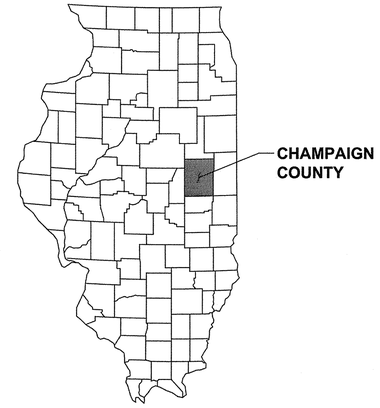
SITE ENGINEERING PLANS FOR

CHAMPAIGN COUNTY SATELLITE JAIL ASPHALT PROJECT ITB # 2017-010

502 SOUTH LIERMAN AVENUE CITY OF URBANA, ILLINOIS



NATURAL GAS AND ELECTRIC

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EMAIL: MFULLER@AMEREN.COM

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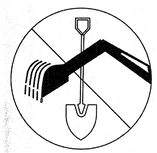

TO OBTAIN THE LOCATIONS OF PARTICIPANTS' UNDERGROUND FACILITIES BEFORE YOU DIG IN ILLINOIS, CALL J.U.L.I.E. TOLL FREE: 1-800-892-0123.

ILLINOIS STATUTE REQUIRES A MINIMUM OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.

NOTE: UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL HAVE APPROPRIATE PARTICIPANT UTILITIES MARK EXACT UTILITY LOCATIONS PRIOR TO CONSTRUCTION.

BENCHMARK #1000=739.13
Chiseled square on north side of light pole base located on the east side of the south parking lot (visitor lot).

SURFACE FEATURES

	CONCRETE CURB AND GUTTER
	EDGE OF CONCRETE PAVEMENT
	EDGE OF ASPHALT PAVEMENT
	EDGE OF GRAVEL
	PAVEMENT MARKING
	EDGE OF CONCRETE SIDEWALK
	DITCH FLOWLINE
	TOP OR BOTTOM OF SLOPE
OH	OVERHEAD LINE WITH UTILITY POLE
	EDGE OF LANDSCAPING
	SHRUB LINE

UNDERGROUND UTILITIES

SS	STORM SEWER PIPE
W	WATER LINE

SURVEY MONUMENTS

	BENCHMARK

STRUCTURES

	CLEAN OUT
D	STORM SEWER MANHOLE
	WATER VALVE
	POST INDICATOR VALVE
	POWER POLE WITH ELECTRIC METER
	LIGHT POLE
	YARD LIGHT
	TELEPHONE BOX OR PEDESTAL
M	ELECTRIC METER
HH	HAND HOLE
	BOLLARD, POST, OR GUARD POST
	SIGN
	FLAG POLE
+782.45	SPOT ELEVATION
754	CONTOUR LINE WITH ELEVATION
12"	DECIDUOUS TREE WITH TRUNK DIAMETER

ABBREVIATIONS AND ANNOTATION

ASPH.	ASPHALT SURFACE
CONC.	CONCRETE SURFACE
GRAV.	GRAVEL SURFACE
ADS / CPP	CORRUGATED HDPE PIPE
RCP	REINFORCED CONCRETE PIPE
C.O.	CLEAN OUT
C&G	CURB AND GUTTER
EX.	EXISTING
F.F.	FINISHED FLOOR ELEVATION
I.E.	PIPE INVERT ELEVATION
INF.	INFLUENT PIPE INVERT ELEVATION
EFF.	EFFLUENT PIPE INVERT ELEVATION
R&R	REMOVE AND REPLACE
TYP.	TYPICAL
B.M.	BENCHMARK

PROPOSED SURFACE FEATURES

	PROPOSED EDGE OF PAVEMENT
	PROPOSED PAVEMENT MARKING
	PROPOSED EDGE OF CONCRETE SIDEWALK
	PROPOSED DRAINAGE SWALE
+797.77	PROPOSED SPOT ELEVATION

PROPOSED STRUCTURES

	PROPOSED BUMPER BLOCK

PROPOSED EROSION CONTROL MEASURES

	SILT FENCE
	STORM SEWER SILT BASKET / INLET PROTECTION

PROPOSED MISCELLANEOUS

	PROPOSED REMOVAL AND REPLACEMENT AREA
	PROPOSED NEW PAVEMENT AREA
	PROPOSED PAVEMENT REHABILITATION AREA

SHEET INDEX

SIGNED: _____
David E. Atchley
Illinois Licensed Professional Engineer No. 47257
License Expires November 30, 2017

DATED: 8/9/17

DAVID E. ATCHLEY 062-047257 LICENSED PROFESSIONAL ENGINEER OF ILLINOIS

SHEETS: All civil ("C") sheets.

