 576-7094 CONTACT:	WATER CITY OF DES PLAINES 1420 MINER STREET DES PLAINES, IL 60016 (847) 391-5390 CONTACT: TIM OAKLEY
GAS NICOR GAS 1844 FERRY ROAD NAPERVILLE, IL 60563 (630) 388-3830 CONTACT: CONSTANCE LANE	TELEPHONE AT&T 65 N. WEBSTER ST JOLIET, IL 60431 (770) 750-6181 CONTACT: JIM EVERETT
SEWER CITY OF DES PLAINES 1420 MINER STREET DES PLAINES, IL 60016 (847) 391-5390 CONTACT: TIM OAKLEY	CABLE COMCAST 688 INDUSTRIAL DRIVE ELMHURST, IL 60126 (630) 600-6346 CONTACT: MARTHA GIERAS

DATE	REVISIONS	DRAWN BY
01/13/23	ADDENDUM #2 REVISIONS	EJB

Manhard CONSULTING LTD
116 West Illinois, 7th Floor, Chicago, IL 60654 ph:312.824.3801 fx:847.634.0095 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

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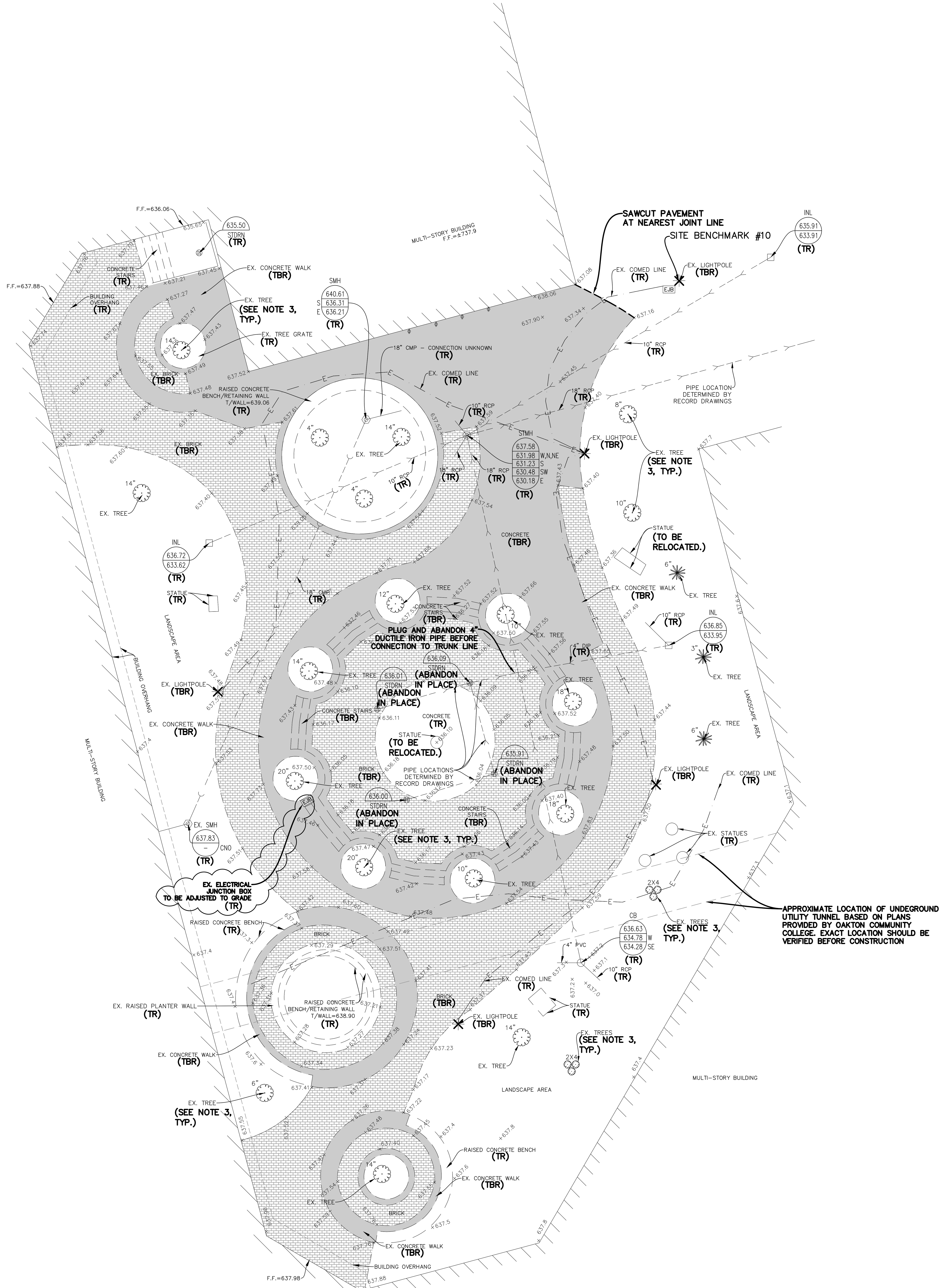
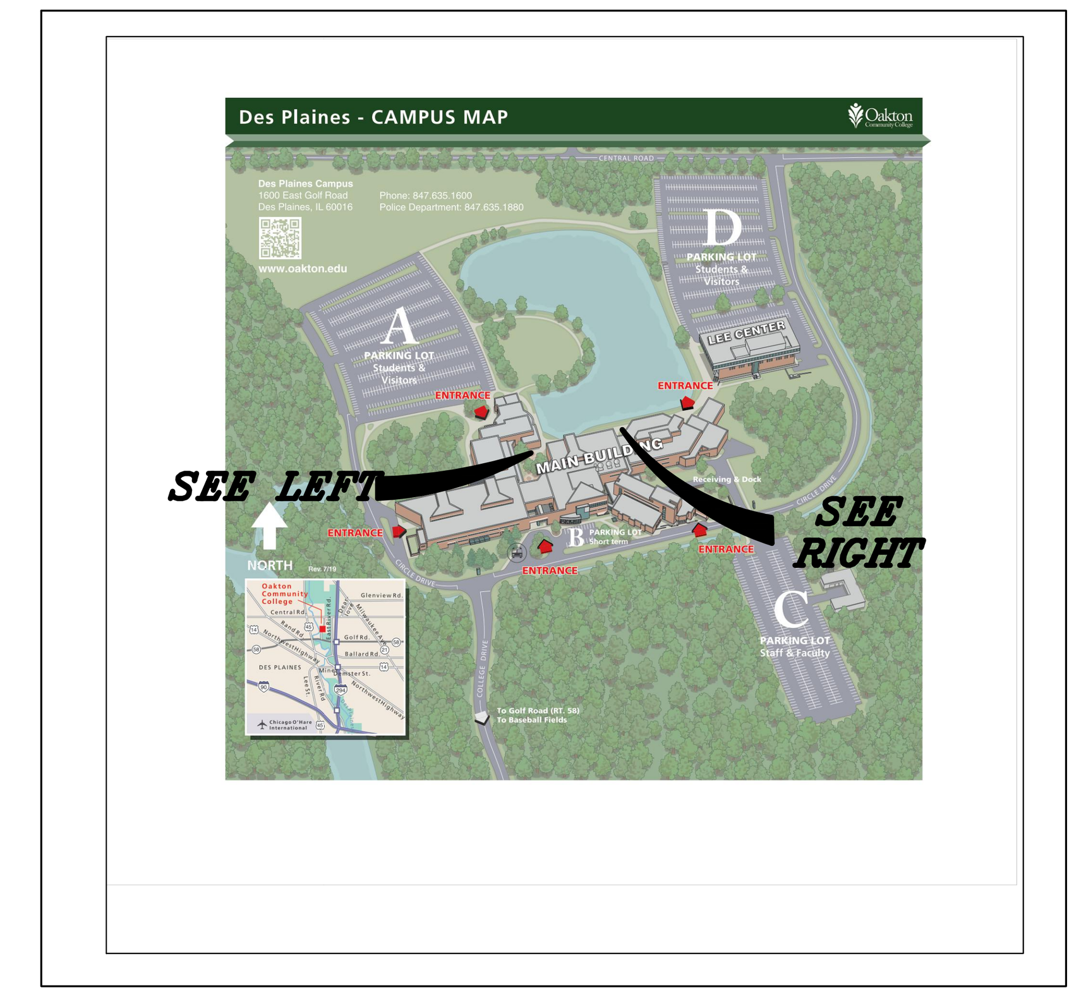
OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
TITLE SHEET

PROJ. MGR.: JCM
PROJ. ASSOC.: JCM
DRAWN BY: EMO
DATE: 11-04-22
SCALE: N.T.S.

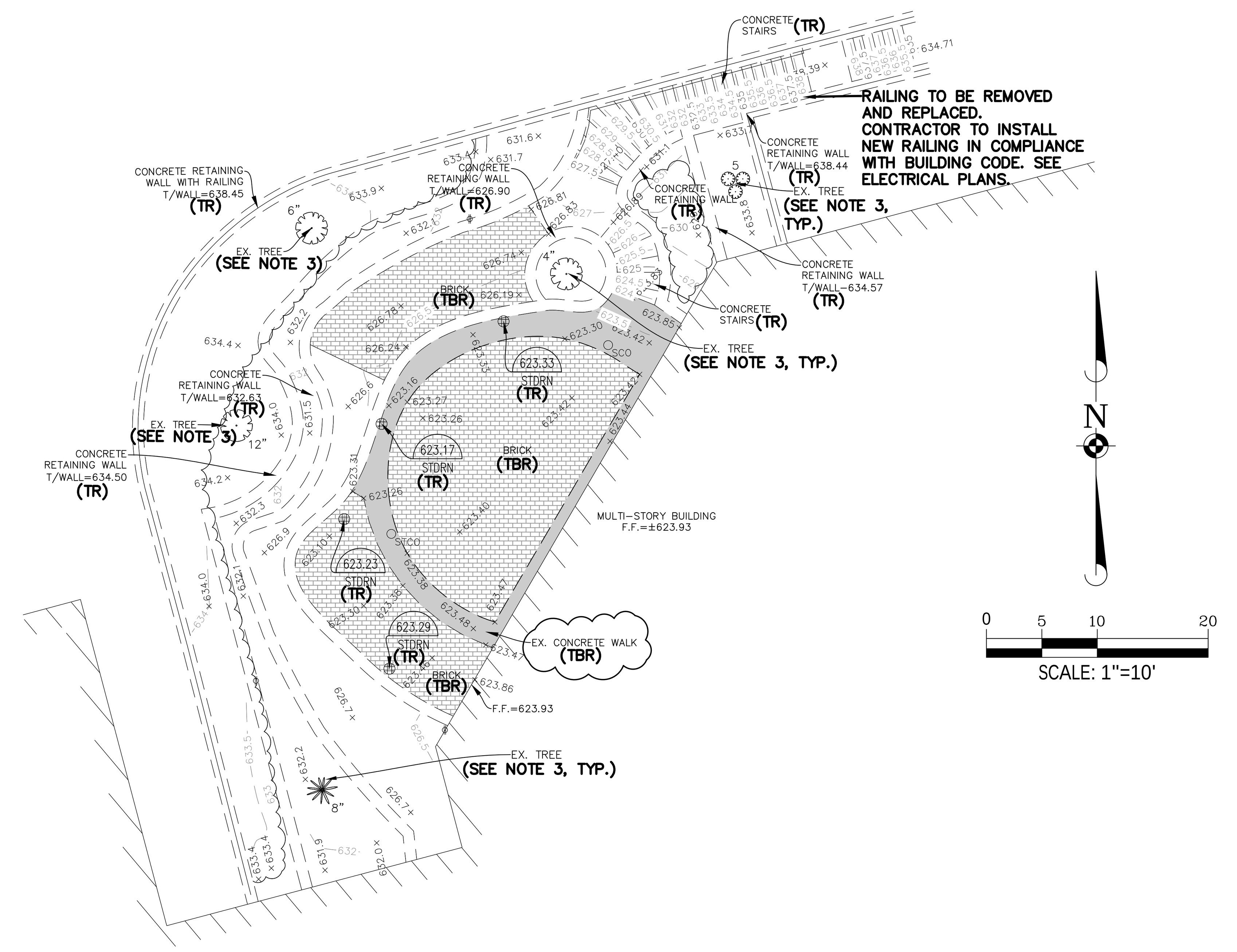
SHEET 1 OF 7
OCC.DPIL13

100% CD DRAWINGS (ADDENDUM #2) 01-13-23





LOCATION MAP



DEMOLITION LEGEND

[paver hatch]	PAVER REMOVAL (SEE PLANS FOR LIMITS OF FULL DEPTH REMOVAL, INCLUDES REMOVAL OF EX. AGGREGATE TO BE DISPOSED OF OFFSITE BY CONTRACTOR)
[pavement hatch]	PAVEMENT REMOVAL (SEE PLANS FOR LIMITS OF FULL DEPTH REMOVAL)
— — — —	SAWCUT LINE
× × ×	FENCE, RETAINING WALL, RAILROAD TIES, POLES, CURB AND GUTTER, ETC. TO BE REMOVED
⨯⨯⨯	UTILITY STRUCTURE TO BE REMOVED
-///-///-///-	UTILITY LINE REMOVAL, FILL OR ABANDONMENT (REFER TO SPECIFICATIONS)
(TBR)	TO BE REMOVED
(TR)	TO REMAIN

EXISTING CONDITIONS NOTES:

1. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY MANHARD CONSULTING LTD. ON APRIL 14, 2022. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
2. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.
3. SEE LANDSCAPE PLANS FOR ANY TREE PRESERVATION OR REMOVAL.

DATE	REVISIONS
01/13/23	ADDENDUM #2 REVISIONS

Manhard CONSULTING LTD
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

ECT Environmental Consulting & Technology, Inc.
403 W. St. Charles Road, Lombard, IL 60148
(630)559-2000
www.ectinc.com

OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

CITY OF DES PLAINES, ILLINOIS

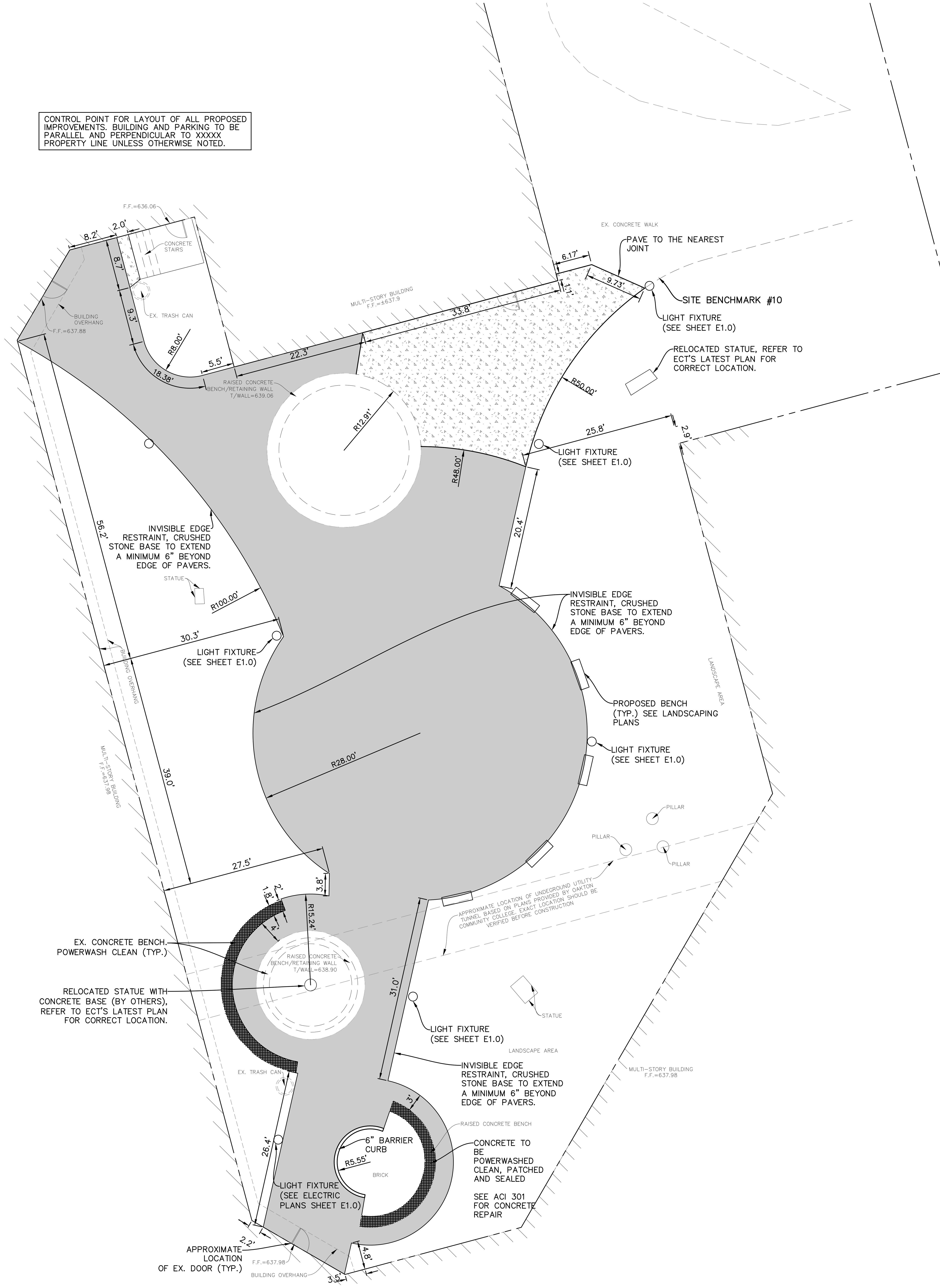
EXISTING CONDITIONS AND DEMOLITION PLAN

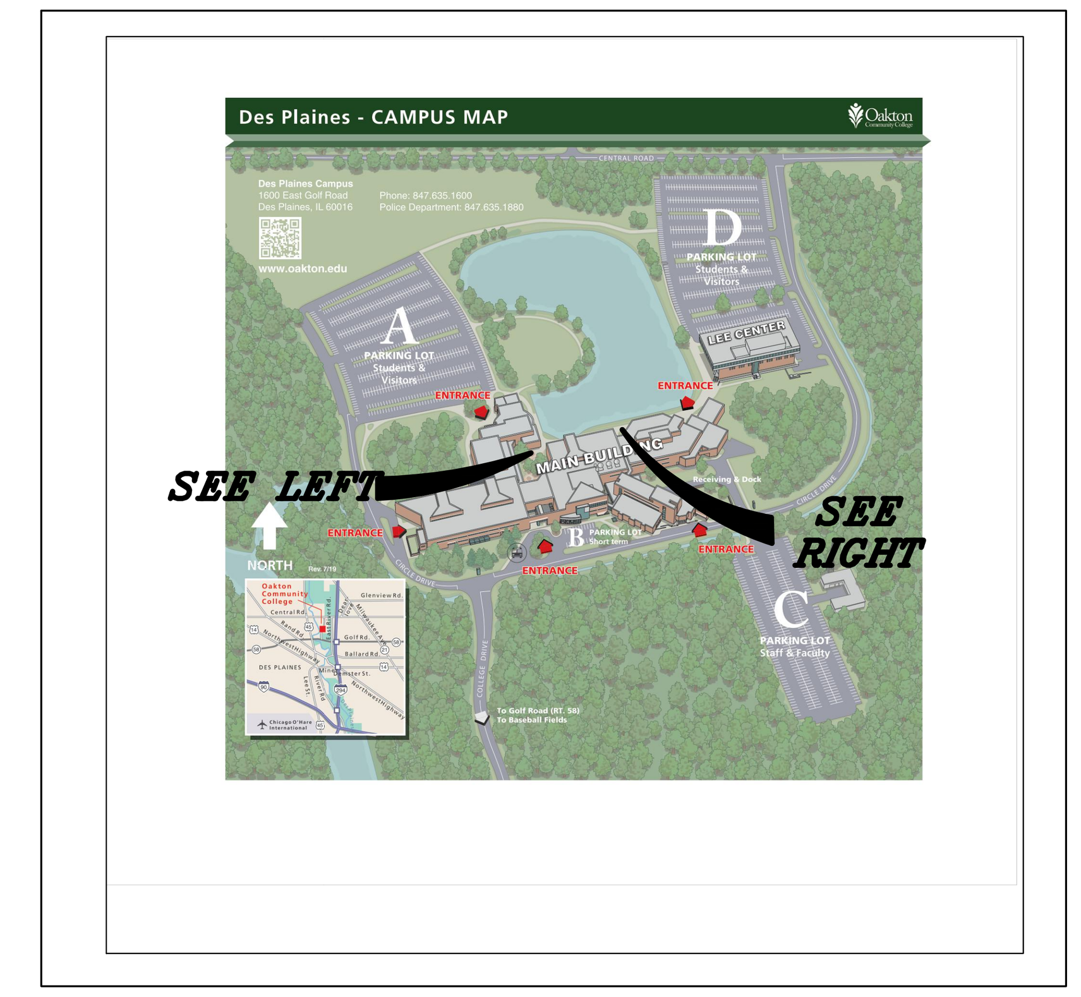
PROJ. MGR.:	JCM
PROJ. ASSOC.:	JCM
DRAWN BY:	BTV
DATE:	11-04-22
SCALE:	1"=10'

SHEET 2 OF 7

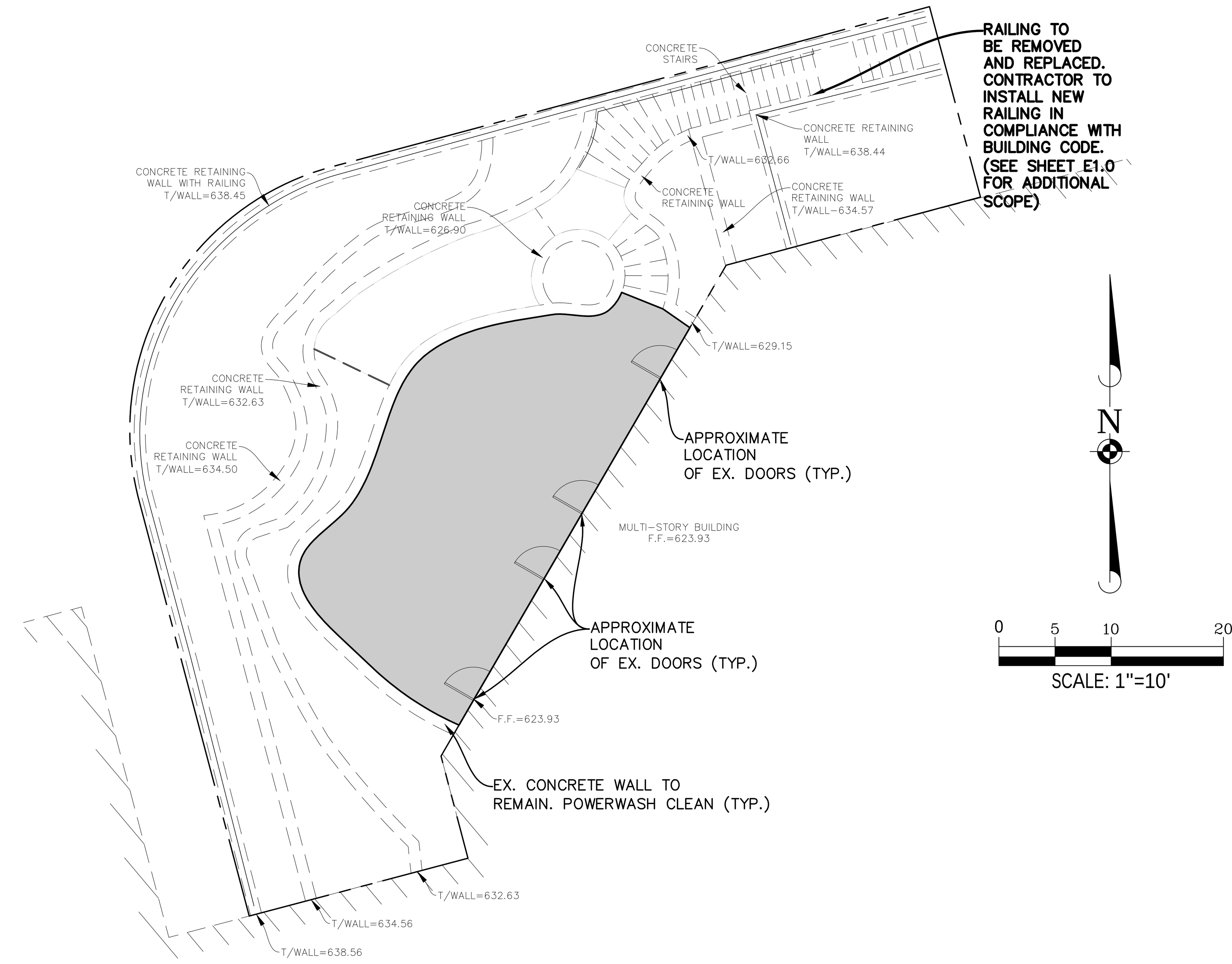
OCC.DPIL13

100% CD DRAWINGS (ADDENDUM #2) 01-13-23





LOCATION MAP



06-01-16

PAVEMENT LEGEND

BRUSSELS BLOCK UNILOCK PAVERS*
1" SAND SETTING
6" COMPACTED AGGREGATE BASE, CA-6 GRADE 9 (GRADE 8 WILL NOT BE ACCEPTED)
*A PORTION OF THE PAVER MATERIAL HAS BEEN PREVIOUSLY ACQUIRED BY THE COLLEGE. SEE SHEET L2.0 FOR PAVER LAYOUT AND QUANTITIES.