PROJECT NO.:	11217022	SCALE: AS SHOWN	NO.	DATE	REVISION	BY
PROJECT DATE:	2017/8/9	DRAWN BY: CBP	1	2017/7/14	REVISED KEYNOTE 7	CBP
F.B. :	.	CHECKED BY: DEA	2	2017/8/9	REVISED KEYNOTES AND BID BREAKDOWN	CBP
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PLOT DATE: 8/9/17, \\msa-ps.com\fs\Projects\11200s\11210s\11217\11217022\CADD\C3D\11217022 Design.dwg

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CHAMPAIGN COUNTY SATELLITE JAIL
ASPHALT PROJECT ITB # 2017-010
CITY OF URBANA, CHAMPAIGN COUNTY, ILLINOIS

COVER SHEET

FILE NO. 11217022
SHEET C1.1

EXISTING TOPOGRAPHY NOTES

1. Field work for this plat of survey was completed on June 26 and 27, 2017.
2. The surveyor did not make an examination or consider environmental subsurface conditions as part of this survey.
3. The locations and characteristics of underground utilities as shown on this survey are based on above-ground structures observed by and maps provided to the surveyor. The surveyor did not make excavations to verify the existence, exact location, size, depth, or condition of any buried utilities or structures.
4. Surfaces not otherwise labeled can be assumed to have grass surface covering.
5. Bearings shown on this plat of survey are on the Illinois State Plane, East Zone (NAD 83) coordinate system. Elevations shown on this plat of survey are based on the NAVD 88 vertical datum.

GENERAL CONSTRUCTION NOTES

1. All grading, sewer, pavement work and any other miscellaneous work shall be performed in accordance with the current edition of The Illinois Department of Transportation "Standard Specifications for Road and Bridge Construction," the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois," the current City of Urbana New Street and Subdivision Ordinances, and the current Urbana & Champaign Sanitary District ordinances. In case of conflict, the most stringent shall hold.
2. The Contractor is responsible to maintain the vertical grades and the horizontal alignment as shown on the plans of all storm sewers, sanitary sewer, street pavement, sidewalks and all other site improvements.
3. All utility locations shown on these plans are approximate and as supplied by the respective utility companies. The Contractor shall contact J.U.L.I.E. System ([800] 892-0123) for precise field verification of all public underground lines and for private services a Locating and Utility Service should be contacted prior to any excavation. All cost incurred for a Locating Service shall be considered incidental at no additional compensation to the Contractor. The Contractor shall be responsible for all damage and costs to repair any public or private underground utilities as a result of excavation.
4. Contractors are advised to visit the site prior to submitting bids in order to be familiar with all conditions pertaining to work being bid.
5. It is the intention that all specifications and details adopted by reference in these plans refer to the latest published revision thereof.
6. All labor, equipment, and materials called for in these plans or the referenced Specifications shall be furnished by the selected Contractor as necessary in order to complete all construction of the various improvements.
7. A. All Contractors shall obtain any necessary excavation permits, drive permits, land disturbance permits and bonds from the City and required insurance coverage prior to beginning construction and shall provide copies of same to the Engineer.

   B. Attention is called to current City, County, State and Federal Safety Regulations and Guidelines. Contractors shall be familiar with these regulations and guidelines and shall strictly adhere to same.
9. All existing sanitary sewers, field tiles, drains and utilities cut or crushed during construction shall be replaced or plugged at the direction of the Engineer. It shall be the responsibility of the contractor to replace or repair promptly all damaged lines at no added compensation, unless such re-routing exceeds 50 feet in length in each case a tile is replaced. Replacement pipe shall be ADS-N12 corrugated pipe or an equivalent approved by the Engineer.
10. Limits of construction are within the lot lines of the tract and immediate right-of-way adjacent to the property unless otherwise specified.
11. Contractors shall take care to maintain the site and adjacent areas in as clean a condition as possible. Any debris, dirt, mud, etc., shall be cleaned daily, or as the Engineer directs, from any adjoining streets or properties by the responsible contractor as a part of the primary construction work. This shall be at no additional compensation to the Contractor.
12. The Contractor shall be responsible to notify the Owner, Engineer, City, and Sanitary District at least two days prior to starting or restarting of any construction.
13. All work, including materials, workmanship, and methods shall be guaranteed by the contractor for 18 months after job completion and full acceptance by the Engineer and Owner. Any defects discovered during that 18-month period shall be promptly repaired or corrected by the Contractor at no cost to the Owner.
14. The Contractor shall dispose of excess excavated material **off site**.
15. Traffic control protecting all work shall be provided in accordance with current state and national standards and as directed by the Engineer. Traffic control shall be in place as soon as construction begins.
16. If alterations or changes in quantities change the character or quantity of the work under the original bid and contract, whether or not changed by different quantities or alterations, an adjustment may be made to the contract. Owner may alter the work by adding to or deducting from or otherwise modifying the work, without invalidating the Contract. All such changes shall be performed under the conditions of the original contract, except that no extra work or modifications shall be done or paid for by Owner without a written order from Owner signed by the Owner. The work as changed by change orders shall be performed for the unit prices set forth in the Contractor's Schedule of Unit Prices. To the extent any element of the work as changed is not subject to unit prices, the amount to be paid to Contractor shall be agreed to in writing by the parties prior to the commencement of any such change. Contractor shall provide adequate proof of cost of each such items. Claims for extra work which have not been authorized by a written change order by the Owner will be rejected and payment denied.

GENERAL NOTES AND SPECIFICATIONS FOR EROSION CONTROL

1. Refer to the "GENERAL CONSTRUCTION NOTES."
2. Dispose of excess excavated approved clay or topsoil on site at the direction of the Engineer. All other excess asphalt, concrete, etc. shall be removed from site by the Contractor and shall be included in the cost of their contract costs.
3. All earth excavation, embankment, structure excavation, trimming, backfilling and compaction work shall conform to current edition of the IDOT Standard Specifications for Road and Bridge Construction. Earth quantities to be paid for as in original state (i.e., compacted condition).
4. All stripped topsoil shall be placed over disturbed or filled areas and graded (bladed) smooth in the top 6" (min.) after grading work is approved. The remaining topsoil shall be placed in berms or stockpiles. No earthen clods larger than 3"± dia. shall be accepted (i.e., additional grading required).
5. All temporary and permanent erosion control measures shall comply with the Illinois and City guidelines. The Contractor shall provide these measures as shown on the plans and/or as required by the City.
6. Appropriate measures shall be taken by the operator to minimize or eliminate wastes or unused building materials, including, but not limited to, garbage, debris, cleaning wastes, wastewater, and other substances from being carried from a site by runoff. Proper disposal or management of all wastes and unused building materials, appropriate to the nature of the waste material, is required.
7. Tracking of sediment from the site onto public or private roadways shall be minimized. This can be accomplished initially by a temporary gravel construction entrance.
8. Public or private roadways shall be kept cleared of accumulated sediment. Bulk clearing of accumulated sediment shall not include flushing the area with water. Cleared sediment shall be returned to the point of likely origin or other suitable locations.
9. All existing and new on-site open grate storm structures shall be protected against sedimentation with a filter basket (in open ground) or sediment bag (in open ground or pavement areas) per accepted design criteria, standards, and specification for that purpose.
10. The following items apply during the time the construction activity is taking place:

    A. Storm water drainage from adjacent areas that naturally pass through the site shall be controlled by diverting it around disturbed areas. Alternatively, the existing channel must be protected and/or improved to prevent erosion or sedimentation from occurring.