CONCRETE PAVEMENT
8" PORTLAND CEMENT CONCRETE PAVEMENT W/ 6 X 6 W1.4 WWF
4" COMPACTED AGGREGATE BASE, TYPE B

EX. CONCRETE BENCH TO REMAIN

06-01-16

SITE DIMENSIONAL AND PAVING NOTES:

1. ALL DIMENSIONS ARE FACE OF CURB TO FACE OF CURB OR BUILDING FOUNDATION UNLESS NOTED OTHERWISE.
2. ALL PROPOSED CURB AND SHALL BE B6.12 UNLESS OTHERWISE NOTED. FINISH ALL EXPOSED BACK FACES WITH A RUBBED FACES IMMEDIATELY AFTER REMOVING FORMS.
3. ALL CURB RADII SHALL BE 3' MEASURED TO FACE OF CURB UNLESS NOTED OTHERWISE.
4. TIE ALL PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER WITH 2-#6 BARS x 18" LONG DOWELED INTO EXISTING CURB.
5. BUILDING DIMENSIONS AND ADJACENT PARKING HAVE BEEN PREPARED BASED UPON ARCHITECTURAL INFORMATION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT ARCHITECTURAL CHANGES MAY EXIST. THEREFORE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR PRECISE BUILDING DIMENSIONS AND NOTIFY THE ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION. BUILDING DIMENSIONS SHOWN SHOULD NOT BE USED FOR CONSTRUCTION LAYOUT OF BUILDING.
6. IMPROVEMENTS ADJACENT TO BUILDING, IF SHOWN, SUCH AS TRUCK DOCK, RETAINING WALLS, SIDEWALKS, CURBING, FENCES, CANOPIES, RAMPS, HANDICAP ACCESS, PLANTERS, DUMPSTERS, AND TRANSFORMERS ETC. HAVE BEEN SHOWN FOR APPROXIMATE LOCATION ONLY. REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS, SPECIFICATIONS AND DETAILS.
7. LOCATION OF PRIVATE SIDEWALKS SHALL BE COORDINATED WITH PROPOSED DOORWAY. CONTRACTOR TO VERIFY ACTUAL BUILDING PLAN LOCATIONS WITH ARCHITECT/DEVELOPER PRIOR TO CONSTRUCTING THE SIDEWALKS.
8. ALL ROADWAY AND PARKING LOT SIGNAGE, STRIPING, SYMBOLS, ETC. SHALL BE IN ACCORDANCE WITH LATEST JURISDICTIONAL GOVERNMENTAL ENTITY DETAILS.
9. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.
10. PROVIDE DEPRESSED CURB AND RAMP AT ALL HANDICAP ACCESSIBLE SIDEWALK AND PATH LOCATIONS PER FEDERAL AND STATE STANDARDS.
11. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.

DATE	REVISIONS	DRAWN BY
01/13/23	ADDENDUM #2 REVISIONS	EJB

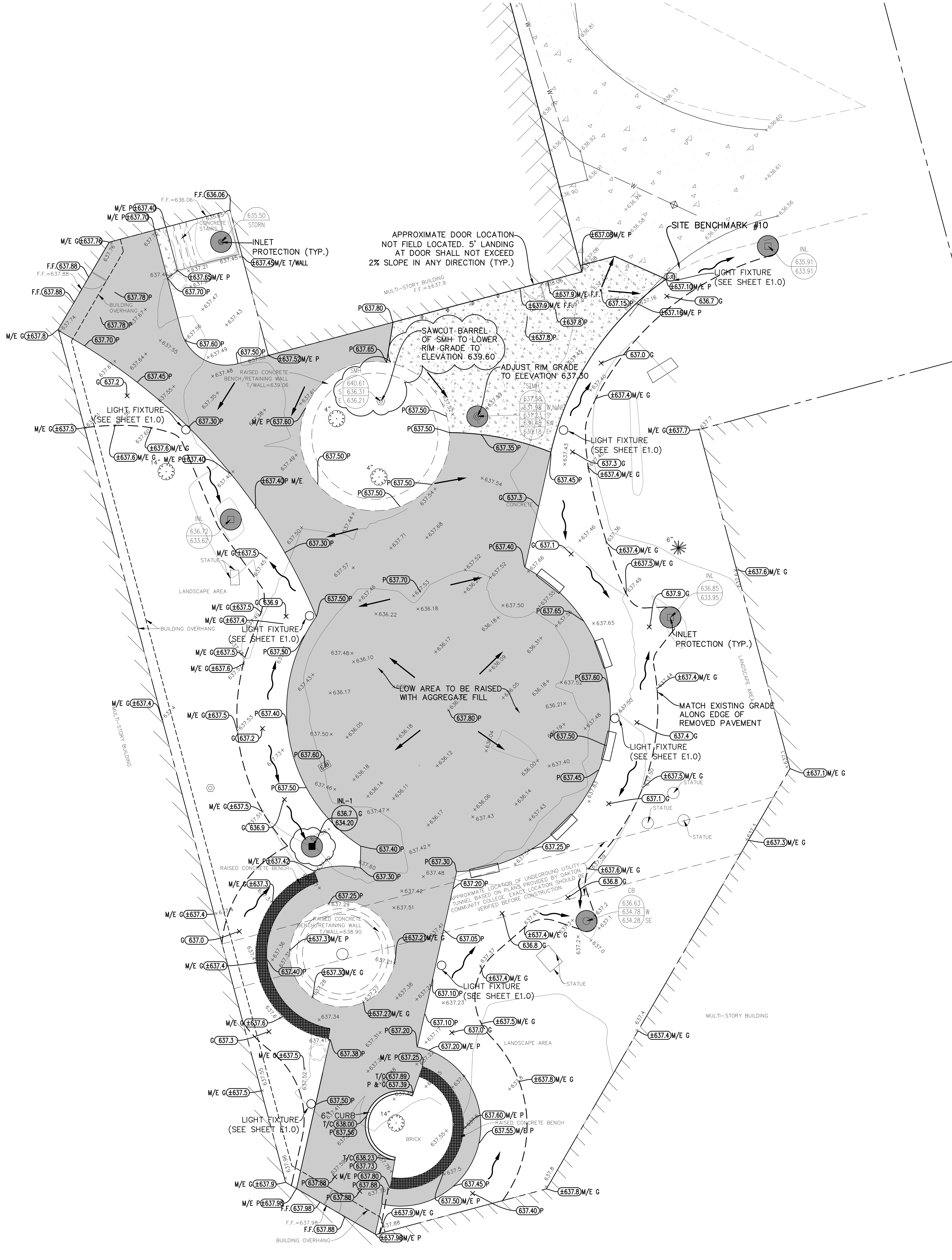
Manhard CONSULTING LTD
ECT Environmental Consulting & Technology, Inc.

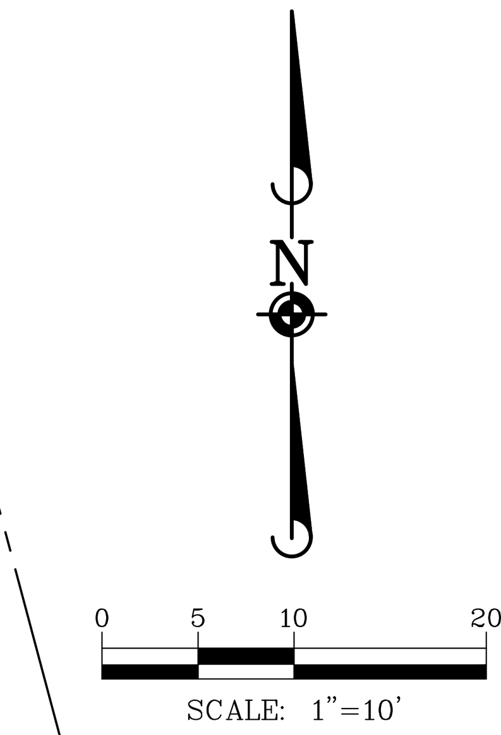
OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
SITE DIMENSIONAL AND PAVING PLAN

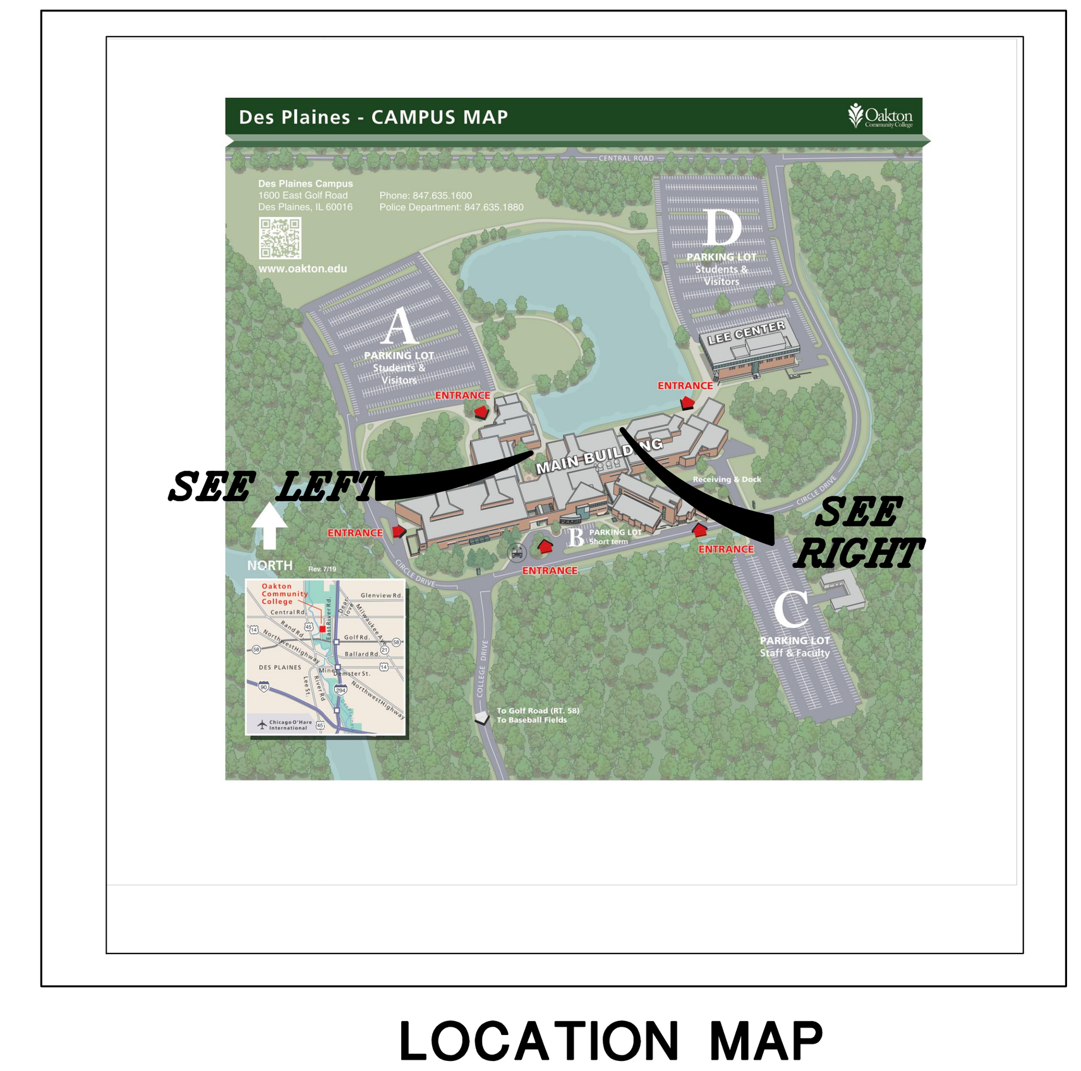
PROJ. MGR.:	JCM
PROJ. ASSOC.:	JCM
DRAWN BY:	BTV
DATE:	11-04-22
SCALE:	1"=10'

SHEET 3 OF 7
OCC.DPIL13

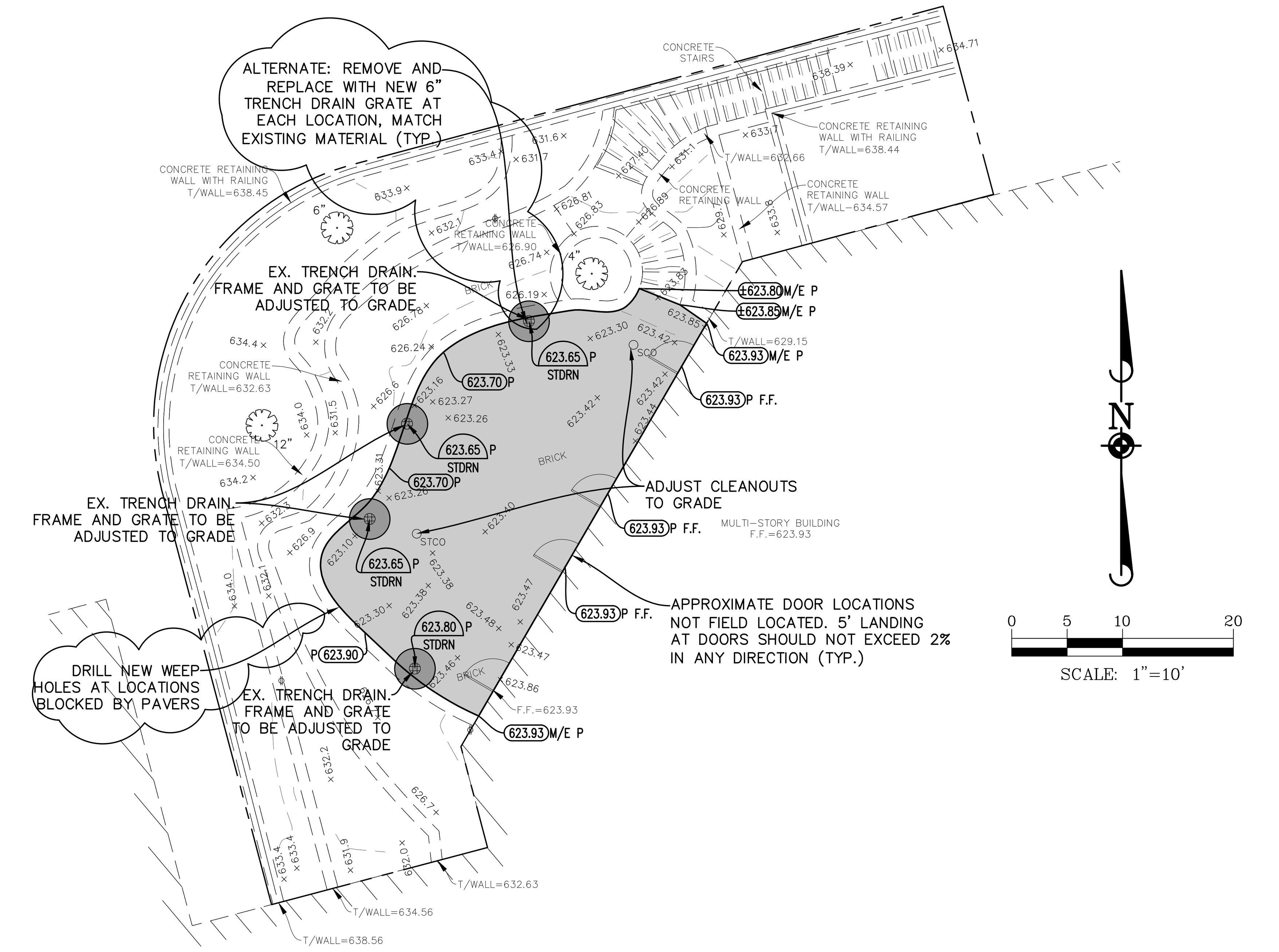
100% CD DRAWINGS (ADDENDUM #2) 01-13-23







LOCATION MAP



GRADING PLAN LEGEND

Symbol	Description
764	PROPOSED 1 FOOT CONTOURS
792.8 G	PROPOSED SPOT ELEVATION
F.F.	PROPOSED FINISHED FLOOR ELEVATION
G/F	PROPOSED GRADE AT FOUNDATION
P	PROPOSED PAVEMENT ELEVATION
T/C	PROPOSED TOP OF CURB
T/W	PROPOSED TOP OF WALK
T/WALL	PROPOSED TOP OF WALL
M/E	MEET EXISTING
G	PROPOSED GROUND GRADE OR GROUND AT BASE OF RETAINING WALL
	PROPOSED DITCH OR SWALE
	PROPOSED DIRECTION OF FLOW
	OVERFLOW RELIEF SWALE
RIDGE	PROPOSED RIDGE LINE
0.5'	PROPOSED DEPTH OF PONDING
	RETAINING WALL
L	PROPOSED SWALE LOW POINT
S	PROPOSED SWALE SUMMIT
	TEMPORARY STORM INLET PROTECTION
	EX. CONCRETE BENCH (TO REMAIN)

06-01-16

GRADING NOTES:

1. CONTRACTOR SHALL REFER TO THE SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS FOR CONSTRUCTION SCHEDULING AND EROSION CONTROL MEASURES TO BE INSTALLED PRIOR TO BEGINNING GRADING OPERATIONS.
2. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
3. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITION OR BETTER.
5. ALL UNPAVED AREAS DISTURBED BY GRADING OPERATIONS SHALL RECEIVE 6 INCHES OF TOPSOIL. REFER TO LANDSCAPE PLANS FOR PLACEMENT OF TOPSOIL WITHIN PLANTING AREAS WHERE PAVING WAS REMOVED. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES 3H:1V OR STEEPER. CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED.
6. EXISTING TOPOGRAPHY SHOWN REPRESENTS SITE CONDITIONS AS PREPARED BY MANHARD CONSULTING ON APRIL 14, 2022. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION. IF THE CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, THEN THE CONTRACTOR SHALL SUPPLY, AT THEIR EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR TO THE OWNER FOR REVIEW.

DATE	REVISIONS	DRAWN BY
01/13/23	ADDENDUM #2 REVISIONS	

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Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

CITY OF DES PLAINES, ILLINOIS

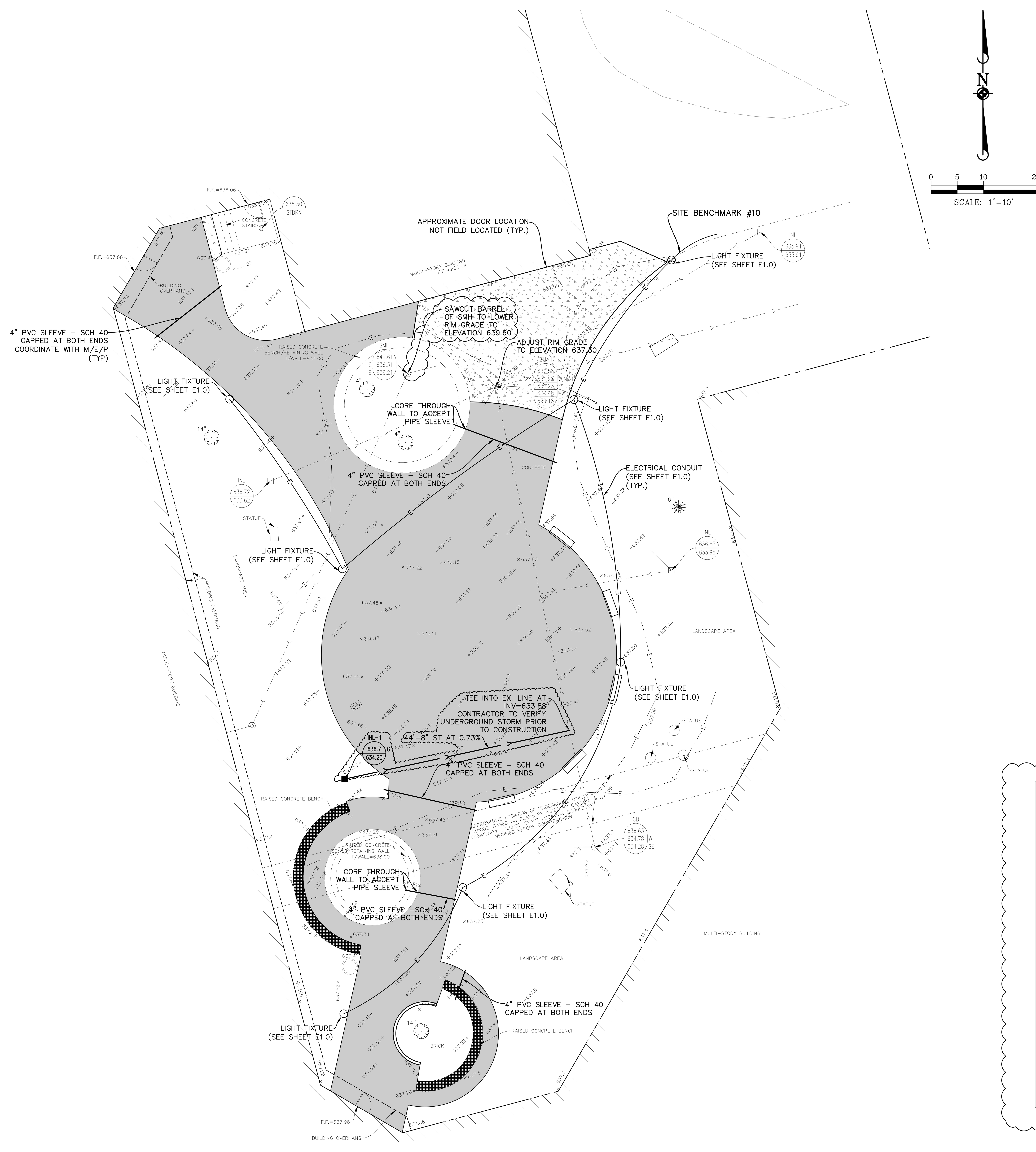
GRADING PLAN

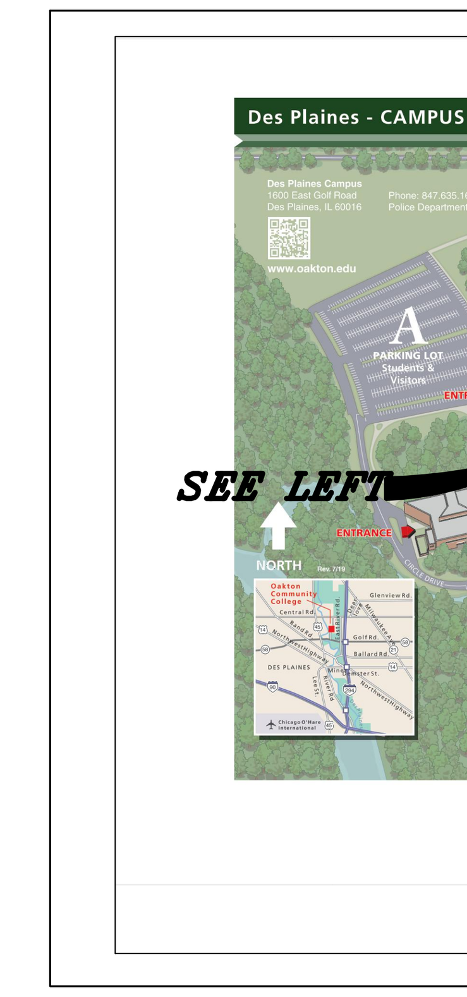
PROJ. MGR.: JCM
PROJ. ASSOC.: JCM
DRAWN BY: BJA
DATE: 11-04-22
SCALE: 1"=10'

SHEET 4 OF 7

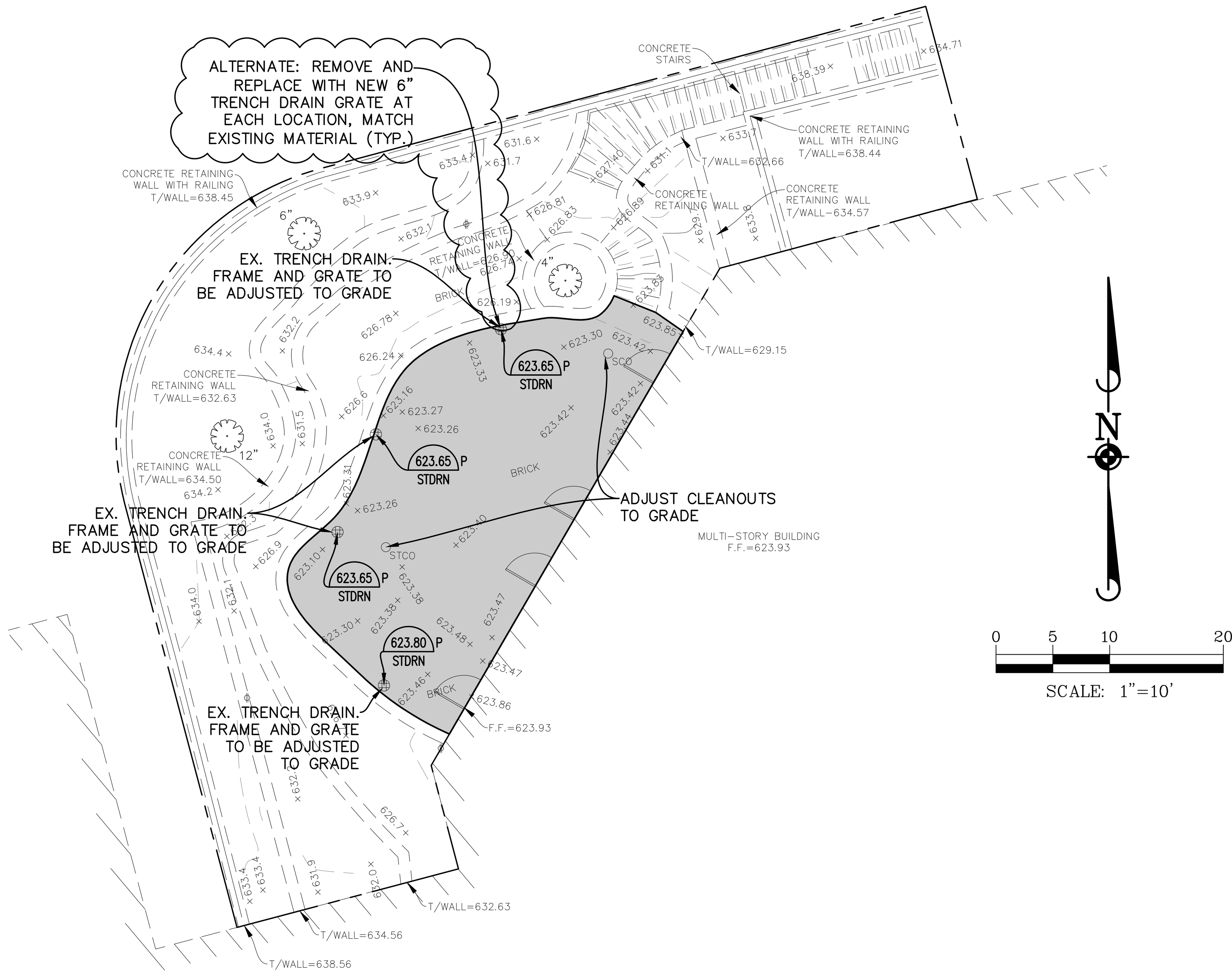
OCC.DPIL13

100% CD DRAWINGS (ADDENDUM #2) 01-13-23





LOCATION MAP



06-01-22

UTILITY NOTES:

1. ALL UTILITY DIMENSIONS ARE TO CENTER OF PIPE OR CENTER OF STRUCTURE UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL CONTACT J.U.L.I.E. (1-800-892-0123) PRIOR TO ANY WORK TO LOCATE UTILITIES AND SHALL CONTACT THE OWNER SHOULD UTILITIES APPEAR TO BE IN CONFLICT WITH THE PROPOSED IMPROVEMENT.
3. ROUTING OF GAS, ELECTRIC AND TELEPHONE SERVICES IF SHOWN ARE APPROXIMATE ONLY AND SUBJECT TO CHANGE BASED UPON FINAL REVIEW AND APPROVAL BY RESPECTIVE UTILITY COMPANIES AND OWNER. CONTRACTOR SHALL CONTACT EACH UTILITY COMPANY AND COORDINATE FINAL LOCATIONS FOR ALL UTILITY SERVICES PRIOR TO START OF CONSTRUCTION.
4. CONTRACTOR SHALL EXCAVATE AND VERIFY ALL EXISTING SEWER, WATER MAIN AND DRY UTILITY LOCATIONS, SIZES, CONDITIONS & ELEVATIONS AT PROPOSED POINTS OF CONNECTION AND CROSSINGS PRIOR TO ANY UNDERGROUND CONSTRUCTION AND NOTIFY THE OWNER OF ANY DISCREPANCIES OR CONFLICTS.
5. LIGHTING AND UNDERGROUND CABLE IF SHOWN ON PLANS ARE FOR APPROXIMATE LOCATION ONLY. REFER TO ELECTRICAL PLANS FOR SPECIFICATIONS AND DETAILS.
6. THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED FINISH GRADES.
7. CONTRACTOR TO VERIFY LOCATION, SIZES, AND ELEVATION OF ALL BUILDING SERVICE LOCATIONS WITH ARCHITECTURAL PLANS.
8. AT LOCATIONS WHERE WATER MAIN CROSSES BENEATH OR LESS THAN 18" ABOVE A SEWER, PROVIDE WATER MAIN PROTECTION PER STANDARD SPECIFICATIONS FOR SEWER AND WATER MAIN CONSTRUCTION IN ILLINOIS, LATEST EDITION.
9. ELEVATIONS GIVEN FOR STORM SEWER STRUCTURES LOCATED IN CURB LINE ARE PAVEMENT ELEVATIONS.
10. ALL EXISTING UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT ELEVATION OR LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES.
11. THE UNDERGROUND UTILITY INFORMATION AS SHOWN HERE ON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED.
12. ALL STORM SEWER LENGTHS SHOWN ARE CENTER OF MANHOLE TO CENTER OF MANHOLE OR STORM MANHOLE TO FES.
13. SOME EXISTING ITEMS TO BE REMOVED HAVE BEEN DELETED FROM THIS PLAN FOR CLARITY. SEE DEMOLITION PLAN FOR ITEMS DELETED.

DATE	REVISIONS	DRAWN BY
01-13-23	ADDENDUM #2 REVISIONS	EJB

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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

CITY OF DES PLAINES, ILLINOIS

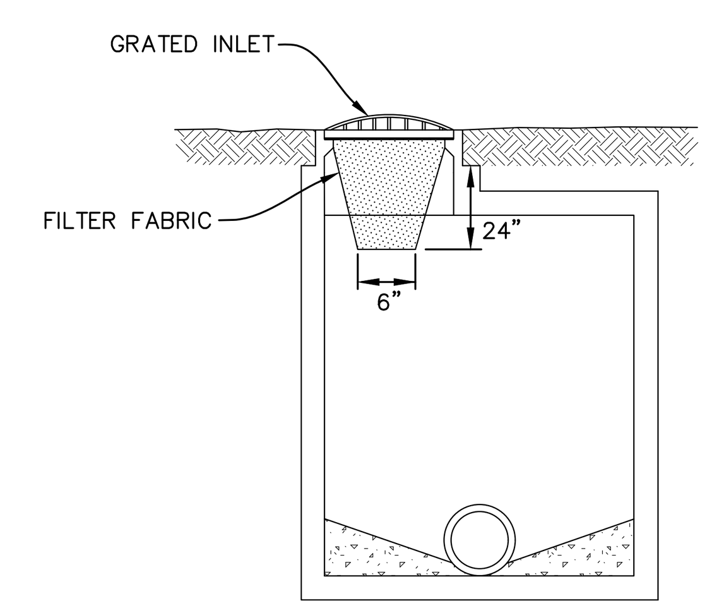
UTILITY PLAN

PROJ. MGR.: JCM
PROJ. ASSOC.: JCM
DRAWN BY: EJB
DATE: 11-04-22
SCALE: 1"=10'

SHEET 5 OF 7

OCC.DPIL13

100% CD DRAWINGS (ADDENDUM #2) 01-13-23

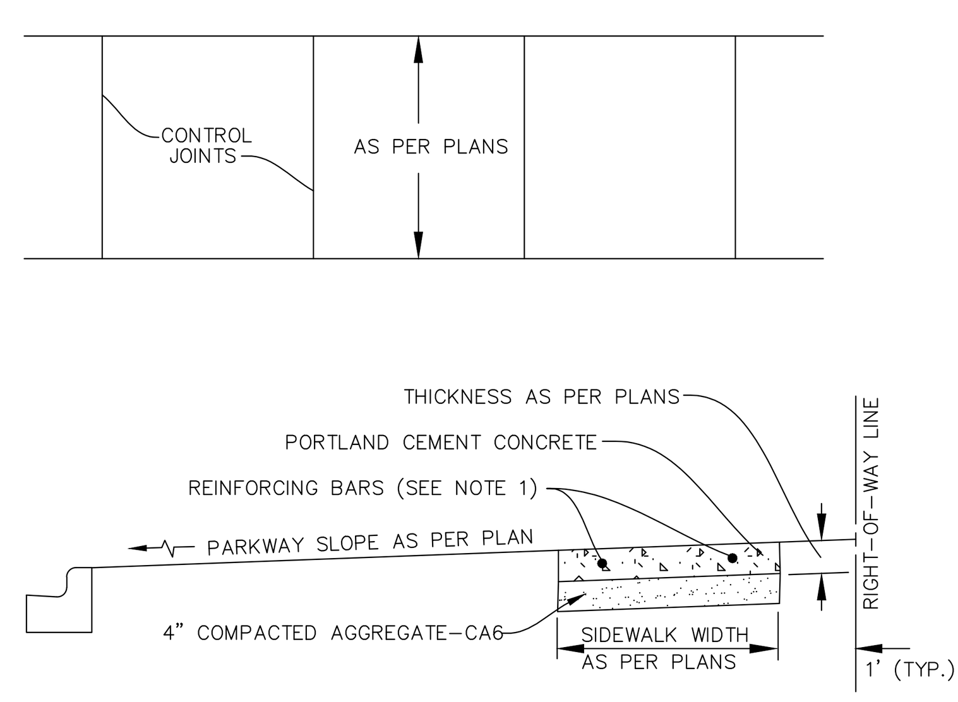


NOTE:
1. CONTRACTOR HAS THE OPTION OF USING A MANUFACTURED PRODUCT SUCH AS DANDY BAG, IPP INLET FILTER, FLEXSTORM OR APPROVED EQUAL.
2. FOR CURB STRUCTURES, CONTRACTOR HAS THE OPTION OF USING A MANUFACTURED PRODUCT SUCH AS DANDY CURB SACK OR APPROVED EQUAL.

06-01-15

FILTER BASKET INLET SEDIMENT FILTER

EC-ST-FB-INLETPROTECT

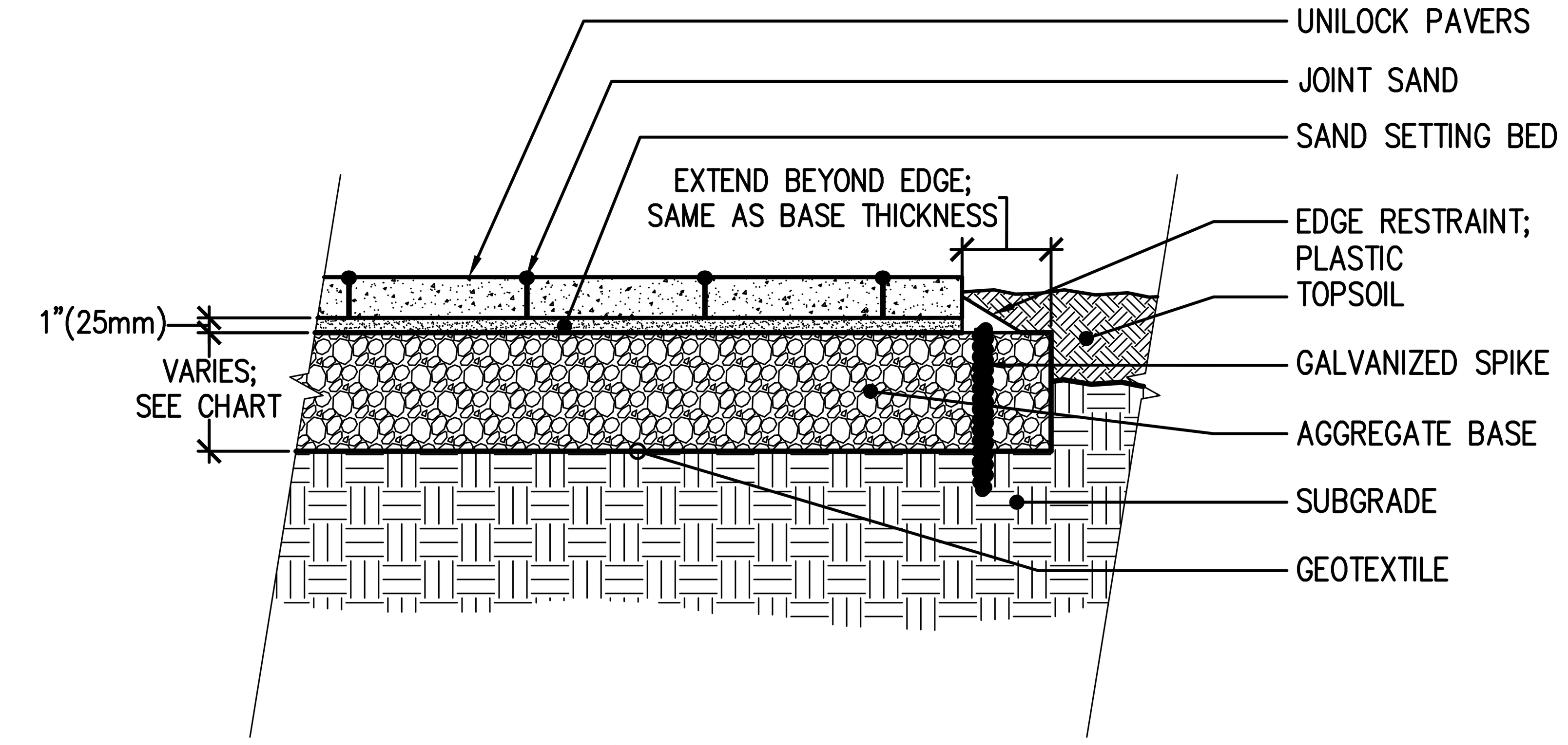


NOTES:
1. AT ALL TRENCH CROSSINGS, 2-#4 REFORMED REINFORCING BARS (10' LONG) SHALL BE PLACED OVER THE TRENCH.
2. CONCRETE THICKNESS SHALL BE 6" ACROSS DRIVEWAYS AND TRENCH CROSSINGS.
3. 3/4" EXPANSION JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM SPACING OF 50'.
4. CONTROL JOINTS SHALL BE SPACED THE SAME AS THE SIDEWALK WIDTH AND 1/4" IN DEPTH.
5. CROSS SLOPE ON SIDEWALK SHALL NOT EXCEED 2.00%

04-20-21

SIDEWALK DETAIL

S-RD-SIDEWALK



RESIDENTIAL USE	MINIMUM BASE THICKNESS
WALKWAY OR PATIO	6" (100 mm)
DRIVEWAY	8" (200 mm)
OTHER	CONTACT UNILOCK

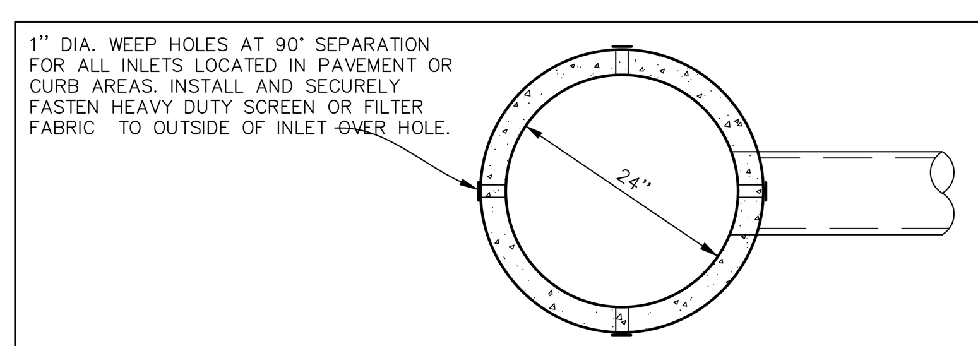
RESIDENTIAL APPLICATION
PAVER DETAIL

CREATED:	MARCH 1, 2011
REVISED:	MARCH 6, 2014
FILE NAME:	CS-1-PAVER.DWG

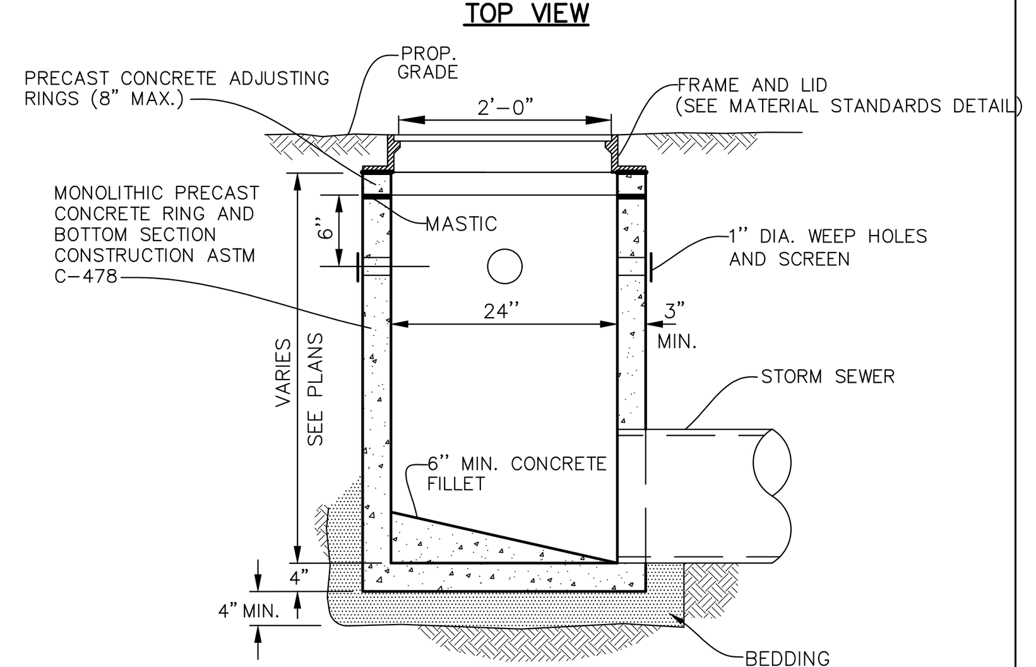
NOTES:
This cross section is intended for preliminary design purposes only. Confirm site conditions and consult with a qualified design professional or installer prior to installation.

CROSS SECTION
PAVERS ON GRANULAR BASE WITH EDGE RESTRAINT

UNILOCK®
DESIGNED TO CONNECT.



TOP VIEW



SIDE VIEW

NOTES:
1. INSTALL MINIMUM 4" OF BEDDING MATERIAL UNDER STRUCTURE BOTTOM SECTION & FILL ENTIRE EXCAVATION ALL AROUND STRUCTURE UP TO C.L. OF PIPE WITH BEDDING AND HAUNCHING MATERIAL.
2. PIPE OPENINGS SHALL BE CAST IN TO WALL.
3. STRUCTURE FRAME, ADJUSTING RINGS, AND ALL CONCRETE SECTIONS SHALL BE SET ON AND SEALED WITH BITUMINOUS MASTIC JOINT MATERIAL AND MORTARED ON INSIDE IF STRUCTURE LIES IN PAVEMENT.
4. FILL LUG HOLES WITH BITUMINOUS JOINING COMPOUND.
5. CURB & GUTTER TYPE FRAME AND GRATES OF INLETS IN PARKING LOT CORNERS SHALL BE LOCATED 2'-0" FROM THE FACE OF ADJACENT CURB TO CENTERLINE OF FRAME & GRATE.

06-01-15

INLET DETAIL

S-ST-INLET

MATERIAL STANDARDS

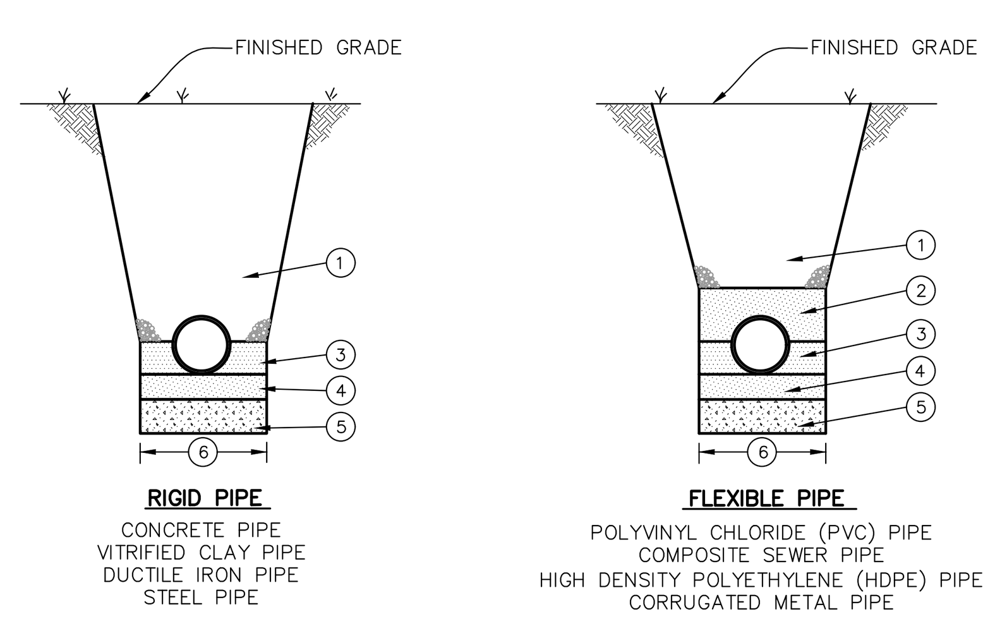
ITEM	BRAND	PRODUCT
MANHOLES/CATCHBASINS/INLETS IN OPEN AREAS AND PAVEMENT (SELF-SEALING LID WITH PROPER UTILITY MARKINGS)	NEENAH	
	CLOSED LID	R-1772
	OPEN LID *1 SWALES AND DITCHES	R-2502 A R-4340 B

*1 WHEREVER STORMWATER COULD POSSIBLY ENTER STORM STRUCTURE

06-01-15

MATERIAL STANDARDS

S-MS-MATERIALSTNDS



RIGID PIPE
CONCRETE PIPE
VITRIFIED CLAY PIPE
DUCTILE IRON PIPE
STEEL PIPE

FLEXIBLE PIPE
POLYVINYL CHLORIDE (PVC) PIPE
COMPOSITE SEWER PIPE
HIGH DENSITY POLYETHYLENE (HDPE) PIPE
CORRUGATED METAL PIPE

(1) MECHANICALLY COMPACTED SELECTED GRANULAR BACKFILL IN 6 INCH LIFTS UNDER OR WITHIN 2 FEET OF ANY PAVEMENT, CURB & GUTTER OR SIDEWALK. MACHINE COMPACTION OF EXCAVATED MATERIAL IN OTHER LOCATIONS WHERE SUITABLE.

(2) MECHANICALLY COMPACTED SELECTED GRANULAR BACKFILL IN 6 INCH LIFTS TO 12" ABOVE TOP OF PIPE.

(3) RIGID PIPE:
WELL-COMPACTED HAUNCHING MATERIAL PLACED IN MAXIMUM 6 INCH LIFTS TO SPRING LINE OF PIPE
FLEXIBLE PIPE:
WELL-COMPACTED HAUNCHING MATERIAL PLACED IN MAXIMUM 6 INCH LIFTS TO SPRING LINE OF PIPE.