    B. Runoff from a disturbed area within the site shall be controlled by one (1) or more of the following measures:
       1) Sediment detention basins.
       2) Sediment control practices, such as filter strips, diversions, straw bales, filter fences, inlet protection measures, slope minimization, phase construction, temporary and permanent seeding of vegetation, mulching, and sodding.

    All measures involving erosion control practices shall be designed and installed under the guidance of a qualified professional experienced in erosion control and following the specifications and criteria under this subsection. All other non-engineered erosion control measures involving vegetation should be installed according to accepted specifications and criteria under this subsection.
13. Limits of topsoil stockpile or berms, if applicable, shall be as shown or as otherwise directed by the Engineer.
14. All areas not paved shall be fine graded, seeded and mulched as soon as grading has been approved. Seed mixtures for unpaved areas shall conform to IDOT specifications or an approved mixture.
15. Filter barriers shall be inspected immediately after each rainfall, at least daily during prolonged rainfall and on a weekly basis. Any required repairs shall be made immediately after notification.
16. All geotextile fabric shall be in accordance to Article 1080.02 of the current edition of the IDOT Standard Specifications for Road and Bridge Construction. Should the geotextile fabric decompose or become ineffective prior to the end of the expected usable life and the barrier still be necessary, the barrier shall be replaced promptly.
17. Sediment deposits should be removed after each storm event when deposits reach approximately half the height of the filter fabric.
18. Any sediment deposits remaining in place after the silt fence is no longer required shall be dressed to conform with the existing grade, prepared and seeded.
19. Remove all silt fencing after permanent vegetation has been established and growth is dense enough to eliminate any erosion of soils.
20. The Contractor shall be responsible for reviewing the "Construction Pollution Prevention Plan" for this project. The Contractor shall follow all terms and conditions of the plan and the (NPDES) permit as it relates to their work. The Contractor will be required to certify their acknowledgment of the permit, Construction Pollution Prevention Plan, terms, and conditions for this project.
21. Final stabilization and termination of permit requirements shall occur when all of the following have been met:
    A. All soil disturbing activities are completed.
    B. Temporary erosion and sediment control measures have been removed or will be removed at an appropriate time.
    C. All areas of the construction site not otherwise covered by a permanent pavement or structure have been stabilized with a uniform perennial vegetation cover with a density of 70% or equivalent measures have been employed.
22. Mulch nettings or an approved method by the Engineer shall be used at any time the ground is sloped 3:1 or more. All nettings shall be biodegradable paper plastic or cotton netting over the mulch according to manufacturer's specifications.
23. At any time the Contractor desires alternate method of mulching and seeding, it must be submitted to and approved by the Engineer. No extra compensation shall be allowed for alternate method.
24. Seeding mixtures and application shall be as follows:

TYPE	MIXTURE
A) Permanent Seeding	Perennial Rye (Manhattan, Pennfine) (70 LBS/AC) + Bluegrass(100 LBS/AC)
B) Temporary Seeding	Perennial Rye (40 LBS/AC) Spring Oats (80 LBS/AC)

GENERAL NOTES AND SPECIFICATIONS FOR SITE GRADING

1. Refer to the "GENERAL CONSTRUCTION NOTES."
2. All earth excavation work shall conform to Section 202 of the Standard Specifications for Road and Bridge Construction. Earth quantities to be paid for as in original state (i.e., compacted condition).
3. All borrow and furnished excavation shall conform to Section 204 of the Standard Specifications for Road and Bridge Construction unless otherwise noted.
4. All stripped topsoil shall be placed over disturbed or filled areas and graded (bladed) smooth. No earthen clods larger than ±3 inches in diameter shall be accepted (i.e., additional grading will be required). All organic soil materials shall be removed from the pavement subgrade area.
5. All disturbed earth areas shall be seeded and/or have siltation barriers applied as shown on these plans as soon as final grading has been completed.
6. The Contractor shall be responsible for any damage to storm and sanitary sewer due to earthwork operations (i.e. resetting of castings, dirt in manholes, dirt in pipes, etc.).
7. The entire subgrade shall be compacted to be not less than 95% of the standard laboratory density.
8. All excavation, fine grading, embankment work, seeding, necessary watering and mulching shall be a part of seeding work and shall be considered in the unit price of seeding.
9. Finished grading shall be checked and approved by the Engineer before seeding.