(4) 4" WELL-COMPACTED BEDDING MATERIAL

(5) UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED WITH GRANULAR FOUNDATION MATERIAL WHERE SOIL CONDITIONS WARRANT

(6) TRENCH WIDTH:
TRENCH DEPTH OF 5 FEET AND LESS, WITHOUT PROTECTION
OUTSIDE DIAMETER + 12 INCHES ON EACH SIDE OF THE PIPE.
TRENCH DEPTH OF 5 FEET AND LESS, WITH PROTECTION
OUTSIDE DIAMETER + 18 INCHES ON EACH SIDE OF THE PIPE.
TRENCH DEPTH OF GREATER THAN 5 FEET
OUTSIDE DIAMETER + 18 INCHES ON EACH SIDE OF THE PIPE.

06-01-15

PIPE INSTALLATION DETAIL

S-MS-PIPEINSTALL

SHOULD A CONFLICT ARISE BETWEEN MANHARD DETAILS AND THE VILLAGE DETAILS, THE VILLAGE DETAILS SHALL TAKE PRECEDENCE.

DATE	REVISIONS	DRAWN BY
01/12/23	ADDENDUM #2 REVISIONS	EJB

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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
CONSTRUCTION DETAILS

PROJ. MGR.: JCM
PROJ. ASSOC.: JCM
DRAWN BY: BTV
DATE: 11-04-22
SCALE: 1"=XX'

SHEET 6 OF 7
OCC.DPIL13

100% CD DRAWINGS (ADDENDUM #2) 01-13-23

06-01-16

MANHARD CONSULTING, LTD.
STANDARD SPECIFICATIONS

GENERAL CONDITIONS

CONTRACTOR acknowledges and agrees that the use and reliance of these Plans and Specifications is sufficient consideration for CONTRACTOR'S covenants stated herein.

DEFINITION OF TERMS

a. "CLIENT" shall mean Oakton Community College, which is the person or entity with whom Manhard Consulting, Ltd. has contracted with to prepare Civil Engineering PLANS and SPECIFICATIONS.

b. "ENGINEER" shall mean Manhard Consulting, Ltd., a Civil Engineering consultant on the subject project.

c. "PLANS and SPECIFICATIONS" shall mean the Civil Engineering PLANS and SPECIFICATIONS prepared by the ENGINEER, which may be a part of the contract documents for the subject project.

d. "CONTRACTOR" shall mean any person or entity performing any work described in the PLANS and SPECIFICATIONS.

e. "JURISDICTIONAL GOVERNMENTAL ENTITY" shall mean any municipal, county, state or federal unit of government from whom an approval, permit and/or review is required for any aspect of the subject project.

INTENT OF THE PLANS AND SPECIFICATIONS

The intent of the PLANS and SPECIFICATIONS is to set forth certain requirements of performance, type of equipment and structures, and standards of materials and construction. They may also identify labor and materials, equipment and transportation necessary for the proper execution of the work but are not intended to be infinitely determined so as to include minor items obviously required as part of the work. The PLANS and SPECIFICATIONS require new material and equipment unless otherwise indicated, and to require complete performance of the work in spite of omissions of specific references to any minor component part. It is not intended, however, that materials or work not covered by or properly inferred from any heading, branch, class or trade of the SPECIFICATIONS shall be supplied unless distinctly so noted. Materials or work described in words, which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

INTERPRETATION OF PLANS AND SPECIFICATIONS

a. The CLIENT and/or CONTRACTOR shall promptly report any errors or ambiguities in the PLANS and SPECIFICATIONS to the ENGINEER. Questions as to meaning of PLANS and SPECIFICATIONS shall be interpreted by the ENGINEER, whose decision shall be final and binding on all parties concerned.

b. The ENGINEER will provide the CLIENT with such information as may be required to show revised or additional details of construction.

c. Should any discrepancies or conflicts on the PLANS or SPECIFICATIONS be discovered either prior to or after award of the contract, the ENGINEER's attention shall be called to the same before the work is begun thereon and the proper corrections made. Neither the CLIENT nor the CONTRACTOR may take advantage of any error or omissions in the PLANS and SPECIFICATIONS. The ENGINEER will provide information when errors or omissions are discovered.

GOVERNING BODIES

All works herein proposed shall be completed in accordance with all requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, and all such pertinent laws, directives, ordinances and the like shall be considered to be a part of these SPECIFICATIONS. If a discrepancy is noted between the PLANS and SPECIFICATIONS and requirements of any JURISDICTIONAL GOVERNMENTAL ENTITY, the CLIENT and/or the CONTRACTOR shall immediately notify the ENGINEER in writing.

LOCATION OF UNDERGROUND FACILITIES AND UTILITIES

When the PLANS and SPECIFICATIONS include information pertaining to the location of existing underground facilities and utilities (including but not limited to water mains, sanitary sewers, storm sewers, electric, telephone, gas and cable TV lines), such information represents only the opinion of the ENGINEER as to the approximate location and elevation of such facilities and utilities. At the locations wherein detailed positions of these facilities and utilities become necessary to the new construction, including all points of connection, the CONTRACTOR shall furnish all labor and tools to verify or definitely establish the horizontal location, elevation, size and material (if appropriate) of the facilities and utilities. The CONTRACTOR shall notify the ENGINEER at least 48 hours prior to construction if any discrepancies in existing utility information or conflicts with existing utilities exist. The ENGINEER assumes no responsibility whatever with respect to the sufficiency or accuracy of the information shown on the PLANS and SPECIFICATIONS relative to the location of underground facilities and utilities, nor the manner in which they are removed or adjusted.

It shall be the CONTRACTOR's responsibility prior to construction, to notify all Utility Companies of the intent to begin construction and to verify the actual location of all such facilities and utilities. The CONTRACTOR shall also obtain from the respective Utility Companies the working schedules for removing or adjusting these facilities.

UNSUITABLE SOILS

The PLANS have been prepared by the ENGINEER based on the assumption that all soils on the project are suitable to support the proposed improvements shown. The CLIENT or CONTRACTOR shall immediately notify the ENGINEER if he discovers or encounters an obstruction that prevents the installation of the improvement according to the line and grades shown on the PLANS.

PROTECTION OF TREES

All trees that are not to be removed shall be protected from damage. Trees shall not be removed unless requested to do so in writing by the CLIENT.

NOTIFICATION OF OWNERS OF FACILITIES AND UTILITIES

The CONTRACTOR shall notify all applicable Jurisdictional Governmental Entities or utility companies, i.e., water, sewer, electric, telephone, gas and cable TV prior to beginning any construction so that said entity or company can establish the location and elevation of underground pipes, conduits or cables adjoining or crossing proposed construction.

TRAFFIC CONTROL

The CONTRACTOR shall provide when required by any JURISDICTIONAL GOVERNMENTAL ENTITY, all signs, equipment, and personnel necessary to provide for safe and efficient traffic flow in all areas where the work will interrupt, interfere or cause to change in any form, the conditions of traffic flow that existed prior to the commencement of any portions of the work. The CLIENT may, at his discretion, require the CONTRACTOR to furnish traffic control under these or other circumstances where in his opinion it is necessary for the protection of life and property. Emergency vehicle access shall be maintained at all times. Unless authorized by the CLIENT or CLIENT's construction representative, all existing access points shall be maintained at all times by the CONTRACTOR. The need for traffic control shall be anticipated by the CLIENT.

WORK AREA

The CONTRACTOR, his agents and employees and their employees and all equipment, machinery and vehicles shall confine their work within the boundaries of the project or work area specified by the Client. The CONTRACTOR shall be solely liable for damage caused by him or his agents and employees and their equipment, machinery and vehicles on adjacent property or areas outside designated work areas.

UTILITY POLES

It shall be the responsibility of the CONTRACTOR to arrange for the relocation or bracing of existing utility poles that may be within the working limits of this contract. It is expressly understood that all work and costs connected with the maintenance of these utility poles, their temporary relocations, etc., shall be the responsibility of the CLIENT or the CONTRACTOR.

RESTORATION

It is the intent of these SPECIFICATIONS that clean-up and final restoration shall be performed immediately upon completion of each phase of the work, both inside and outside the Project, or when so directed by the CLIENT so that these areas will be restored as nearly as possible to their original condition or better, and shall include but not be limited to, restoration of maintained lawns and rights-of-way, roadways, driveways, sidewalks, ditches, bushes, hedges, trees, shrubs, fences, mailboxes, sewers, drain tiles, water mains, etc.

CLEANING UP

The CONTRACTOR shall at all times keep the premises free from accumulations of waste material or rubbish caused by his employees or work, and at the completion of the work he shall remove all his rubbish, tools, scaffolding and surplus materials and shall leave his work "broom clean" or its equivalent, unless more exactly specified.

ROAD CLEANING

The CONTRACTOR shall maintain roadways adjoining the project site free from mud and debris at all times. If mud and/or debris is carried onto the roadways from vehicles entering onto the highway from either the CONTRACTOR's trucks, his employees' vehicles, or his material suppliers, the CONTRACTOR shall immediately remove said mud and/or debris.

SAFETY AND PROTECTION

The CONTRACTOR shall be solely and completely responsible for the conditions of the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and not be limited to normal working hours. The CONTRACTOR shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR's duties and responsibilities for safety and for protection of the work shall continue until such time as all work is completed and the CLIENT has notified CONTRACTOR that the work is acceptable. The duties of the ENGINEER do not include review of the adequacy of either the CONTRACTOR's or the general public's safety in, on, or near the construction site.

HOLD HARMLESS

To the fullest extent permitted by law, any CONTRACTOR; material supplier or other entity by use of these plans and specifications hereby waives any right of contribution and agrees to indemnify, defend, save and hold harmless the CLIENT and ENGINEER and its agents, employees and consultants from and against all manner of claims, causes, causes of action, damages, losses and expenses, including but not limited to, attorneys' fees arising out of, resulting from or in connection with the performance of any work, pursuant to or with respect to these plans and specifications. However, this indemnity shall not be construed to indemnify ENGINEER, its consultants, agents or employees against its own negligence.

Claims, damages, losses and expenses as these words are used in the Agreement shall mean and include, but not be limited to (1) injury or damage occurring by reason of the failure of or use or misuse of any hoist, riggings, blocking, scaffolding or any and all other kinds of items of equipment, whether or not the same be owned, furnished or loaned by any part or entity, including any contractor; (2) all attorneys' fees and costs incurred in bringing an action to enforce the provisions of this indemnity; (3) costs for time expended by the indemnified party and its employees, at its usual rates plus costs or travel, long distance telephone and reproduction of documents and (4) consequential damages.

In any and all claims against the CLIENT or ENGINEER or any of their agents or employees and consultants by any party, including any employee of the CONTRACTOR or any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount of type of damages, compensation or benefits payable by or for the CONTRACTOR or any Subcontractor under workers' or workmen's compensation acts, disability benefit acts or other employee benefit acts or any insurance maintained by CONTRACTOR or any Subcontractor or any other party.

INSURANCE

Any party using or relying on these plans, including any contractor, material supplier, or other entity shall obtain, (prior to commencing any work) general public liability insurance insuring against all damages and claims for any bodily injuries, death or property damage arising out of any work, including the construction work provided for in these plans, and shall name the CLIENT and ENGINEER and its consultants, agents and representatives as additional insureds under such insurance policy; provided that any party using or relying on these plans having obligations to maintain specific insurance by reason of any agreement with CLIENT or any CONTRACTOR or ENGINEER shall provide evidence and certificates of insurance as required by such contract or agreement. Such insurance must contain a clause stating that the insurance is primary coverage for ENGINEER and ENGINEER's other applicable coverage is considered secondary. Such insurance shall not limit any liability of any party providing work or services or providing materials.

THIRD PARTY BENEFICIARY

Manhard Consulting, Ltd., the ENGINEER, is intended to be a third party beneficiary of this willing agreement and requirement.

Note: These Specifications are for Northern Illinois.

DETAILED SPECIFICATIONS

I. DEMOLITION

The CONTRACTOR shall coordinate with respective utility companies prior to the removal and/or relocation of utilities. The CONTRACTOR shall coordinate with the utility company concerning portions of work which may be performed by the Utility Company's forces and any fees which are to be paid to the utility company for their services. The CONTRACTOR is responsible for paying for all fees and charges.

Should removal and/or relocation activities damage features indicated to remain, the CONTRACTOR shall provide new materials/structures in accordance with the contract documents. Except for materials designed to be relocated on this plan, all other construction materials shall be new.

Prior to demolition occurring, all erosion control devices are to be installed.

All existing utility lines and conduits located under proposed buildings shall be removed and properly backfilled. All utility lines and conduits located under drives, on-site roads, parking lots or sidewalks shall be filled with a flowable backfill and end plugged. All existing structures shall be removed. All existing utility lines located under landscape areas shall be left in place and plugged at all structures.

The CONTRACTOR is responsible for demolition, removal and disposal (in a location approved by all JURISDICTIONAL GOVERNING ENTITIES) of all structures, pads, walls, flumes, foundations, road, parking lots, drives, drainage structures, utilities, etc., such that the improvements shown on these plans can be constructed. All demolition work shall be in accordance with all applicable federal, state and local requirements. All facilities to be removed shall be undercut to suitable material and brought to grade with suitable compacted fill material per the specifications.

The CONTRACTOR is responsible for obtaining all permits required for demolition and disposal.

Electrical, telephone, cable, water, fiber optic cable and/or gas lines needing to be removed shall be coordinated by the CONTRACTOR with the affected utility company.

CONTRACTOR must protect the public at all times with fencing, barricades, enclosures, and other appropriate best management practices.

Continuous access shall be maintained for surrounding properties at all times during demolition.

All fire access lanes within the project area shall remain in service, clean of debris, and accessible for use by emergency vehicles.

The CONTRACTOR shall coordinate water main work with the Fire Department and the JURISDICTIONAL GOVERNING ENTITY to plan the proposed improvements and to ensure adequate fire protection is available to the facility and site throughout this specific work and through all phases of construction. CONTRACTOR shall be responsible for any required water main shut offs with the JURISDICTIONAL GOVERNING ENTITY during construction. Any costs associated with water main shut offs will be the responsibility of the CONTRACTOR and no extra compensation will be provided.

CONTRACTOR shall maintain all existing parking areas, sidewalks, drives, etc. clear and free from any construction activity and/or material to ensure easy and safe pedestrian and vehicular traffic to and from the site. CONTRACTOR shall coordinate/phase all construction activity within proximity of the building and utility interruptions with the facility manager to minimize disturbance and inconvenience to facility operations.

CONTRACTOR may limit saw-cut and pavement removal to only those areas where it is required as shown on these construction plans, however if any damage is incurred on any of the surrounding pavement, etc. the CONTRACTOR shall be responsible for ITS removal and repair.

Any existing wells encountered shall be exposed and sealed 3' below proposed finish grade by the CONTRACTOR in accordance with Section 920.120 (latest edition) of the Illinois Water Well Construction Code, Department of Public Health, and all applicable local rules and regulations. CONTRACTOR is responsible for obtaining all permits required by JURISDICTIONAL GOVERNMENTAL ENTITIES for abandoning existing wells.

Any existing septic tanks and grease traps encountered shall have all liquids and solids removed and disposed of by a licensed commercial hauler in accordance with JURISDICTIONAL GOVERNING ENTITY regulations, and the tank and grease traps shall then be filled with suitable materials or removed from the site and disposed of by the CONTRACTOR.

Voids left by any item removed under any proposed building, pavement, walk, etc. or within 24" thereof shall be filled and compacted with suitable materials by the CONTRACTOR.

The CONTRACTOR shall be responsible for the disconnection of utility services to the existing buildings prior to demolition of the buildings.

Any material containing asbestos found within existing structures shall be removed from the site and disposed of off-site by the CONTRACTOR in accordance with County, State and Federal regulations.

CONTRACTOR shall develop and implement a daily program of dust control and shall submit and obtain JURISDICTIONAL GOVERNING ENTITY approval of dust control procedures prior to demolition of any structures. Modification of dust control procedures shall be performed by the CONTRACTOR to the satisfaction of the JURISDICTIONAL GOVERNING ENTITY as requested.

The CONTRACTOR shall coordinate all demolition with the JURISDICTIONAL GOVERNING ENTITY and CLIENT to ensure protection and maintenance of sanitary sewer and water utilities as necessary and to provide stormwater conveyance until new facilities are constructed, tested and placed into operation.

The locations of all existing utilities shown on this plan have been determined from the best information available and are given for the convenience of the CONTRACTOR and are not to be interpreted as the exact location, or as the only obstacles that may occur on the site. The ENGINEER assumes no responsibility for their accuracy. Prior to the start of any demolition activity, the CONTRACTOR shall notify the utility companies for location of existing utilities and shall verify existing conditions and proceed with caution around any anticipated features.

The CONTRACTOR is responsible for removing the existing irrigation system in the areas of proposed improvements. The contractor shall cap the existing irrigation system to remain such that the remaining system shall continue to function properly.

The parking lot shall be completed in sections such that it does not interrupt the facility operations. The CONTRACTOR shall coordinate with the construction manager for work to be performed.

II.EARTHWORK

STANDARDS

This work shall be completed in conformance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition except as modified below.

SOIL BORING DATA

Copies of results of soil boring and reports, if such borings were taken by the CLIENT in the vicinity of the proposed construction site, should be made available by the CLIENT to the CONTRACTOR. These borings are presented for whatever purpose the CONTRACTOR chooses to make of them. The ENGINEER makes no representation or warranty regarding the number, location, spacing or depth of borings taken, nor of the accuracy or reliability of the information given in the results thereof.

Further, the ENGINEER does not assume responsibility for the possibility that during construction, the soil and groundwater condition may be different than indicated. Neither does the ENGINEER assume responsibility for variations of soil and groundwater at location between borings. The CONTRACTOR is required to make its own borings, explorations and observations to determine soil and groundwater conditions.

EARTHWORK CALCULATIONS AND CROSS SECTIONS

The CONTRACTOR understands that any earthwork calculations, quantities or cross sections that have been furnished by the ENGINEER are for information only and are provided without any guarantee by the CLIENT or ENGINEER whatsoever as to their sufficiency or accuracy. CONTRACTOR warrants that he has performed his own subsurface investigations as necessary and his own calculations and cross sections to determine site soil conditions and earthwork volumes. The ENGINEER makes no representation or guarantee regarding earthwork quantities or that the earthwork for this project will balance due to the varying field conditions, changing soil types, allowable construction to tolerances and construction methods that are beyond the control of the ENGINEER.

CLEARING, GRUBBING AND TREE REMOVAL

The site shall be cleared, grubbed, and trees and stumps removed where designated on the PLANS. Trees designated to remain shall be protected from damage.

***TOPSOIL STRIPPING**

Upon completion of demolition, clearing, grubbing and tree removal, all topsoil shall be stripped from under all buildings and pavements areas, and other areas necessary to complete the work. Topsoil stripped shall be placed in stockpiles in locations as designated by the CLIENT. Existing topsoil should not be stripped from future planting areas.

TOPSOIL RESPREAD

Upon completion of roadway and/or parking lot improvements and installation of underground utilities a minimum of six inches (6") of topsoil shall be respread over all unpaved areas which have been disturbed by earthwork construction, except building pads and other designated areas, which shall be kept free from topsoil.

SEEDING

Upon completion of topsoil respread, the CONTRACTOR shall apply seed and fertilizer to all respread areas in accordance with IDOT standards or as designated on landscape drawings and specifications provided by the CLIENT.

SODDING

Upon completion of topsoil respread, the CONTRACTOR shall install sod to all areas designated on the plans or as designated on the landscape drawings and specifications provided by the CLIENT.

EXCAVATION AND EMBANKMENT

Upon completion of topsoil stripping, all excavation and embankments shall be completed as shown on the PLANS. All suitable excavated materials shall be hauled, placed (moisture conditioned if necessary) and compacted in the embankment areas. The CONTRACTOR shall include all dewatering, temporary ditching and culverts necessary to complete the excavation and embankment.

Specifically included in the scope of Excavation and Embankments is grading and shaping of all cut or fill areas including swales and ditches; handling of sewer spoil, etc., and all work required to provide positive drainage at the end of each working day and upon completion of a section.

The CONTRACTOR shall be responsible for the excavation of all swales and ditches and for the excavation or filling of the roads, building pads and parking lots within the work limits to lines & grades shown on the plans. He shall be responsible for obtaining compaction in accordance with the minimum values listed in the table below for all embankments unless more stringent values are listed in the soils report or are approved by the CLIENT, and to use any method approved by the CLIENT necessary to obtain this compaction (i.e., soil fabric or any undercutting that may be required).

Type Material	Percent Compaction Standard	Pavement & Floor Slabs	Grass Areas
Sandy Soils	Modified Proctor	95%	90%
Clayey Soils	Standard Proctor	95%	90%

The CONTRACTOR shall notify the CLIENT if proper compaction cannot be obtained so that the CLIENT may determine what remedial measures may be needed.

A soils testing firm employed by the CLIENT shall determine which soils are unsuitable. Materials in their natural state being defined as unsuitable that would be suitable material if moisture conditioned, shall be conditioned by the CONTRACTOR and used as suitable embankment material or hauled from the site.

For purposes of definition, unsuitable material shall be as follows unless determined otherwise by the Soils Engineer:

1. Any soil whose optimum moisture content exceeds 25%.
2. Any cohesive soil with an unconfined compressive strength of 1.5 tons per square foot or less.
3. Any soil whose silt content exceeds 60% by weight.
4. Any soil whose maximum density is less than 100 pounds per cubic foot.
5. Any soil containing organic, deleterious, or hazardous material.

Upon completion of excavation and shaping of the water retention areas intended to maintain a permanent pool of water, all silt seams and granular or sandy soils shall be removed to a minimum depth of three feet below the subgrade and replaced with an impermeable clay liner, including adjacent to and under storm sewer inlets and outlets. It is the intent of these PLANS and SPECIFICATIONS that the CONTRACTOR shall prepare the lake bottoms, side slopes, and compaction thereof such that the lakes will maintain the proposed normal water level and that leakage does not exceed ½ inch per week.

Ditches and swales are to be excavated to the lines and grades indicated on the PLANS. All suitable materials excavated from the ditches shall be used in construction of the embankments.

The CONTRACTOR shall notify the CLIENT immediately upon encountering groundwater during excavation. If in the opinion of the CLIENT or the JURISDICTIONAL GOVERNING ENTITY this condition necessitates the installation of perforated drain tile bedded in washed gravel or open storm sewer joints wrapped with fabric, the CONTRACTOR shall install the same.

During excavation and embankment, grades may be adjusted to achieve an overall site earthwork balance. The CONTRACTOR shall cooperate fully with the CLIENT in adjustment of grades, construction methods and placement of material to meet the above goals and shall immediately advise CLIENT if he believes that the earthwork will not balance.

It is the intent of these PLANS that storm waters falling on the site be diverted into sedimentation / lake / detention basins during construction. The CONTRACTOR shall construct and maintain any temporary ditches or swales that are necessary to accomplish this prior to beginning mass excavation.

EROSION CONTROL

Suitable erosion control practices shall be maintained by the CONTRACTOR in accordance with Illinois Urban Manual and all applicable Soil Erosion and Sedimentation Control ordinances and the PLANS.

UNDERCUTTING DURING EARTHWORK

If the subgrade cannot be dried adequately by discing as outlined above for placement of material to planned grades and if the CLIENT determines that the subgrade does not meet the standards set forth above, the CLIENT may require undercutting.

MISCELLANEOUS CONTRACT ITEMS

The following items may be required at the CLIENT's option, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY:

(1) **GEOTEXTILE FABRIC**

Geotextile fabric or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY where proper compaction of embankments over existing soft soils is not possible. Geotextile fabric shall meet the material specifications of and shall be installed in accordance with the above standards.

(2) **EROSION CONTROL BLANKET**

Erosion control blanket or approved equal shall be provided in areas as designated by the CLIENT, as indicated on the PLANS or as required by the JURISDICTIONAL GOVERNING ENTITY for the stabilization of disturbed areas. Erosion control blanket shall meet the material specifications of and shall be installed in accordance with the above standards, the Illinois Urban Manual and/or the details shown on the PLANS.

III.UNDERGROUND IMPROVEMENTS

A. GENERAL

STANDARDS

All underground improvements shall be constructed and tested in accordance with the Standard Specifications for Water and Sewer Construction in Illinois and Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition. In the event of conflicting guidelines, the more restrictive shall govern.

SELECTED GRANULAR BACKFILL

Selected Granular Backfill shall be required for all sewer and water main trenches lying under existing or proposed streets, driveways, parking lots and within 24" thereof, and where noted on PLANS. All material placed in such trenches shall be in accordance with the above standards.

MANHOLES, CATCH BASIN, INLETS & VALVE VAULTS

All Manholes, Catch Basins, Inlets, and Valve Vaults shall be constructed of reinforced precast concrete ring construction with tongue and groove joints in conformance with the latest revision of ASTM designation C-478. All joints between sections and frames (except sanitary manholes, see Section IIIB Manholes, below) shall be sealed with mastic type bituminous jointing compound. CONTRACTOR shall remove all excess mastic on inside of structure and butter joints with mortar. Manholes are to have offset cones except that no cone shall be used on storm manholes 6'-0" deep or less in which case a reinforced concrete flat top section shall be used, and Valve Vaults shall have concentric cones. Only concrete adjustment rings will be permitted where necessary and shall be limited to two adjustment rings totaling not more than 8" in height. All manholes and catch basin steps shall be copolymer polypropylene with continuous ½" steel reinforcement as manufactured by MA Industries, or approved equal.

***AUGER/BORING AND CASING** - INTENTIONALLY OMITTED

***AUGER (OPEN BORE)** - INTENTIONALLY OMITTED

***HORIZONTAL AND VERTICAL SEPARATION OF WATER AND SEWER MAINS** - INTENTIONALLY OMITTED

STRUCTURE ADJUSTMENTS

Structures shall be adjusted to the finished grade as shown on PLANS.

*B. SANITARY SEWERS AND APPURTENANCES - INTENTIONALLY OMITTED

*C. WATER MAINS AND APPURTENANCES - INTENTIONALLY OMITTED

D. STORM SEWERS AND APPURTENANCES

STORM SEWER PIPE

Storm sewer pipe shall conform to the following:

(1) Reinforced concrete pipe minimum Class IV in conformance with the latest revision of ASTM designation C76 with C443 flexible gasket joints, except that bituminous mastic joints may be used in grass areas.

(2) Polyvinyl Chloride (PVC) Pipe: ASTM D3034 (4-inch thru 15-inch) or ASTM F679 (18-inch thru 36-inch), rated SDR 35, continually marked with manufacturer's name, pipe size, cell classification, SDR rating. Joints shall be flexible elastomeric seals conforming to ASTM D3212.

(3) Ductile Iron Pipe (DIP) shall conform to ANSI/AWWA C151/21.5, Class 50 cement lined with push on type joints conforming to ANSI/AWWA C111/A21.11.

(4) Spiral Rib Metal Pipe Type 1R: 18-inch diameter and greater. Pipe ends shall be re-corrugated and installed with semi-corrugated Hugger type brands and "O" ring gaskets. (Only permitted with Municipality approval and/or when specifically indicated on PLANS).

(5) High Density Polyethylene Pipe (HDPE) Smooth Interior, AASHTO Designation M252 and M294, maximum diameter of 48 inches. Pipe joints and fittings shall be watertight gasketed joints. No band seals will be allowed. (Only permitted in landscape areas with Municipality Approval and/or when specifically indicated on PLANS).

(6) Polypropylene (PP) Pipe shall have a smooth interior and annular exterior corrugations and shall meet or exceed ASTM F2881 and AASHTO M330. Pipe shall be joined with a gasketed integral bell & spigot joint meeting the requirements of ASTM F2881. PP Pipe shall be watertight according to the requirements of ASTM D3212. Spigots shall have gaskets meeting the requirements of ASTM F477. (Only permitted with Municipality Approval and/or when specifically indicated on PLANS.)

(7) Polyvinyl Chloride (PVC) large diameter closed profile gravity sewer pipe, UNI-B-9: ASTM F794. (Only permitted with Municipality Approval and/or when specifically indicated on PLANS).

(8) Corrugated Steel (Metal) Pipe (CSP or CMP), ASTM A760, 16 gauge unless noted on PLANS. Corrugated steel pipe may be round pipe, arch pipe, or slotted drainpipe as indicated on PLANS. Slotted drainpipe shall have 1.75 inches wide drain waterway openings and 6 inches minimum height drain guide. (Only permitted with Municipality approval and/or when specifically indicated on PLANS).

Precast tees, bends, and manholes may be used if permitted by the JURISDICTIONAL GOVERNMENTAL ENTITY.

Storm sewer shall include bedding and trench backfill.

MANHOLES, INLETS & CATCH BASINS

Manholes, Inlets and Catch Basins shall be constructed in conformance with Section IIIA Manholes, etc. above. The space between connecting pipes and the wall of the manhole shall be completely filled with non-shrink hydraulic cement mortar. Frames and lids shall be Neenah or approved equal unless specified otherwise on the PLANS. All frames and grates shall be provided such that the flange fully covers the opening plus 2" of the structure as a minimum. * Provide **"Vane"** Type frame & grate for all structures located in curb where gradient exceed 2.0%. Manholes shall include steps, frame & grate, bedding and trench backfill.

***FLARED END SECTION** - INTENTIONALLY OMITTED

***RIP RAP** - INTENTIONALLY OMITTED

FOUNDATION, BEDDING AND HAUNCHING

Foundation, Bedding and Haunching shall be wet coarse aggregate or moist fine aggregate in accordance with the above standards and placed as shown on the detail.

UNDERDRAINS

Pipe underdrains shall be corrugated flexible plastic pipe conforming to AASHTO Designation M252 perforated corrugated polyethylene pipe (PE) with a smooth interior of the diameter indicated on the PLANS and wrapped in a soil filter fabric supplied and installed by the CONTRACTOR. Perforations may be circular or slotted, but shall provide a minimum inlet area of 1.0 square inch per 2.0 linear feet of pipe. CONTRACTOR shall submit fabric and pipe catalogue Specifications for approval by the CLIENT. CONTRACTOR shall bed and backfill the underdrain in one of the following IDOT gradations of aggregate (CA-5, CA-7, CA-11, CA-14 or CA-15).

MISCELLANEOUS

(1) All existing field drainage tile or storm sewers encountered or damaged during construction shall either be restored to their original condition, properly rerouted and/or connected to the storm sewer system.

(2) Footing drains shall be connected to sump pumps or discharged directly into storm sewers. Footing drains or drainage tile shall not be connected to the sanitary sewer.

CONNECTION FOR STORM SERVICE TO STORM MAIN

Connections of storm sewer services to storm sewer mains should be made with manufactured tees when available. Availability of manufactured tees will be a function of the storm sewer material and pipe diameter size of the service sewer and main. If manufactured tees are not reasonably available, connections should be made in accordance with manufacturer's recommendations for all storm sewer other than concrete pipe. For concrete pipe connections without manufactured tees the storm sewer main shall be machine cored and the service sewer connected using non-shrink grout for the void between pipes. The service sewer shall be cut flush with the inside wall of the sewer main and not extend into the inside flow area of the main or otherwise impede flow.

IV. ROADWAY AND PARKING LOT IMPROVEMENTS

STANDARDS

Work shall be completed in accordance with the applicable sections of the Standard Specifications for Road and Bridge Construction, Department of Transportation, State of Illinois, latest edition (hereinafter referred to collectively as the "Standard Specifications") except as modified below and except that payment will be defined as detailed in the contract documents between the CLIENT and the CONTRACTOR. Supplementing the Standard Specifications shall be the applicable sections of the latest editions of the "Supplemental Specifications and Recurring Special Provisions", the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the Illinois Supplement thereto, (hereinafter referred to collectively as the "MUTCD"). Any references to "ENGINEER" in the "Standard Specifications" shall be interpreted as the CLIENT or CLIENT's Construction Representative.

SUBGRADE PREPARATION

The CONTRACTOR shall be responsible for all subgrade compaction and preparation to the lines and grades shown on the plans.

AGGREGATE BASE COURSE TYPE 'B'

Aggregate Base Course Type B shall be limited to CA-6 or CA-10 gradation. Aggregate base courses shall be proof rolled as outlined below.

PROOF ROLL

The CONTRACTOR shall proof roll the subgrade with either a 2-axle truck loaded to 27,000 lbs. Or a 3-axle truck loaded to 45,000 lbs. or as specified by the JURISDICTIONAL GOVERNING ENTITY. The CLIENT and JURISDICTIONAL GOVERNING ENTITY shall observe and approve the proof rolling of the subgrade and the base course. Proof rolling tolerances shall be a maximum deflection of 1" for the subgrade and ½" for the base course. The above criteria is intended as a maximum deflection standard and that proof rolling of a majority of the area will have less deflection than specified above. In any case of deficiency, the subgrade and/or base course shall be repaired and retested before proceeding with the pavement construction.

Pavement subgrade material shall not be removed, placed or disturbed after proof roll testing has been completed prior to the pavement construction. Additional testing will be required if the pavement subgrade is disturbed and/or material is removed from or placed on the pavement subgrade after proof rolling approval.

Trucks or heavy equipment shall not travel on any pavement subgrade after final testing prior to pavement construction.

***HOT-MIX ASPHALT BASE COURSE** - INTENTIONALLY OMITTED

***HOT-MIX ASPHALT BINDER AND SURFACE COURSE** - INTENTIONALLY OMITTED

CONCRETE PAVEMENTS

Concrete pavements shall be constructed in accordance with American Concrete Institute Standard ACI330R-08 and as shown on the PLANS.

Slabs and driveway aprons shall be constructed with 6" x 6" - W1.4 x W1.4 welded wire fabric positioned on steel chair supports. Placing fabric during the concrete pouring operation will not be allowed.

Sawing of joints shall commence as soon as the concrete has cured and hardened sufficiently to permit sawing without excessive raveling, but no later than eight hours after the concrete has been placed. All joints shall be sawed to a depth equal to 1/3 of the pavement thickness before uncontrolled shrinkage cracking take place. If necessary, the sawing operation shall occur during the day or at night, regardless of weekends, holidays or weather conditions. The CONTRACTOR shall be aware of jurisdictional noise ordinances and holiday restrictions for scheduling purposes.

The CONTRACTOR is responsible to guard fresh concrete until it sets and hardens sufficiently to prevent people from writing, walking, riding bicycles or otherwise permanently marking, defacing or causing depressions of any type in the concrete. Any concrete so marked will be removed and replaced by the CONTRACTOR at the CONTRACTOR'S expense.

The CONTRACTOR shall protect the pavement against all traffic, including that of their own employees or other workers, until test specimens have attained the specified strength.

SIDEWALKS

Concrete sidewalks shall be constructed to width and thickness as shown on the PLANS. Sidewalks shall be thickened to a minimum of 6" at all driveways. All sidewalks shall be IDOT Class SI concrete, on aggregate base as shown on the detail. A ½" expansion joint shall be provided when meeting existing sidewalk.

***CURB AND GUTTER** - INTENTIONALLY OMITTED

***CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT** - INTENTIONALLY OMITTED

FRAME ADJUSTMENTS

The road contractor shall be responsible for making final adjustments and the setting on a bituminous mastic jointing compound all castings located in the roadway, sidewalks, and parking areas prior to construction of any curbing, sidewalk, or final surface. Any structures that need to be lowered, or raised in excess of 4" shall be completed and the work backcharged against the underground contractor. This Contractor shall also be responsible for cleaning all of the above structures immediately upon completion of his phase of work. This work shall be incidental to the cost of the pavement.

***PAVEMENT MARKING - PAINT - INTENTIONALLY OMITTED**

PAVEMENT MARKING - THERMOPLASTIC - INTENTIONALLY OMITTED

QUALITY CONTROL

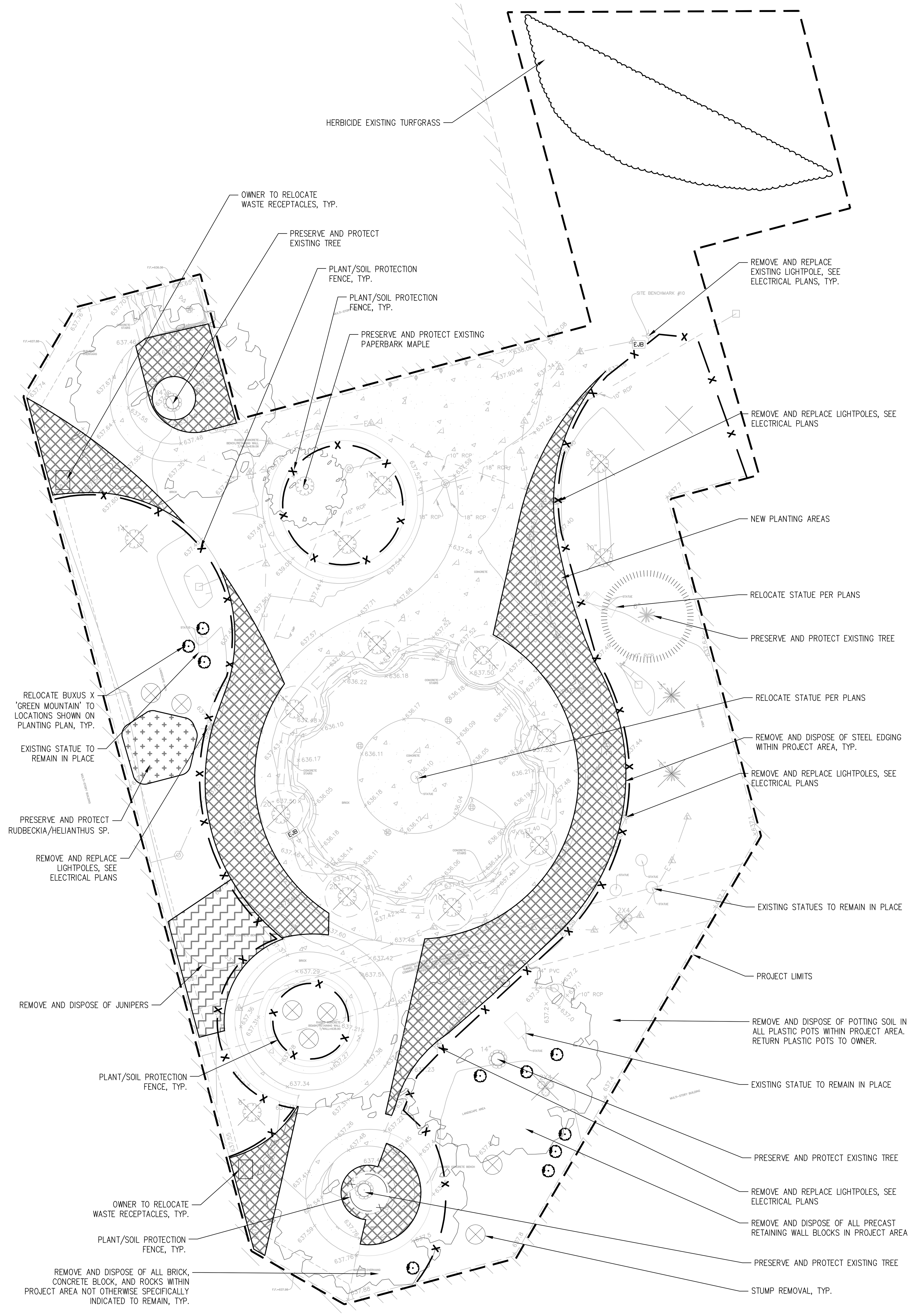
The CONTRACTOR shall provide all testing necessary to ensure improvements are in accordance with the project specifications and provide testing documentation that specifications were met.

***UNIT PAVING**

See Bid Package for paver specifications.

SHOULD A CONFLICT ARISE BETWEEN THE MANHARD SPECIFICATIONS AND THE VILLAGE SPECIFICATIONS, THE VILLAGE SPECIFICATIONS TAKE PRECEDENCE.

DRAWN BY	REVISIONS	DATE



PLANT REMOVAL PROCEDURES:

- INSTALL PLANT PROTECTION FENCING AND FOLLOW PLANT PROTECTION PROCEDURES IN 015639.
- TRANSPLANT BUXUS X 'GREEN MOUNTAIN' TO LOCATIONS SHOWN ON THE PLANS.
- REMOVE ALL LARGE WOODY PLANT MATERIAL WITHIN THE PROJECT AREA NOT OTHERWISE INDICATED FOR PRESERVATION OR TRANSPLANTING.
- CUT OUT STUMPS OF REMOVED WOODY VEGETATION TO A DEPTH OF 18 INCHES BELOW FINISHED GRADE. REMOVE AND DISPOSE OF WOOD CHIPPINGS OFF SITE AND REPLACE WITH IMPORTED TOPSOIL PER SPECIFICATION 329300. ONLY HAND METHODS FOR REMOVAL OF TREES AND STUMPS WITHIN PLANT PROTECTION ZONE WILL BE PERMITTED.
- REMOVE SHRUBS NOT OTHERWISE INDICATED FOR PRESERVATION. DIG OUT ROOT MASS TO A DEPTH OF 18 INCHES. REPLACE HOLE WITH IMPORTED TOPSOIL PER 329300.
- APPLY NON-SELECTIVE HERBICIDE (GLYOPHOSATE) TO EXISTING HERBACEOUS VEGETATION WITHIN THE PROJECT AREA NOT OTHERWISE INDICATED FOR PRESERVATION OR TRANSPLANTING. SPECIES TO BE HERBICIDED INCLUDE: VINCA MINOR (PERIWINKLE), AEGOPODIUM PODAGRARIA (GOUTWEED/GROUND ELDER), SEEDLING-SIZED HIBISCUS SYRIACUS (ROSE OF SHARON). REFER TO SPECIFICATION 311000.

LEGEND

REMOVE TREE AND GRIND STUMP

REMOVE AND GRIND STUMP

RELOCATE BUXUS X 'GREEN MOUNTAIN', SEE PLANTING PLAN

PLANT/SOIL PROTECTION FENCE AND LIMIT OF PLANT PROTECTION ZONE. SEE E/L3.0 AND SPECIFICATION 015639

PAVEMENT REMOVAL FOR NEW PLANTING AREA. AFTER REMOVING PAVING AND AGGREGATE BASE, SCARIFY SUBGRADE TO A DEPTH OF 6 INCHES AND INSTALL IMPORTED TOPSOIL TO A MINIMUM DEPTH OF 12 INCHES. LIGHTLY COMPACT AND WATER DOWN BEFORE INSTALLING NEW PLANT MATERIAL, TYP.

AMEND EXISTING TOPSOIL WITH 4 INCHES OF COMPOST. PLACE COMPOST DIRECTLY ON TOP OF EXISTING SOIL AND INTEGRATE WITH A POWERED CULTIVATOR TO A TOTAL DEPTH OF 8 INCHES. FINISHED GRADE OF SOIL AFTER PLANTING AND PRIOR TO MULCHING SHALL BE 3 INCHES BELOW TOP OF RETAINING WALL.

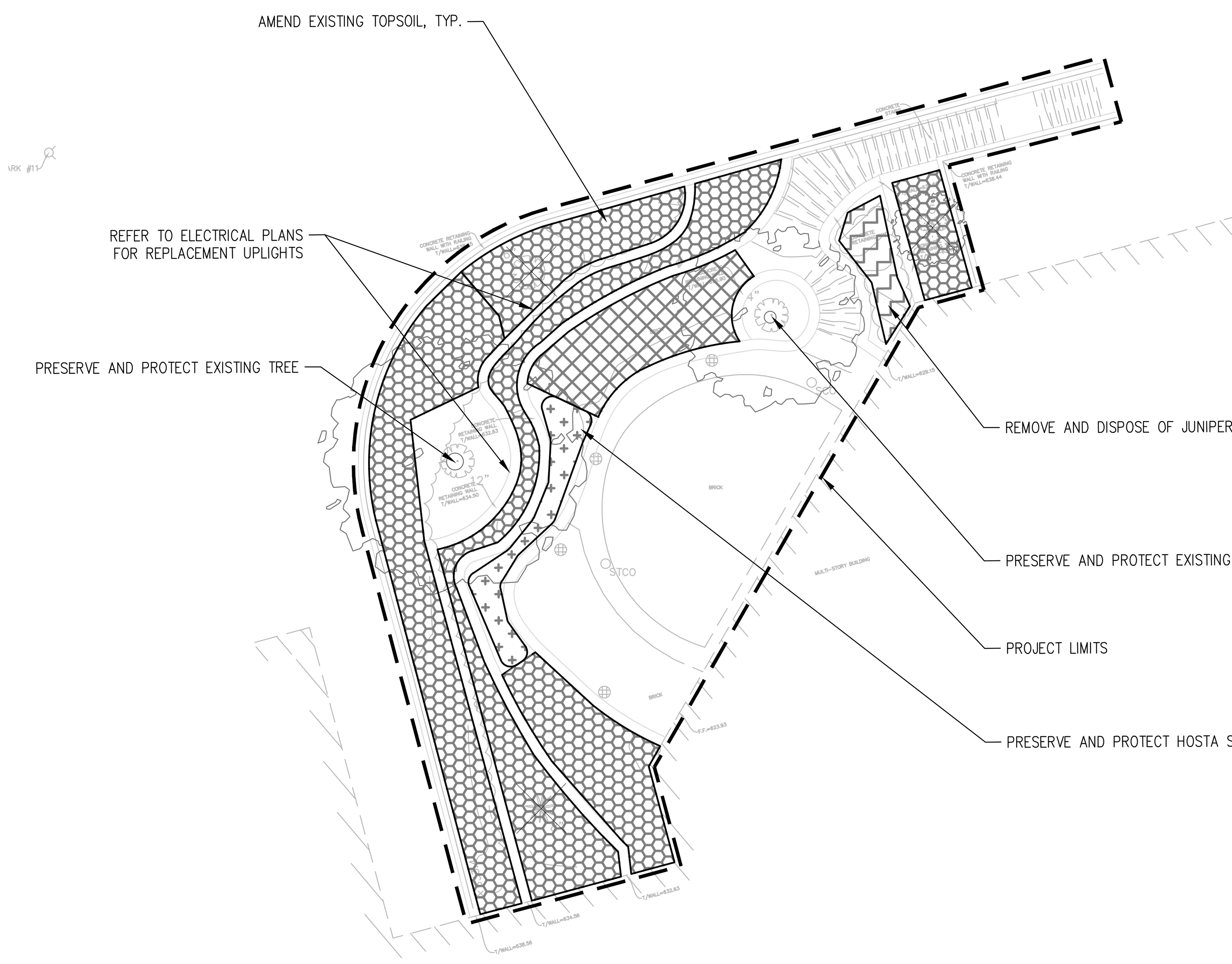
PRESERVE AND PROTECT EXISTING VEGETATION

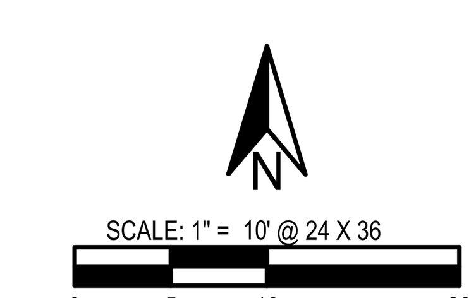
CLEAR AND GRUB WOODY VEGETATION, SEE SPECIFICATION 311000

PROJECT LIMITS

NOTES:

1. REFER TO SHEET 2 FOR SITE DEMOLITION.
2. REFER TO SPECIFICATION 015639 "TEMPORARY TREE AND PLANT PROTECTION".
3. REFER TO SPECIFICATION 311000 "SITE CLEARING".
4. PREPARE A TREE PRUNING SCHEDULE FOR ALL TREES TO REMAIN WITHIN THE PROJECT ARE PER SPECIFICATION 015639.
5. INSTALL GATES WITHIN PLANT PROTECTION FENCE PER SPECIFICATION 015639 AS NEEDED TO ACCESS AREAS DURING PLANTING OPERATIONS.
6. REMOVE AND DISPOSE OF STEEL EDGING WITHIN LIMITS OF WORK