GENERAL NOTES AND SPECIFICATIONS FOR PAVEMENT AND SIDEWALK CONSTRUCTION

1. Refer to the "GENERAL CONSTRUCTION NOTES."
2. Prior to placing pavement, certain subgrade areas may require some additional grading, compaction, or stabilization by the Contractor. This shall be at the direction of the Engineer and at no additional compensation to the Contractor unless such area exceeds 24 SY in each case.
3. If required, lime modified soils shall consist of the construction of a 12" thick modified soil layer composed of soil, lime and water. Lime shall not be applied to or mixed with frozen soil. Soils shall be modified in accordance with Article 302 of the Standard Specifications.
4. Upon pavement completion, the Contractor shall backfill curb lines and walk edges to the satisfaction of the Engineer.
5. The Contractor shall make all final adjustments and mortaring of castings in paved areas with concrete brick or concrete adjustment rings. Absolutely no wood is allowed. The Contractor shall be responsible for protection of storm structures in paved areas during construction of street and walks.
6. Matching existing pavement shall be made with either a construction or an expansion joint. Matching existing sidewalks shall be done to the nearest panel joint.
7. Portland Cement Concrete (PCC):

   All Portland Cement Concrete Paving shall be constructed in accordance with Article 420 of the current IDOT Standard Specifications. Material for PCC pavement shall have a maximum allowable slump of 4 inches. The concrete shall have an air entrainment of not less than 5% or more than 8% by volume. The concrete shall attain a compression strength of 3500 PSI at the age of 14 days when tested by standard methods for street pavements and 3500 PSI at the age of 14 days for sidewalks. If the Contractor desires to allow traffic or paving sooner than 14 days, the Contractor shall notify the Engineer 2 days prior to paving. The Contractor shall refrain from driving on new pavement until the concrete has reached the required strength.

   PCC Sidewalks (Construct in accordance with Article 424 IDOT Standard Specifications):

   A. Sidewalks shall typically be 6" thick unless otherwise specified.

   B. Construct a 3/4 inch thick Bituminous expansion joint in the sidewalk where sidewalk abuts pavement and where sidewalks intersect each other. (No dowel bars required).

   C. Sidewalk ramps and crosswalks which abut streets shall be ramped with a detectable warnings surface so that streets and sidewalk and crosswalk intersections merge to a common elevation, enabling persons in wheelchairs to travel freely. Refer to sidewalk ramp detail.

   PCC Pavement:

   A. All pavement removals shall be accomplished with a full depth saw cut. A minimum 2-foot bench shall be maintained on all sides of an open excavation. Subgrade shall be compacted to the satisfaction of the right-of-way inspector and, if necessary, repaired with granular backfill as instructed by the Inspector.

   B. All concrete patches and repairs of defects shall be modified IDOT Class C patches with the exception of patches on Arterial and Major Collector streets (as defined by the Right-of-Way Inspector). Arterial and Major Collector streets 8 inches or greater in depth shall be repaired using a modified IDOT Class B patch. One-inch deformed reinforcing bars shall be substituted for smooth dowels at any new mid-panel joint. Smooth dowel bars shall be used at any preexisting contraction joint. Preexisting contraction joints shall be replaced with an appropriate grooving tool. Concrete patch width shall coincide with the edge of full panels and shall have a minimum longitudinal distance of 6 feet. In large cuts, full panels shall be removed and replaced.

   C. Construct contraction joints in the pavement and curb and gutter every 15 feet or less. Joint inserts or dummy joints are expressly prohibited. Sawing of all joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive reveling, but no later than 8 hours after concrete is poured in place.