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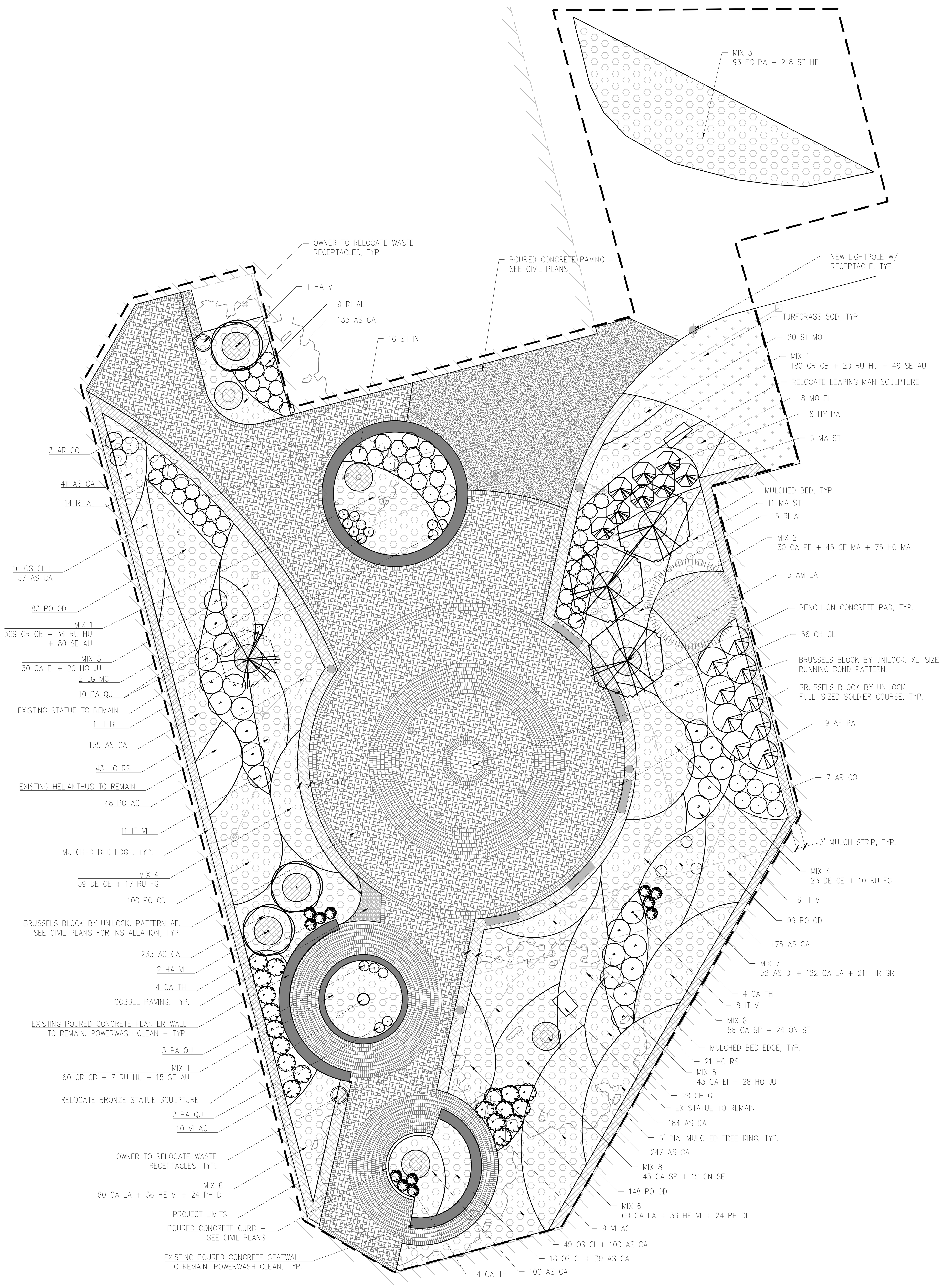
OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

CITY OF DES PLAINES, ILLINOIS

PLANT REMOVAL AND PROTECTION

PROJ. MGR.: JAC
PROJ. ASSOC.: JAC
DRAWN BY: BEP/IB
DATE: 10-27-22
SCALE: 1"=10'

SHEET
L1.0
OCC.DPIL13



GENERAL PLANTING NOTES

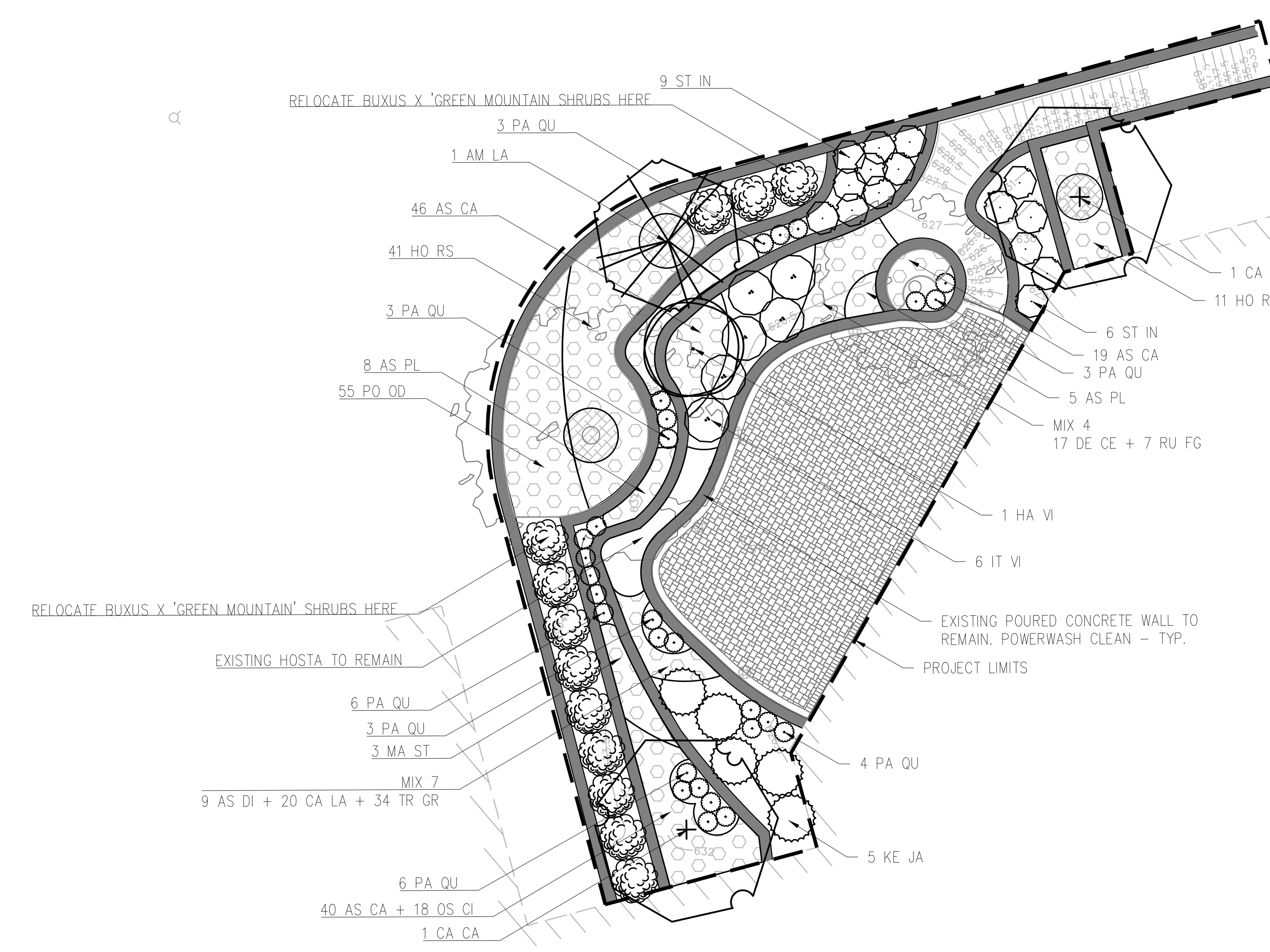
1. CONTRACTOR SHALL PROVIDE FRESH TOPSOIL OR AMEND EXISTING TOPSOIL AS INDICATED ON SHEET L1.0.
2. PRIOR TO CONSTRUCTION THE INSTALLER SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING CONSTRUCTION.
3. CONTRACTOR TO PROVIDE ALL PLANT MATERIAL AND ACCESSORIES.
4. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE/REPLACEMENT OF INSTALLED PLANTS PER THE SPECIFICATIONS. SECTION 329300 INCLUDES A WARRANTY/MAINTENANCE PERIOD OF:
   - 4.1. ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION FOR TURFGRASS;
   - 4.2. ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION FOR WOODY TREES AND SHRUBS;
   - 4.3. AND TWO YEARS FROM THE DATE OF SUBSTANTIAL COMPLETION FOR HERBACEOUS PERENNIALS AND GRASSES.
5. MAINTENANCE DURING THE WARRANTY/MAINTENANCE PERIOD INCLUDES, BUT IS NOT LIMITED TO: WATERING, HERBICIDE APPLICATIONS, MULCHING, PRUNING, MOWING, AND FERTILIZING.
6. NOTE THAT PLANT LIST QUANTITIES ARE FOR THE INSTALLER'S CONVENIENCE ONLY. INSTALLER SHALL VERIFY ALL QUANTITIES.
7. ALL PLANTED MATERIAL SIZES AND MEASUREMENTS, INCLUDING TRUNK, HEAD AND SPREAD SIZES, CONTAINER AND ROOT BALL SIZES, QUALITY AND CONDITION SHALL CONFORM TO THE STANDARD SET FORTH IN THE CURRENT ISSUE OF "AMERICAN STANDARD FOR NURSERY STOCK."
8. ALL PLANTS MUST BE HEALTHY, VIGOROUS MATERIAL, FREE OF PESTS AND DISEASE.
9. ALL PLANTS MUST BE CONTAINER-GROWN OR BALLED AND BURLAPPED AS INDICATED IN THE PLANT LIST.
10. ALL TREES MUST BE STRAIGHT TRUNKED AND FULL-HEADED AND MEET ALL REQUIREMENTS SPECIFIED.
11. ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT AND OWNER BEFORE, DURING AND AFTER INSTALLATION.
12. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS OR WRITTEN SPECIFICATIONS.
13. ALL PLANTING AREAS MUST BE COMPLETELY MULCHED AS SPECIFIED.
14. PRIOR TO MULCHING APPLY A PRE-EMERGENT HERBICIDE (APPROVED BY LANDSCAPE ARCHITECT AND OWNER) AS RECOMMENDED BY THE MANUFACTURER TO PREVENT RECURRING WEED AND GRASS GROWTH.
15. ALL TREES IN LEAF AFTER BEING DUG AT THE NURSERY SOURCE SHALL BE ACCLIMATED FOR TWO (2) WEEKS MINIMUM UNDER A MIST SYSTEM PRIOR TO INSTALLATION.
16. ALL LARGE PIECES OF STONE AND CONCRETE RESIDUE OVER 1" IN DIAMETER ARE TO BE REMOVED FROM PLANTING BEDS TO A 18" DEPTH AND REPLACED WITH CLEAN TOPSOIL.

LEGEND

- PROJECT LIMITS
- PROPOSED SMALL TREE. SEE A/L3.00
- PROPOSED LARGE SHRUB. SEE B/L3.00
- PROPOSED MEDIUM SHRUB. SEE B/L3.00
- PROPOSED SMALL SHRUB OR LARGE PERENNIAL. SEE C/L3.00
- EXISTING SHADE TREE
- EXISTING EVERGREEN TREE
- TRANSPLANTED SHRUB. SEE SPEC 329300, 3.10
- SMALL PERENNIALS
- MULCH BED
- TURFGRASS SOD
- COBBLE PAVING. SEE D/L3.00

NOTES

1. REFER TO CIVIL SHEETS FOR PAVING AND CURB LAYOUT, GRADING, DRAINAGE, AND RELATED DETAILS
2. REFER TO CIVIL SHEETS FOR BASES FOR RELOCATED SCULPTURE
3. REFER TO ELECTRICAL SHEETS FOR NEW LIGHTPOLES AND ELECTRICAL SERVICE.
4. REFER TO SPECIFICATION 329300 "EXTERIOR PLANTINGS" FOR PLANTS, SOIL, AND MULCH INSTALLATION AND MAINTENANCE.
5. REFER TO SPECIFICATION 129300 "SITE FURNISHINGS" FOR BENCHES.
6. CONTRACTOR SHALL STAKE ALL TREE/SRHUB LOCATIONS AND LAYOUT ALL HERBACEOUS PLANTING AREAS FOR REVIEW AND ACCEPTANCE BY LANDSCAPE ARCHITECT PRIOR TO PLANTING PER 329300, PART 3.4.
7. REFER TO CIVIL SHEETS FOR INSTALLATION OF UNIT PAVERS. CONTRACTOR SHALL FOLLOW PATTERNS SHOWN ON THIS SHEET.
   - 7.1. PLANS REQUIRE THE FOLLOWING QUANTITY OF PAVERS APPROXIMATELY:
     - 7.1.1. 2,772 SF OF HALF-SIZED BRUSSELS PAVERS
     - 7.1.2. 1,981 SF OF STANDARD-SIZED BRUSSELS PAVERS
     - 7.1.3. 1,569 SF OF XL-SIZED BRUSSELS PAVERS
   - 7.2. OWNER WILL SUPPLY CONTRACTOR WITH APPROXIMATELY 2,024 SQUARE FEET OF HALF-SIZE BRUSSELS PAVERS AND 2,942 SQUARE FEET OF STANDARD SIZE BRUSSELS PAVERS. CONTRACTOR MAY SAWCUT STANDARD SIZE UNITS IN HALF TO MAKE ADDITIONAL HALF-SIZED UNITS.
     - 7.2.1. CONTRACTOR SHALL CONFIRM ALL REQUIRED QUANTITIES AND PROVIDE ADDITIONAL PAVERS AS NEEDED TO COMPLETE THE WORK.



SCALE: 1" = 10' @ 24 X 36

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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
PLANTING PLAN

PROJ. MGR.:	JAC
PROJ. ASSOC.:	JAC
DRAWN BY:	BEP/IB
DATE:	10-27-22
SCALE:	1"=10'

SHEET
L2.0
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Individual Plants

SMALL TREES

Quantity	Symbol	Scientific Name	Common Name	Spacing	Container	Size	Comments
4	AM LA	Amelanchier laevis	Allegheny Serviceberry	NA	B&B	8' HT	MULTI-STEM
2	CA CA	Carpinus caroliniana	Blue Beech	NA	B&B	8' HT	MULTI-STEM
4	HA VI	Hamamelis Virginiana	Witch Hazel	NA	B&B	8' HT	MULTI-STEM

SHRUBS

Quantity	Symbol	Scientific Name	Common Name	Spacing	Container	Size	Comments
9	AE PA	Aesculus parviflora	Bottlebrush Buckeye	5' O.C.	CONT	5 GAL	
8	HY PA	Hydrangea paniculata 'Little Lime'	Little Lime Hydrangea	4' O.C.	CONT	3 GAL	
31	IT VI	Itea virginica 'Henry's Garnet'	Henry's Garnet Virginia Sweetspire	4' O.C.	CONT	4 GAL	
5	KE JA	Kerria japonica	Japanese Rose	4' O.C.	CONT	5 GAL	
1	LI BE	Lindera benzoin	Spicebush	NA	B&B	5' HT.	
38	RI AL	Ribes alpinum 'Green Mound'	Green Mound Mountain Currant	32" O.C.	CONT	3 GAL	
31	ST IN	Sephenandra incisa 'Crispa'	Lace Shrub	3' O.C.	CONT	3 GAL	
19	VI AC	Viburnum acerifolium	Mapleleaf Viburnum	3' O.C.	B&B	4' HT	

PERENNIALS

Quantity	Symbol	Scientific Name	Common Name	Spacing	Container	Size	Comments
10	AR CO	Aralia cordata 'Sun King'	Golden Japanese Spikenard	36" O.C.	CONT	1 GAL	
1549	AS CA	Asarum canadense	Wild Ginger	12" O.C.	CONT	1 PT	
12	CA TH	Caulophyllum thalictroides	Blue Cohosh	18" O.C.	CONT	1 GAL	
94	CH GL	Chelone glabra	Turtlehead	18" O.C.	CONT	1 GAL	
116	HO RS	Hosta 'Royal Standard'	Royal Standard Hosta	24" O.C.	CONT	1 GAL	
7	LG MC	Ligularia 'Britt-Marie Crawford'	Leopard Plant	36" O.C.	CONT	1 GAL	
8	MO FI	Monarda fistulosa	Bee Balm	32" O.C.	CONT	1 GAL	
482	PO OD	Polygonatum odoratum var. pluriflorum 'Variegatum'	Variegated Solomon's Seal	18" O.C.	CONT	1 QT	
20	ST MO	Stachys monieri 'Hummelo'	Betony	18" O.C.	CONT	1 GAL	

FERNS

Quantity	Symbol	Scientific Name	Common Name	Spacing	Container	Size	Comments
13	AS PL	Asplenium platyneuron	Ebony Spleenwort	18" O.C.	CONT	1 PT	
19	MA ST	Matteuccia struthiopteris	Ostritch Fern	36" O.C.	CONT	1 PT	
90	OS CI	Osmundastrum cinnamomeum	Cinnamon Fern	18" O.C.	CONT	1 PT	
48	PO AC	Polystichum acrostichoides	Christmas Fern	18" O.C.	CONT	1 PT	

VINES

Quantity	Symbol	Scientific Name	Common Name	Spacing	Container	Size	Comments
43	PA QU	Parthenocissus quinquefolia	Virgina Creeper	18" O.C.	CONT	1 QT	

Plant Mixes

Mix 1

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
549	CR CB	Crocus chrysanthus 'Cream Beauty'	Cream Beauty Crocus	0.3	6" O.C.	BULB	TOP SIZE	INTERPLANT BETWEEN RU HU AND SE AU
61	RU HU	Ruellia humilis	Prairie Petunia	0.3	18" O.C.	CONT	1 QT	
141	SE AU	Sesleria autumnalis	Autumn Moor Grass	0.7	18" O.C.	CONT	2 QT	

Mix 2

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
30	CA PE	Carex pennsylvanica	Penn Sedge	0.2	18" O.C.	CONT	1 QT	
45	GE MA	Geranium maculatum	Wild Geranium	0.3	18" O.C.	CONT	1 QT	
75	HO MA	Hosta 'May'	May Hosta	0.5	18" O.C.	CONT	1 QT	

Mix 3

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
93	EC PA	Echinacea pallida	Pale Purple Coneflower	0.3	18" O.C.	CONT	1 QT	
218	SP HE	Sporobolus heterolepis	Prairie Dropseed	0.7	18" O.C.	CONT	1 QT	

Mix 4

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
79	DE CE	Deschampsia cespitosa 'Goldtau'	Goldtau Tufted Hair Grass	0.7	18" O.C.	CONT	1 QT	
34	RU FG	Rudbeckia fulgida v. fulgida	Black-eyed Susan	0.3	18" O.C.	CONT	1 QT	

Mix 5

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
73	CA EI	Carex elata 'Aurea'	Bowles Golden Sedge	0.6	18" O.C.	CONT	1 QT	
48	HO JU	Hosta tardiana 'June'	June Hosta	0.4	18" O.C.	CONT	1 QT	

Mix 6

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
121	CA LA	Carex laxiculmis 'Hobb' BUNNY BLUE	Bunny Blue Claucous Woodland Sedge	0.5	12" O.C.	CONT	1 PT	
72	HE VI	Heuchera villosa	Hairy Allumroot	0.3	12" O.C.	CONT	1 PT	
48	PH DI	Phlox divaricata	Woodland Phlox	0.2	12" O.C.	CONT	1 PT	

Mix 7

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
61	AS DI	Aster divaricatus	White Wood Aster	0.3	12" O.C.	CONT	1 PT	
142	CA LA	Carex laxiculmis 'Hobb' BUNNY BLUE	Bunny Blue Claucous Woodland Sedge	0.7	12" O.C.	CONT	1 PT	
245	TR GR	Trillium grandiflorum	White Wake Robin	0.3	6" O.C.	CONT	1 PT	INTERPLANT BETWEEN AS DI AND CA LA

Mix 8

Quantity	Symbol	Scientific Name	Common Name	% of Planted Area	Spacing	Container	Size	Comments
99	CA SP	Carex sprengelii	Long Beaked Sedge	0.7	18" O.C.	CONT	1 QT	
43	ON SE	Onoclea sensibiis	Sensitive Fern	0.3	18" O.C.	CONT	1 QT	

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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION

CITY OF DES PLAINES, ILLINOIS

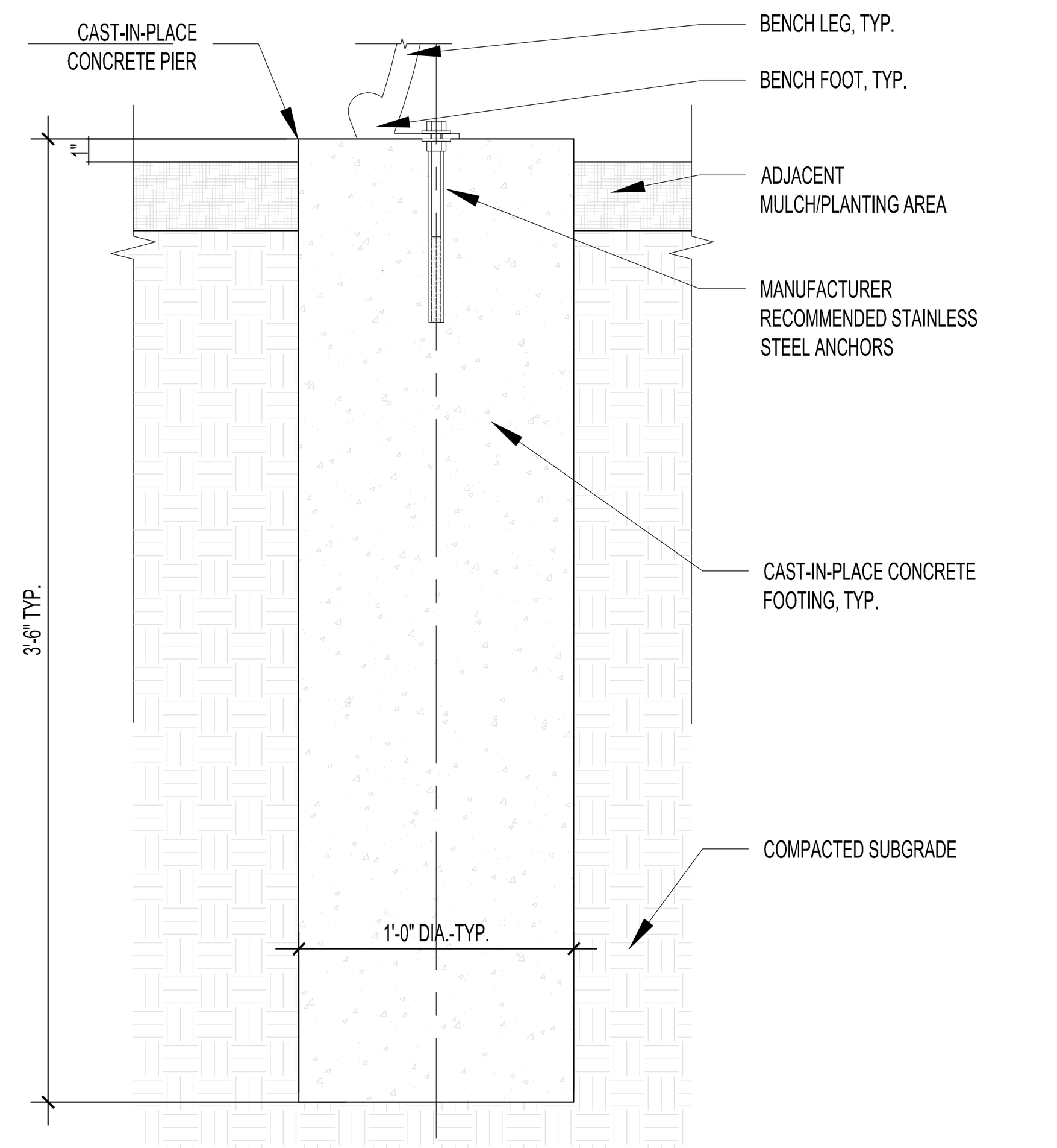
PLANT SCHEDULE

PROJ. MGR.: JAC
PROJ. ASSOC.: JAC
DRAWN BY: BEP/IB
DATE: 10-27-22
SCALE: 1"=10'

SHEET

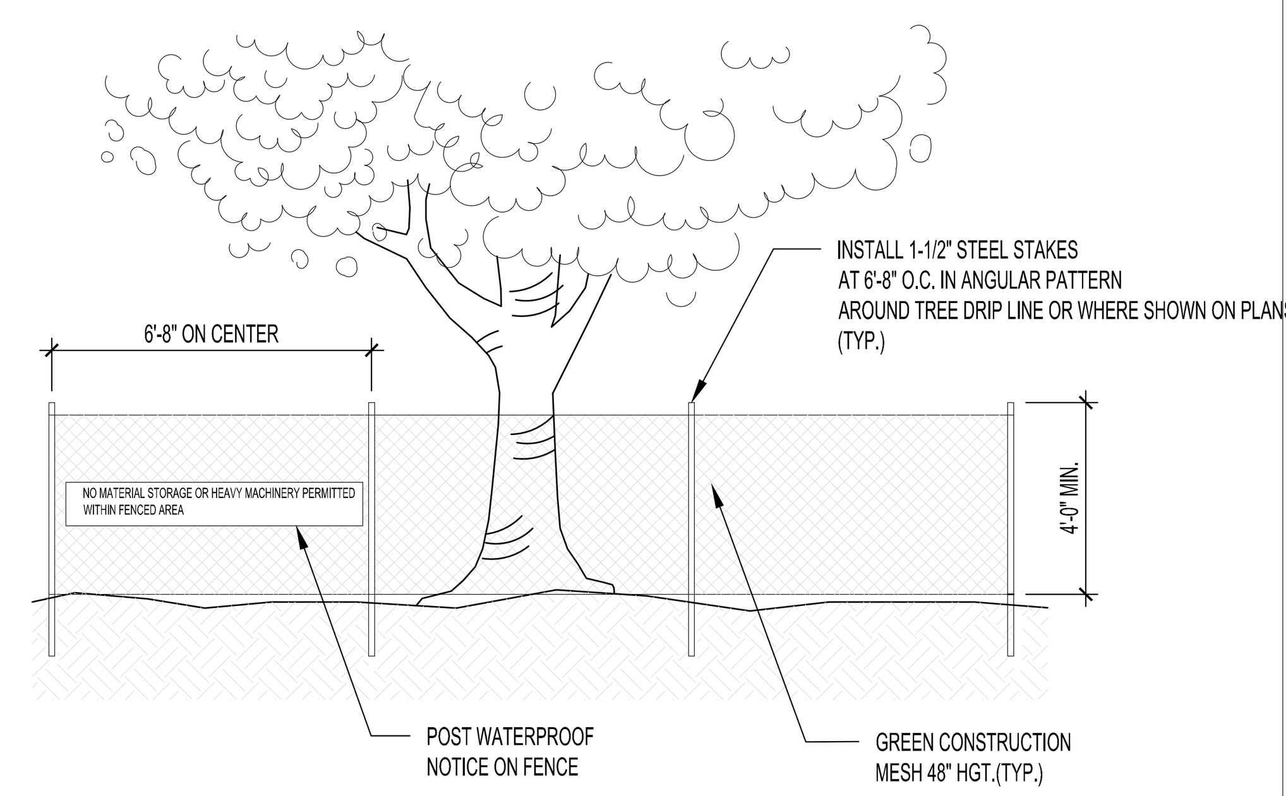
L2.1

OCC.DPIL13



G BENCH PIERS — 1 1/2"= 1'-0"

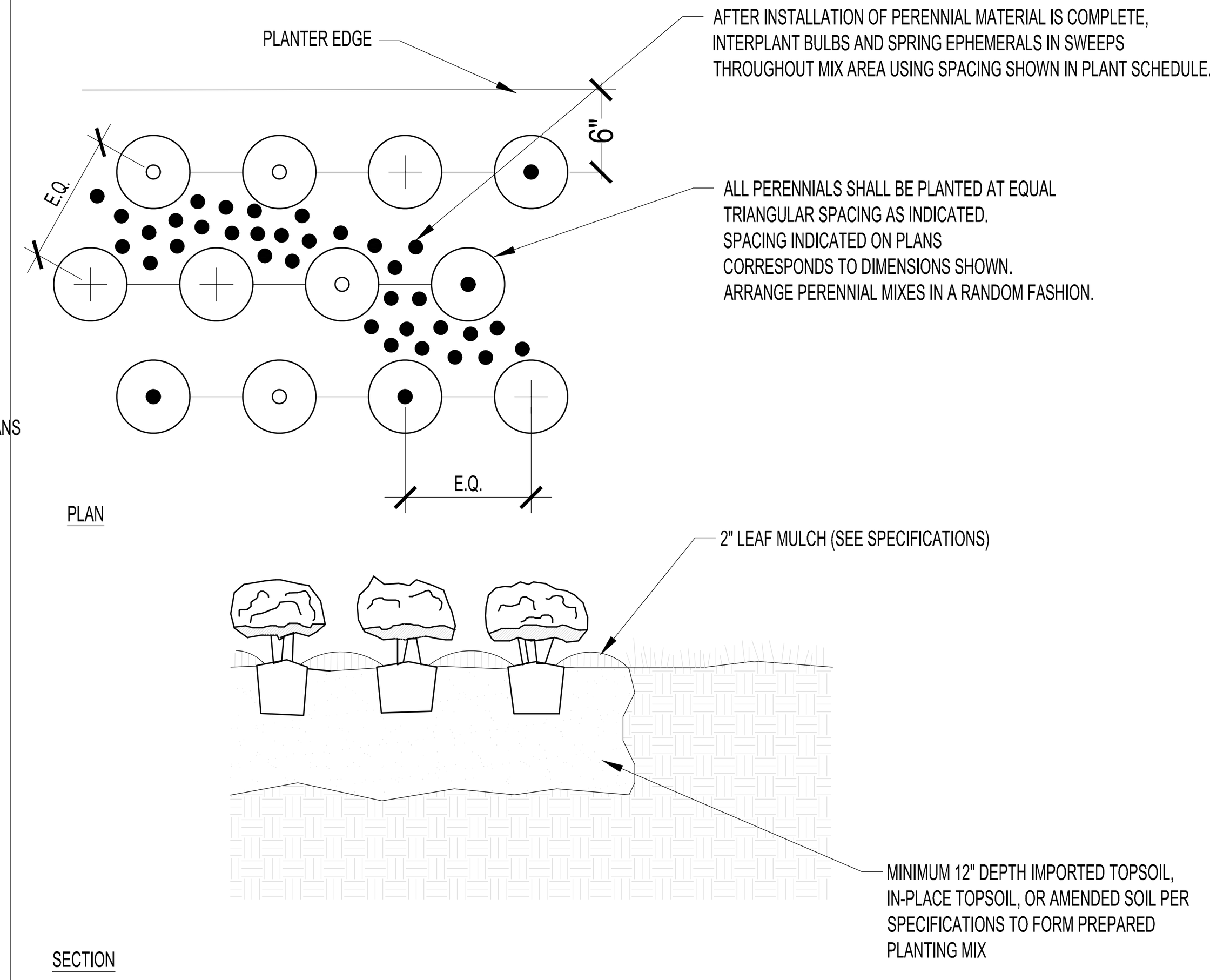
L3.0 Construction Details



NOTE:
1. MAINTAIN PLANT PROTECTION FENCE AROUND ALL EXISTING TREES, OR AS SHOWN IN PLANS, FOR THE ENTIRE DURATION OF THE PROJECT.
2. REFER TO SPECIFICATION 015639 "TEMPORARY TREE AND PLANT PROTECTION".

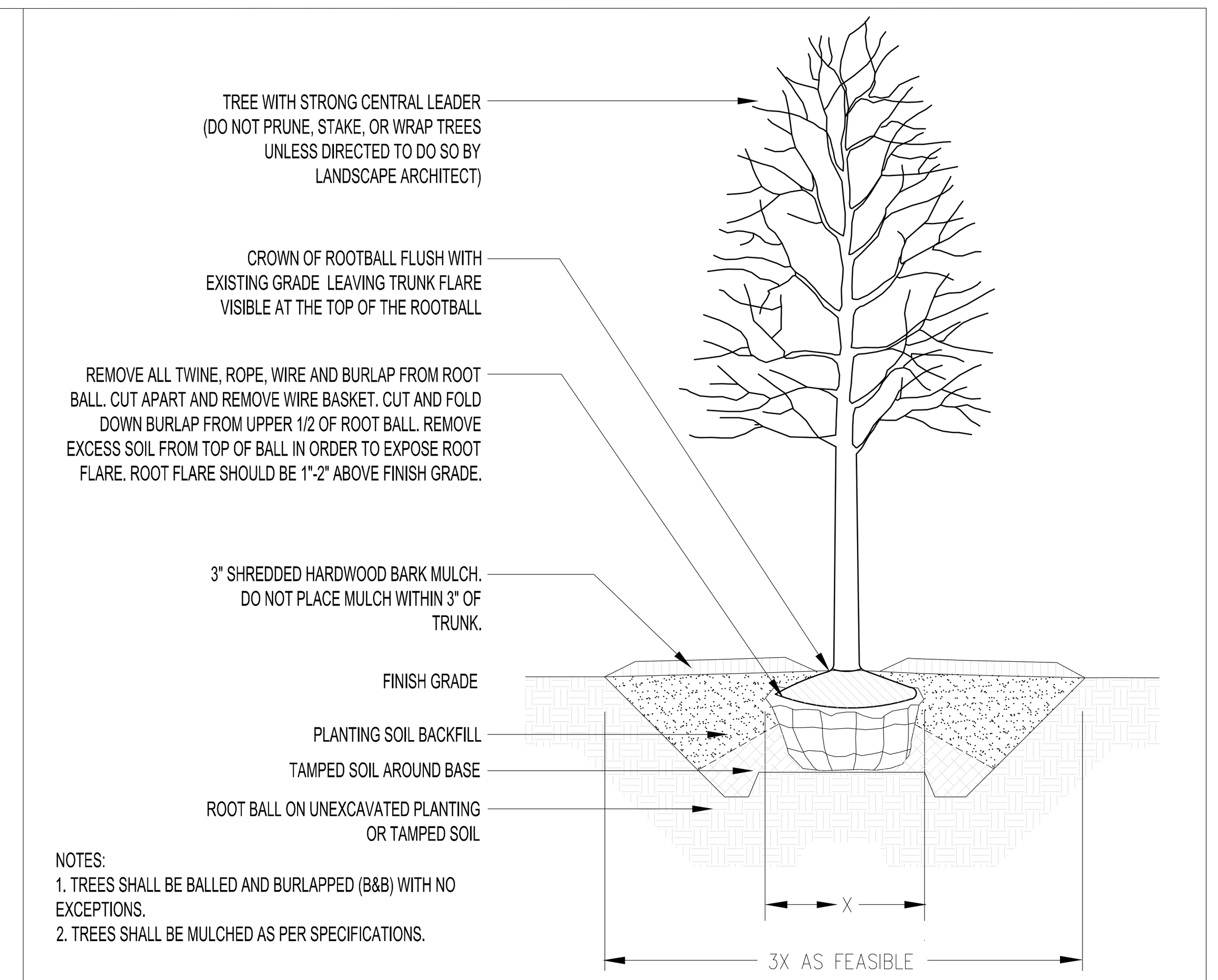
E PLANT PROTECTION ZONE — 1/4"=1'-0"

L3.0 Construction Details



C GROUNDCOVER AND PERENNIAL PLANTING — 1"=1'-0"

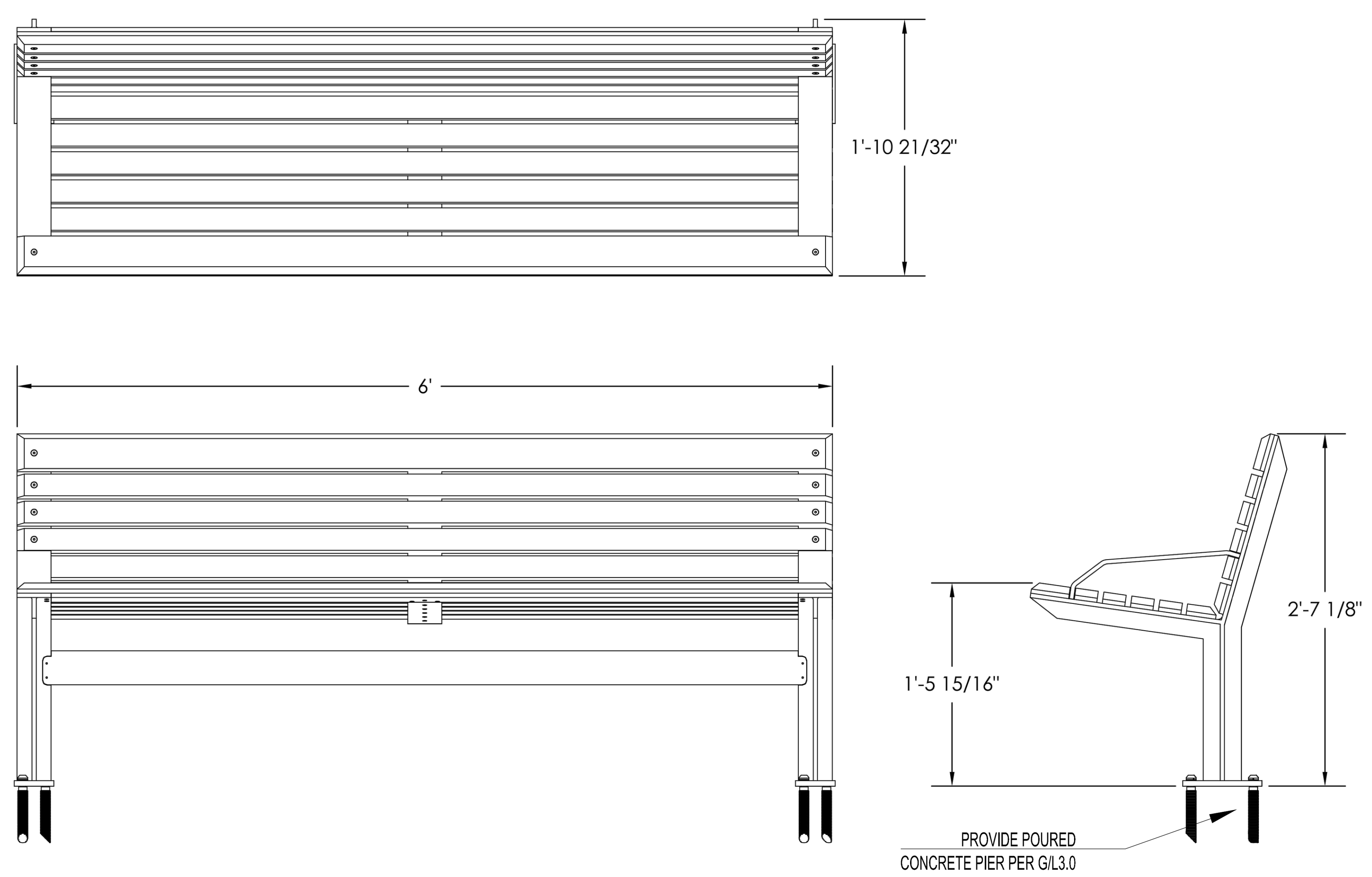
L3.0 Construction Details



NOTES:
1. TREES SHALL BE BALLED AND BURLAPPED (B&B) WITH NO EXCEPTIONS.
2. TREES SHALL BE MULCHED AS PER SPECIFICATIONS.

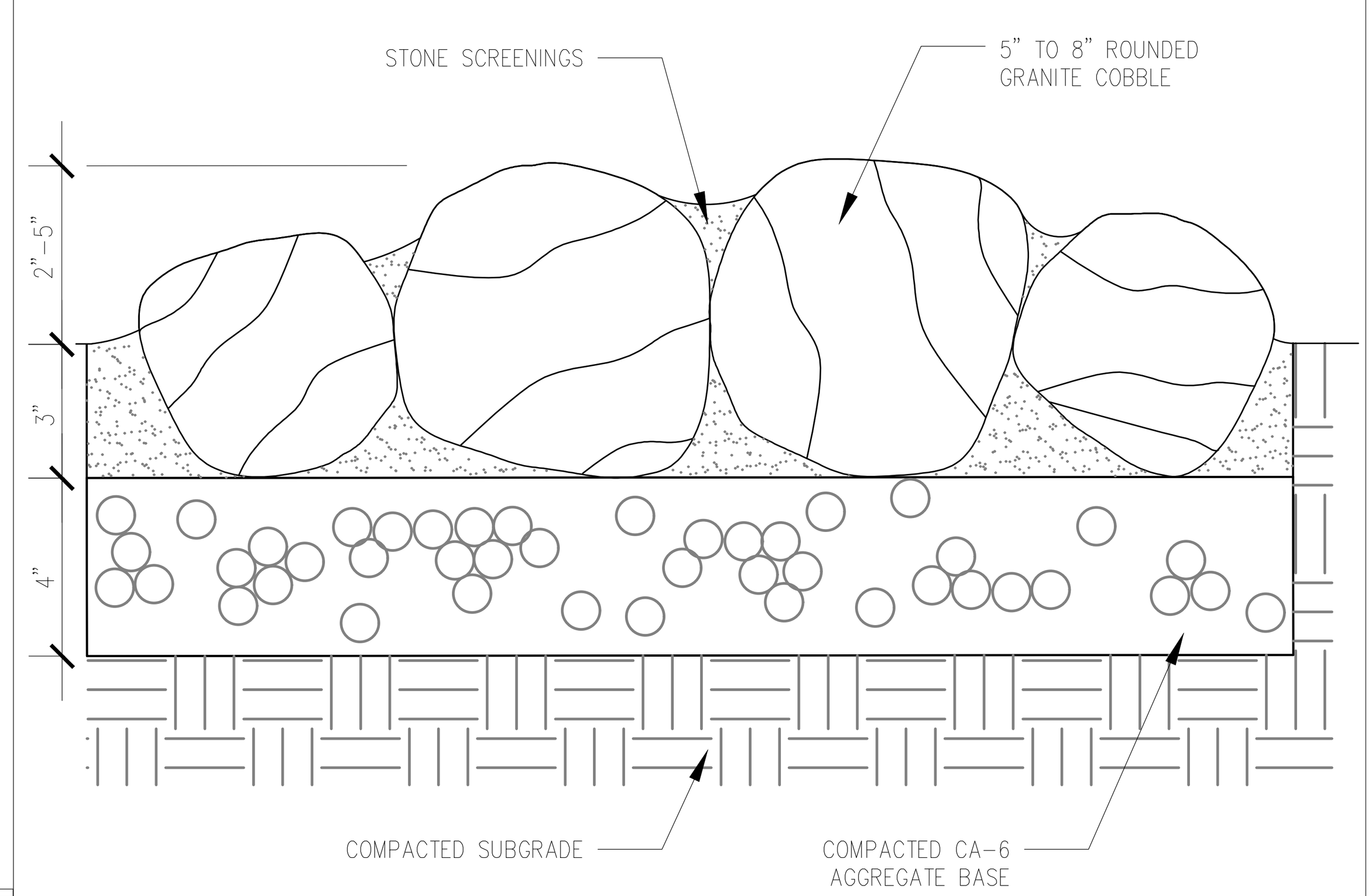
A DECIDUOUS TREE PLANTING — 3/8"=1'-0"

32 90 00_Deciduous Tree Planting-0.0313



APPROVAL	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES TOLERANCES (UNLESS OTHERWISE SPECIFIED): FRACTIONAL: ±1/32 ANGULAR/BEND: ±1° TWO PLACE DECIMAL ±.030 THREE PLACE DECIMAL ±.020	FORMS+SURFACES 30 Pine Street, Pittsburgh, PA 15223 Tel (412) 781-9003 Fax (412) 781-7840		
APPROVED BY :	MATERIAL: -SEE DATA SHEET	NAME / DATE — DWN: JJH, 7/20/16; CHK:	DESCRIPTION: KNIGHT BENCH, BACKED, 6 FOOT TWO ARMRESTS	
COMPANY :	FINISH: -SEE DATA SHEET	DO NOT SCALE DRAWING		
DATE :	WEIGHT: -SEE DATA SHEET SOURCE: - SCALE: N.T.S	PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF FORMS + SURFACES . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT WRITTEN PERMISSION IS PROHIBITED.	SIZE: B / DWG. NO.: SBKNI-072B-2A-SFM-TD	REV: 0 / SHEET: 1 OF 1

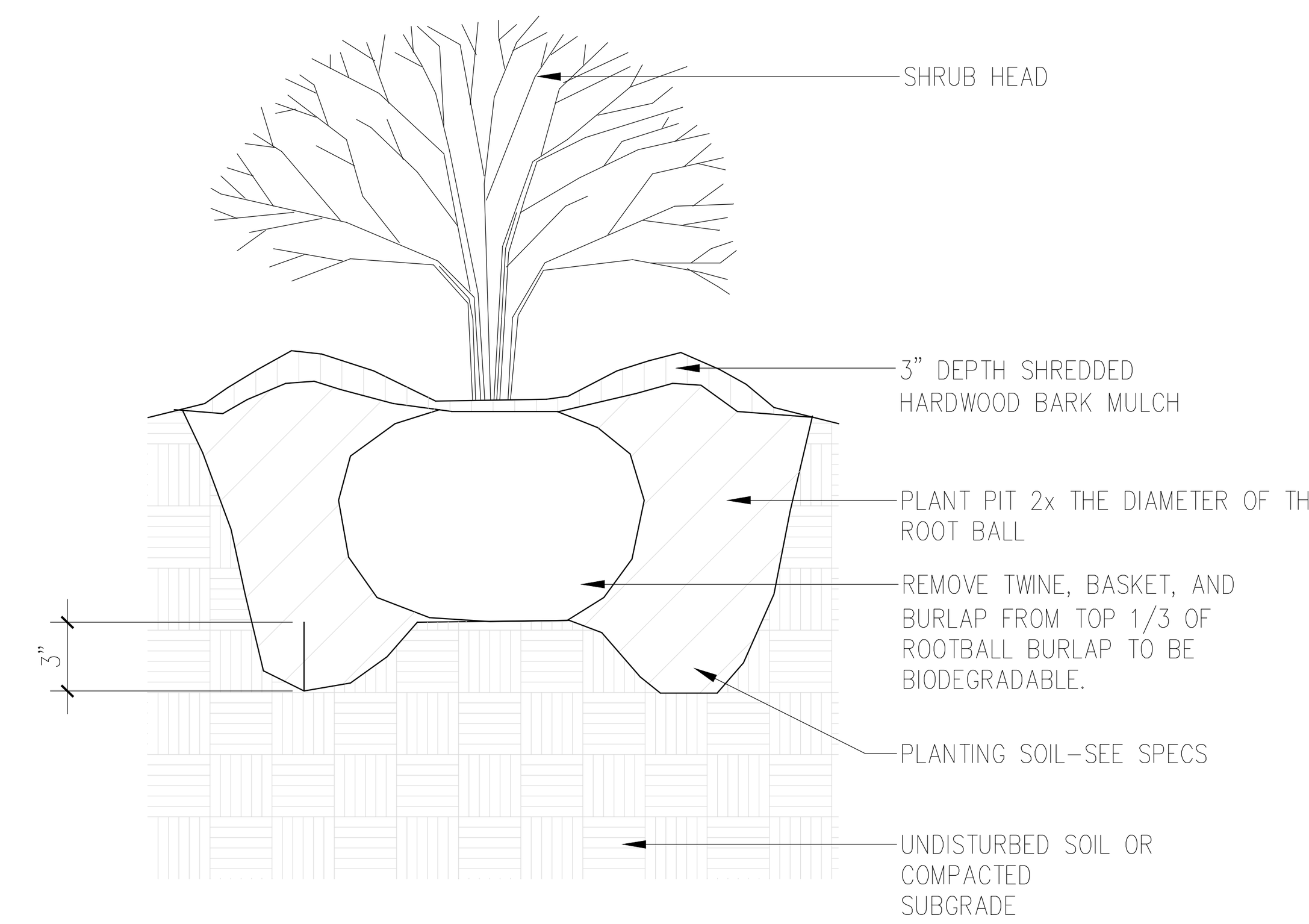
F BENCH — NTS



NOTES:
1. FIT COBBLE TOGETHER TIGHTLY AND TAMP INTO 1"-2" LAYER OF STONE SCREENINGS.
2. DRESS JOINTS WITH ADDITIONAL STONE SCREENINGS AND REPEAT WATERING IN PROCEDURES UNTIL SCREENINGS COMPLETELY FILL JOINTS. ALLOW WATER TO DRAIN COMPLETELY BEFORE ADDING ADDITIONAL SCREENINGS.