   D. Where there are no vertical curves, round off the PVI areas. Transitions in these areas should be (5) five feet each direction from the PVI point.
9. All full depth bituminous or composite pavement patches shall be repaired by a full depth, 10-inch, multi-layer bituminous repair or construct a minimum of an 8-inch concrete base course, overlaid with a 2-inch hot-mix asphalt surface course.
10. Any undesigned cracks in the pavement considered to be a defect but not considered for removal shall be routed and sealed in accordance with City details and standards.
11. All full depth bituminous or composite pavement patches shall be repaired by a full depth, 10-inch, multi-layer bituminous repair or construct a minimum of an 8-inch concrete base course, overlaid with a 2-inch hot-mix asphalt surface course.
12. Any undesigned cracks in the pavement considered to be a defect but not considered for removal shall be routed and sealed in accordance with City details and standards.
13. Hot-Mix Asphalt Pavement:

    All asphalt pavement shall be constructed in accordance with Article 406 and 407 for Hot-Mix Asphalt Paving of the current IDOT Standard Specifications for Road and Bridge Construction and theses plans and details. All pavement base courses, binder courses, and surface courses shall be field tested for proper compaction.

    A. All trimmings and other loose material shall be removed from the subgrade prior to placing the first lift.

    B. Each compacted lift shall be thoroughly clean of all dust, dirt, and foreign materials.

    C. When the binder course has been exposed for an extended period or is not free of ALL dust, dirt, and foreign materials the Engineer should direct the Contractor to clean the surface and apply a light fog tack coat of RC-70 at a rate of approximately 0.05 gallons per SY.

    D. Preparation of the binder course(s) shall be in accordance with Article 406.06 of the latest edition of the Standard Specifications for Road and Bridge Construction IDOT.

    E. Construction observers should regularly check variables such as lift thickness, temperature, and density and follow all applicable IDOT and City of Urbana standards.

    F. Bituminous materials must be produced at an Illinois Department of Transportation approved plant.

    G. The Hot-Mix Asphalt binder course shall be HMA IL-19.0, N=50, PG 70-22 (thickness as specified on the plans and pavement details).

    H. The Hot-Mix Asphalt surface course shall be HMA IL-9.5, N=50, PG 70-22 (thickness as specified on the plans and pavement details).

    I. Asphalt mill and overlay shall include a bituminous material prime coat applied at a rate of 0.1 gallons per square yard.

GENERAL NOTES AND SPECIFICATIONS FOR PAVEMENT MARKINGS

1. Pavement markings shall be latex paint applied at a minimum of 16 mils and shall meet IDOT standards as stated under Articles 780.06 and 1095.02 with glass beads **excluded**.
2. Prior to application of pavement markings, the Contractor shall make certain the pavement surface is dry and free of dirt or grease and, if necessary, clean the surface to the satisfaction of the site superintendent. Pavement markings shall be of colors specified (yellow for parking spaces).
3. Pavement marking words and symbols shall conform closely to the dimensions and spacing specified in the MUTCD and the plans. Deviations from the required dimensions and spacing or other departures from reasonable standards of professionalism will be cause for rejection by the Engineer.
4. Pavement markings shall be applied only when the air and surface temperature are a minimum of 50°F and rising. Where pavement markings cannot be placed according to these specifications and the road is open to traffic with no adequate pavement markings in place, the Contractor shall place temporary barricades to apply pavement markings in phases.

GENERAL NOTES AND SPECIFICATIONS FOR STONE BASE

1. Aggregate base course shall be crushed stone and shall be Type A. Base course aggregate shall be CA-6 material. All aggregate crushed stone base course construction shall conform to section 351 of the "Standard Specifications."
2. The base course shall be constructed in layers not more than 4 inches thick. The aggregate shall be deposited full-lane width, directly on the prepared subgrade or on the preceding layer of compacted aggregate with a spreader. When placed, it shall be free from segregation and shall require minimum blading or manipulation. Immediately after the material has been placed, it shall be compacted with a tamping roller or with a pneumatic-tired roller, or with a vibratory machine, or with a combination of any of the three. The top layer shall be given a final rolling with a three-wheel or tandem roller. The manner of compaction shall be approved by the Engineer.
3. Before the aggregate is deposited on the subgrade, it shall contain the amount of moisture required for compaction. The amount of moisture required shall be that determined by the Engineer for the material and compaction methods being used.
4. If density tests indicate that the base course does not comply with the density requirements, additional wetting, if necessary, and rolling will be required until the density is obtained. Moisture shall be added to the material during compaction only when it is necessary to increase the percentage of moisture to obtain the required density.
5. Aggregate used for base course will be measured for payment in square yards of the thickness specified.
6. Water required to be added for compaction on the grade will not be measured for payment but shall be considered as included in the cost of the item of work being constructed.
7. Aggregate base courses shall have a minimum in-place density of ninety-five percent (95%), with no individual test below ninety-five percent (95%).

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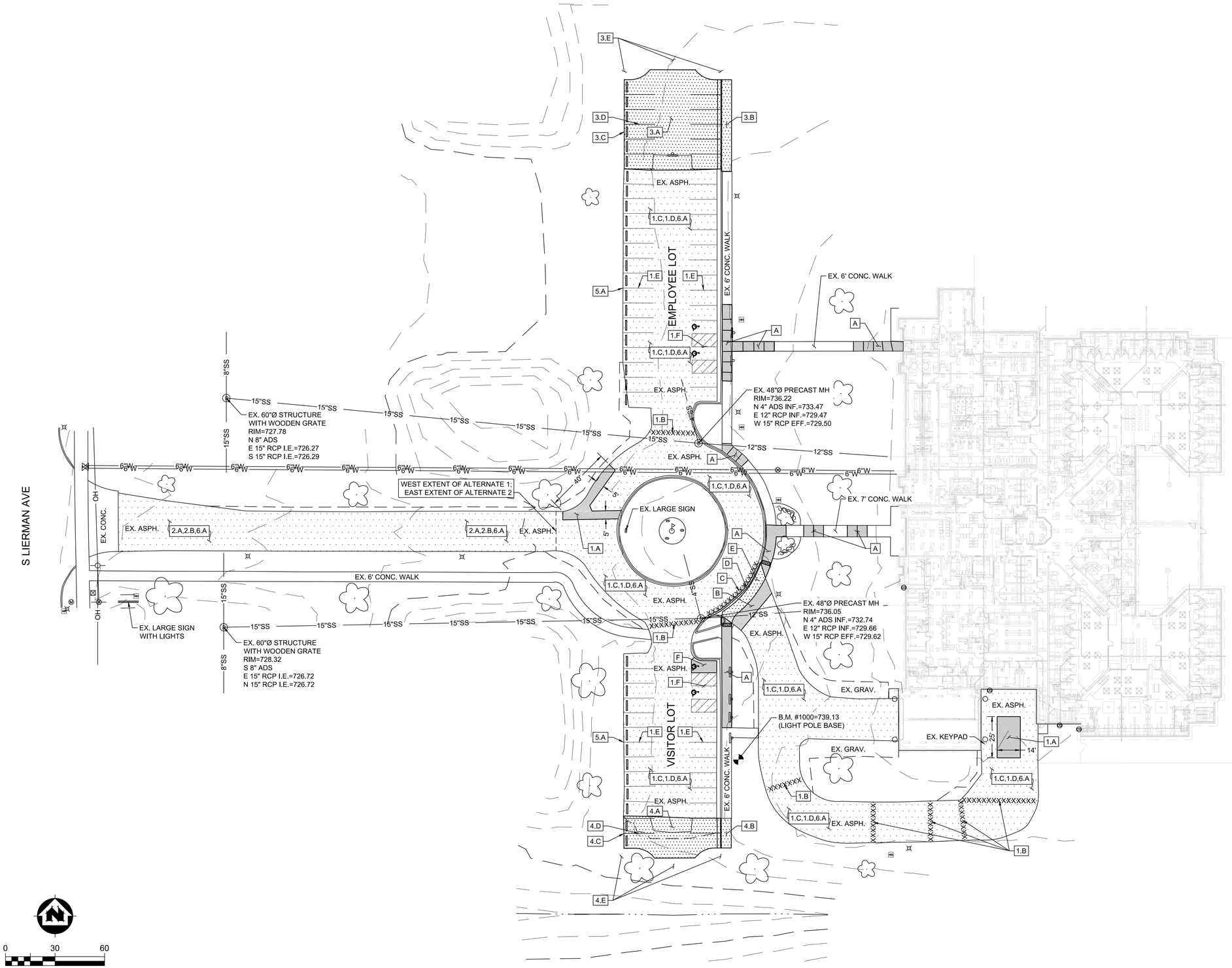
GENERAL NOTES AND SPECIFICATIONS

FILE NO. 11217022
SHEET C1.2



KEYNOTES

Note: The cost of topsoil stripping, grading, and re-seeding shall be considered incidental to all keynote items.