D COBBLE PAVING — 3" = 1'-0"

L3.0 Construction Details.dwg



B SHRUB PLANTING — 1 1/2" = 1'-0"

32 93 00_Shrub Planting_02_0.1250

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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
LANDSCAPE DETAILS

PROJ. MGR.: JAC
PROJ. ASSOC.: JAC
DRAWN BY: BEP/IB
DATE: 10-27-22
SCALE: 1"=10'

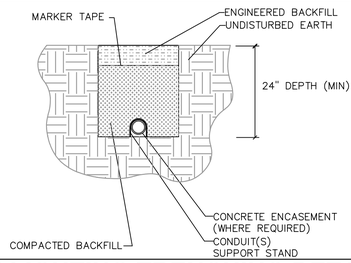
SHEET
L3.0
OCC.DPIL13

ELECTRICAL SYMBOLS LIST

SYMBOL CEILING	SYMBOL WALL	SYMBOL FLOOR	DESCRIPTION
			LED POLE MOUNT FIXTURE TYPE. SEE LIGHTING FIXTURE SCHEDULE IN SPECIFICATIONS.
		PB	PULL BOX. SIZE AS NOTED.
			WIRING IN CONDUIT CONCEALED ABOVE CEILING, IN WALL AND UNDER FLOOR OR UNDERGROUND.
			WIRING IN CONDUIT EXPOSED ON CEILING OR WALL.
			BRANCH CIRCUIT WIRING IN CONDUIT HOMERUN TO PANEL. ONE ARROW PER HOMERUN. SLASHES INDICATE NUMBER OF CONDUCTORS.
			INDICATES GROUND CONDUCTOR.
			INDICATES ISOLATED GROUND CONDUCTOR.
			PANEL ABOVE 240V.

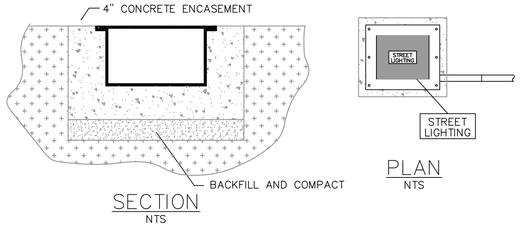
MISCELLANEOUS

RTU 1	HVAC EQUIPMENT IDENTIFICATION
16.01	KEYNOTE IDENTIFICATION
1 / E7.1 DETAIL NUMBER / DRAWING NUMBER	DETAIL IDENTIFICATION



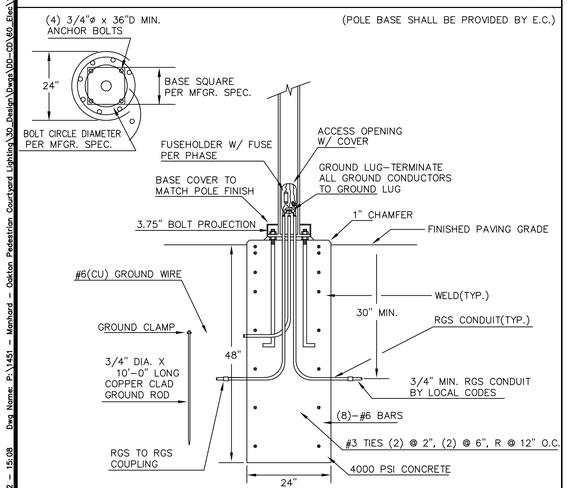
SITE LIGHTING TRENCHING DETAIL 5

SCALE: N.T.S.



SITE LIGHTING PULL BOX DETAIL 4

SCALE: N.T.S.



WALKWAY POLE BASE DETAIL 3

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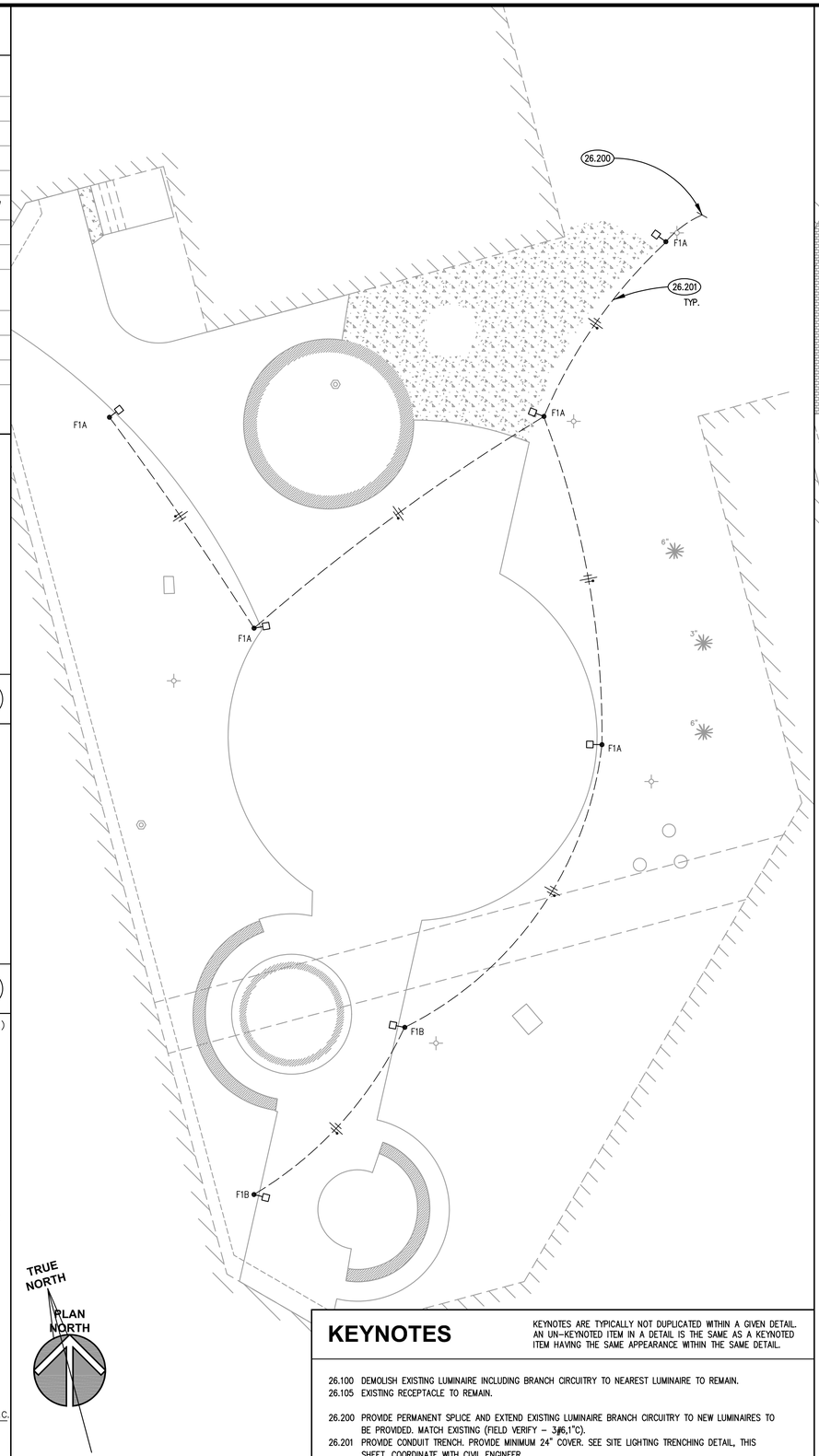


KEYNOTES

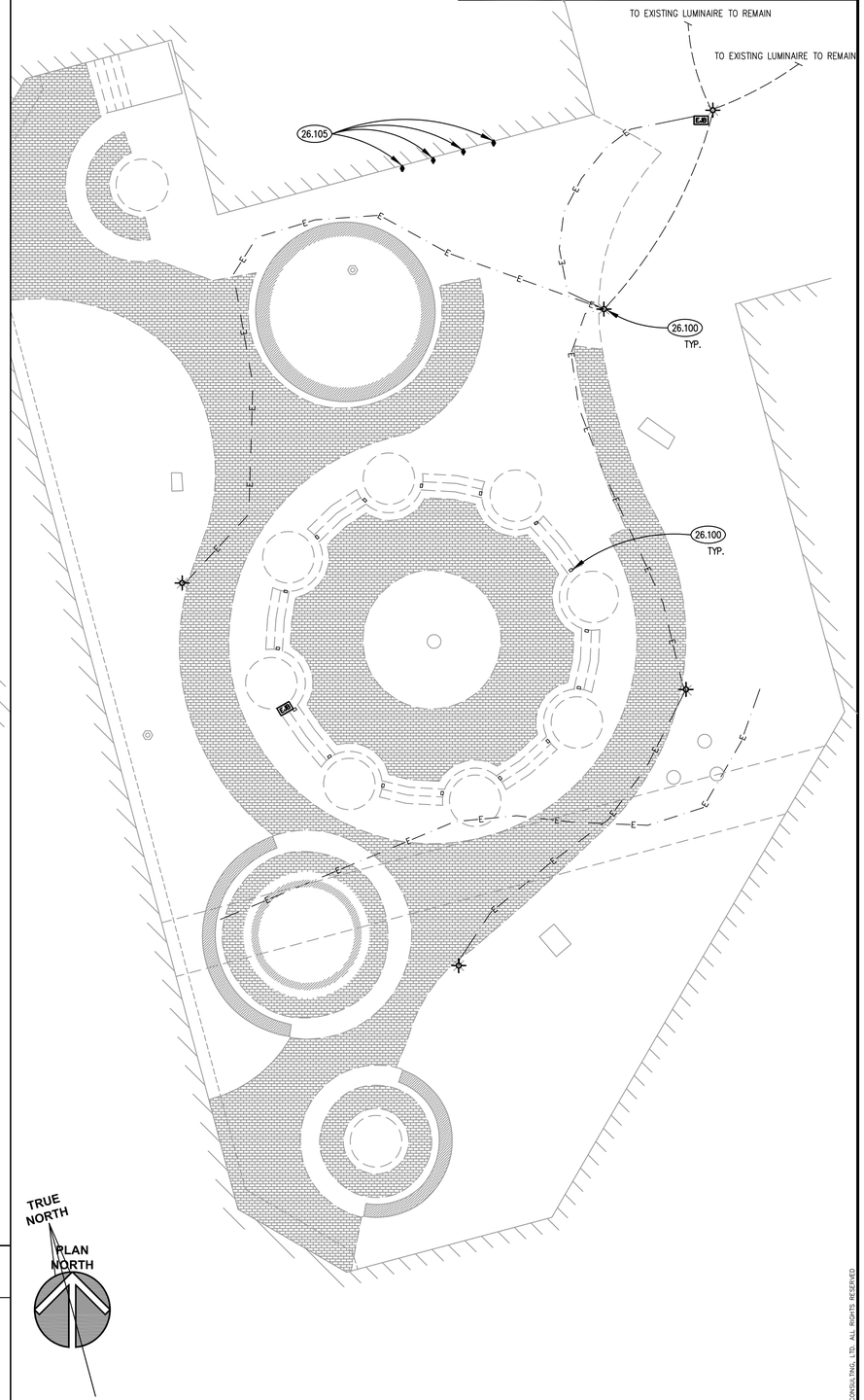
KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

26.100 DEMOLISH EXISTING LUMINAIRE INCLUDING BRANCH CIRCUITRY TO NEAREST LUMINAIRE TO REMAIN.
26.105 EXISTING RECEPTACLE TO REMAIN.

26.200 PROVIDE PERMANENT SPLICE AND EXTEND EXISTING LUMINAIRE BRANCH CIRCUITRY TO NEW LUMINAIRES TO BE PROVIDED. MATCH EXISTING (FIELD VERIFY - 3#6,1"C).
26.201 PROVIDE CONDUIT TRENCH. PROVIDE MINIMUM 24" COVER. SEE SITE LIGHTING TRENCHING DETAIL, THIS SHEET. COORDINATE WITH CIVIL ENGINEER.

ELECTRICAL SITE PLAN 2

SCALE: 1" = 10'-0"



ELECTRICAL DEMOLITION SITE PLAN 1

SCALE: 1" = 10'-0"

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Kluber Architects + Engineers

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Manhard CONSULTING LTD
116 West Illinois, 7th Floor, Chicago, IL 60654
Civil Engineers • Surveyors • Water Resource Engineers • Architects • Structural Engineers
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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
ELECTRICAL PLANS - UPPER COURTYARD

PROJ. MGR.:	MTK
PROJ. ASSOC.:	MTK
DRAWN BY:	ATR
DATE:	11/04/22
SCALE:	1" = 10'-0"

SHEET
E1.0
22-416-1451

100% CD DRAWINGS 11-04-22

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KEYNOTES

KEYNOTES ARE TYPICALLY NOT DUPLICATED WITHIN A GIVEN DETAIL. AN UN-KEYNOTED ITEM IN A DETAIL IS THE SAME AS A KEYNOTED ITEM HAVING THE SAME APPEARANCE WITHIN THE SAME DETAIL.

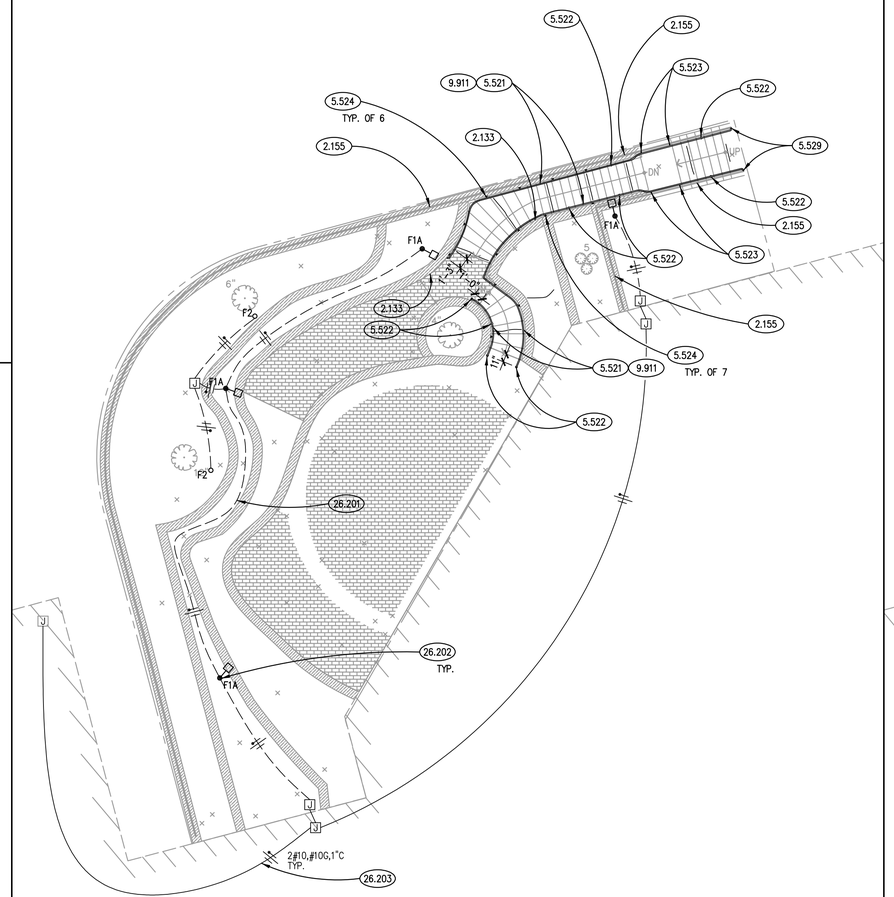
2.155 EXISTING PAINTED STEEL PIPE GUARD RAIL TO REMAIN.
2.133 EXISTING CAST-IN-PLACE CONCRETE RETAINING WALL.
2.455 REMOVE EXISTING STEEL PIPE HANDRAIL AND SUPPORT BRACKETS; EXTRACT EXISTING BRACKET SUPPORT ANCHORS AND FILL ANCHOR HOLES WITH NON-SHRINK, NON-METALLIC CEMENT GROUT IN COLOR TO MATCH EXISTING CONCRETE.

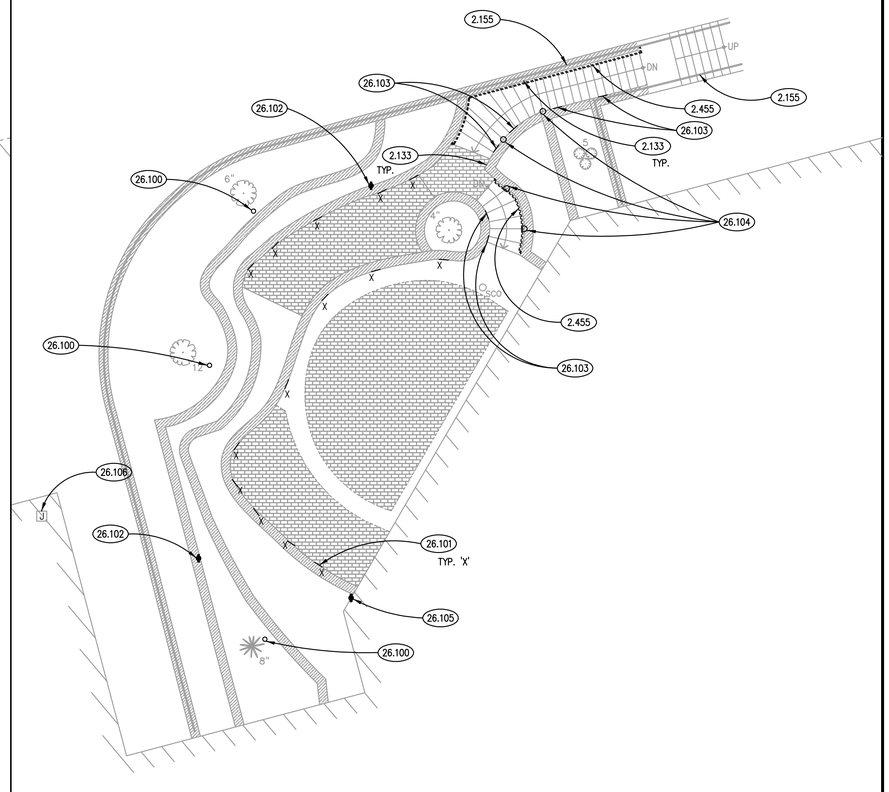
5.521 PIPE RAILING: HANDRAIL; 1-1/4" (NOM.) PLAIN STEEL SCHEDULE 40 PIPE; SET 2'-10" ABOVE ADJACENT WALKING SURFACE AND 2'-10" ABOVE SLOPED LINE CONNECTING NOSINGS OF STAIRS; FABRICATE AND INSTALL HANDRAIL SUCH THAT THERE IS A MINIMUM OF 1-1/2" CLEAR BETWEEN HANDRAIL AND EXISTING CONCRETE WALLS AND GUARDS; LOCATE SUPPORTS NOT MORE THAN 4'-0" O.C.; SHOP-PRIME FOR FIELD PAINTING; FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO PREPARATION OF SHOP DRAWINGS.
5.522 PIPE RAILING SUPPORT: 1-1/4" (NOM.) PLAIN STEEL SCHEDULE 40 PIPE; CORE AND SET 6" (MIN.) INTO EXISTING CONCRETE SLAB/STAIR USING NON-SHRINK, NON-METALLIC GROUT; SHOP PRIME FOR FIELD PAINTING.
5.523 PIPE RAILING SUPPORT: 3/4" PLAIN STEEL BAR BENT TO "L" SHAPE; WELD TO HANDRAIL AND EXISTING GUARD RAIL POST; SHOP-PRIME FOR FIELD PAINTING.
5.524 PIPE RAILING SUPPORT: 3/4" PLAIN STEEL BAR BENT TO "L" SHAPE AND WELDED TO HANDRAIL AND 3" DIA. X 1/4" THICK PLAIN STEEL MOUNTING FLANGE PLATE WITH 3 HOLES; SHOP-PRIME FOR FIELD PAINTING; SURFACE-MOUNT TO FACE OF EXISTING CONCRETE USING 3/8" GALVANIZED STEEL EXPANSION ANCHORS.
5.529 PIPE RAILING ASSEMBLY: RETURN AND WELD END OF NEW HANDRAIL TO EXISTING GUARD RAIL POST.

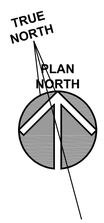
9.911 PAINT HANDRAIL, MOUNTING BRACKETS AND MOUNTING POSTS; COLOR TO MATCH EXISTING GUARD RAIL; BLEND NEW PAINT INTO EXISTING AT WELD POINTS ON EXISTING GUARD RAIL.

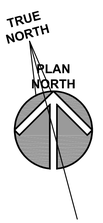
26.100 DEMOLISH EXISTING LUMINAIRE INCLUDING BRANCH CIRCUITRY TO NEAREST LUMINAIRE TO REMAIN.
26.101 EXISTING STEP LIGHTING TO REMAIN (ABANDON IN PLACE).
26.102 EXISTING RECEPTACLE TO BE REMOVED.
26.103 EXISTING STEP LIGHTING TO REMAIN (ABANDON IN PLACE). PROVIDE NEW LOUVERED COVER PLATE. MATCH EXISTING. FINISH: SILVER. NOMINAL SIZE: 10 3/8" X 5 3/4".
26.104 EXISTING SURFACE MOUNTED STEP LIGHTING TO BE DEMOLISHED.
26.105 EXISTING RECEPTACLE TO REMAIN.
26.106 NOMINAL LOCATION OF EXISTING SITE LIGHTING HOMERUN ACCORDING TO EXISTING RECORD DRAWINGS.

26.201 PROVIDE CONDUIT TRENCH. PROVIDE MINIMUM 24" COVER. SEE SITE LIGHTING TRENCHING DETAIL, THIS SHEET. COORDINATE WITH CIVIL ENGINEER.
26.202 PROVIDE HELICAL PILE POLE FOUNDATION AT GRADE. NOMINAL SHAFT SIZE 6-5/8", LENGTH 60".
26.203 FIELD LOCATE EXISTING SITE LIGHTING HOMERUN. PROVIDE PERMANENT SPLICE AND EXTEND BRANCH CIRCUITRY TO NEW LIGHTING TO BE INSTALLED.









ARCHITECTURAL & ELECTRICAL PLAN (2)
SCALE: 1/8" = 1'-0"

ARCHITECTURAL & ELECTRICAL DEMOLITION PLAN (1)
SCALE: 1/8" = 1"-0"

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DRAWN BY	REVISIONS	DATE

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116 West Illinois, 7th Floor, Chicago, IL 60654
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OAKTON COMMUNITY COLLEGE COURTYARD REHABILITATION
CITY OF DES PLAINES, ILLINOIS
ARCHITECTURAL & ELECTRICAL PLANS - LOWER COURTYARD

PROJ. MGR.:	MTK
PROJ. ASSOC.:	MTK
DRAWN BY:	ATR
DATE:	11/04/22
SCALE:	1" = 10'-0"

SHEET
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22-416-1451

100% CD DRAWINGS 11-04-22

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3. To include the following: ADDENDUM #2 CHANGE LOG FOR OAKTON COLLEGE COURTYARD REHABILITATION CITY OF DES PLAINES, ILLINOIS

ADDENDUM #2 CHANGE LOG
FOR
OAKTON COLLEGE COURTYARD REHABILITATION
CITY OF DES PLANES, ILLINOIS

Prepared by:

EVAN BOULWARE
MANHARD CONSULTING, LTD.
116 W. ILLINOIS ST., FLOOR 7
CHICAGO, ILLINOIS 60654
PHONE: (847) 325-7093

OCC.DPIL.13
January 13, 2023

ADDENDUM #2 CHANGE LOG
FOR
OAKTON COLLEGE COURTYARD REHABILITATION

Summary - The purpose of this report is to present all pay item changes included in the updated plan set in the issued Addendum #2. For exact locations of the noted updates please see the latest issue of the final plan set Oakton Community College Courtyard Rehabilitation.

PLAN SET REVISIONS:

Sheet 1 – Title Sheet
- Grading and utility sheets separated for clarity

Sheet 2 – Existing Conditions and Demolition Plan
- Existing electrical junction box in southwest quadrant of lowered central courtyard to be adjusted to grade
- Existing concrete walk in lowered courtyard called out as to be removed

Sheet 4 – Grading Plan
- Additional inlet protection added to proposed inlet southwest of central courtyard area.
- New weep holes to be drilled into concrete wall at locations where existing weepholes are blocked by new paver layout in lower courtyard area
- Alternate option calling for trench drains in lower courtyard to be removed and replaced if adjusting to grade is found to be infeasible
- Sanitary manhole in raised planter to be sawcut to proposed rim grade

Sheet 5 – Utility Plan
- Utility notes added for clarity
- Inlet proposed southwest of central courtyard area
- 44’-8” Storm line proposed to tee into existing storm under central courtyard area

Sheet 6 – Construction Details
- Sidewalk detail added
- Inlet detail added
- Material standards detail added
- Pipe installation detail added

BID ITEM REVISIONS:

90	ADJUST ELECTRICAL JUNCTION BOX TO GRADE		EA
91	DRILL WEEP HOLES INTO CONCRETE WALL		LS
92	6" TRENCH DRAIN FRAME AND GRATE		EA
93	2'-0" DIAMETER INLET		EA
94	8" PVC STORM SEWER PIPE AND TRENCH BACKFILL		LF

All other specifications, terms, and conditions noted in the original bid documents remain in effect and unchanged.

Please sign and return this addendum with your bid.