MAIN BID

A. Remove and replace concrete sidewalk to nearest 6' tooled joint panel with ADA compliant slopes, 1469 SF.

B. Sawcut, remove, and replace asphalt pavement, 27 SY.

C. Sawcut, remove, and replace asphalt pavement 4.5' in width along depressed PCC curb and gutter, 24 SY.

D. Remove and replace depressed PCC curb and gutter, 47 LF.

E. Remove existing asphalt and replace with new 6' wide concrete sidewalk with 2 detectable warning strips, 232 SF.

F. Sawcut and remove existing asphalt pavement and base and replace with 6" concrete pavement per detail, 13 SY.

ALTERNATE BID 1

1.A. Sawcut, remove, and replace asphalt pavement, 80 SY.

1.B. Sawcut, remove, and replace asphalt pavement 4.5' in width along existing joint, 105 SY.

1.C. Apply hot-poured crack filler to existing asphalt pavement in **circle drive, parking, and sally port areas**, approximately 5215 LF for a total of 677 lbs (quantity estimate assumes ¼" wide x 1" deep cracks, an application rate of 1 gallon per 77 feet, and a filler weight of 10 pounds per gallon).

1.D. Apply seal coat with refined coal tar emulsion per manufacturer's specification for moderate traffic/parking areas in **circle drive, parking, and sally port areas**, 3440 SY. Cleaning of oil and grease spots and priming prior to sealing shall be considered incidental.

1.E. Re-stripe parking spaces, 777 LF (excluding ADA parking spaces).

1.F. Re-stripe ADA parking spaces (striping, hatching, and accessible symbol), 4 total. ADA parking signs will be removed and replaced by others.

ALTERNATE BID 2

2.A. Apply hot-poured crack filler to existing asphalt pavement in **drive area between South Lierman Avenue and the circle drive**, approximately 1145 LF for a total of 149 lbs (quantity estimate assumes ¼" wide x 1" deep cracks, an application rate of 1 gallon per 77 feet, and a filler weight of 10 pounds per gallon).

2.B. Apply seal coat with refined coal tar emulsion per manufacturer's specification for moderate traffic/parking areas in **drive area between South Lierman Avenue and the circle drive**, 757 SY. Cleaning of oil and grease spots and priming prior to sealing shall be considered incidental.

ALTERNATE BID 3

3.A. Expand existing **employee** parking with concrete pavement and matching B-6.24 curb and gutter along the east side, 378 SY.

3.B. Extend 6' wide concrete sidewalk adjacent to the **employee** parking expansion, 333 SF.

3.C. Bumper blocks along west edge of the **employee** parking expansion, 6 total.

3.D. Stripe parking spaces in the **employee** parking expansion, 222 LF.

3.E. Backfill topsoil and seed along the edge of the **employee** parking expansion pavement at a maximum 4:1 slope, incidental to the cost of new pavement.

ALTERNATE BID 4

4.A. Expand existing **visitor** parking with concrete pavement and matching B-6.24 curb and gutter along the east side, 143 SY.

4.B. Extend 6' wide concrete sidewalk adjacent to the **visitor** parking expansion, 108 SF.

4.C. Bumper blocks along west edge of the **visitor** parking expansion, 2 total.

4.D. Stripe parking spaces in the **visitor** parking expansion, 74 LF.

4.E. Backfill topsoil and seed along edge of the **visitor** parking expansion pavement at a maximum 4:1 slope, incidental to the cost of new pavement.

ALTERNATE BID 5

5.A. Bumper blocks along west edge of the existing asphalt pavement, 27 total.

ALTERNATE BID 6

6.A. Mill 2" of all asphalt parking and drive areas and overlay with bituminous prime coat (0.1 GAL/SY) and 2" HMA IL-9.5, N=50, PG 70-22 surface course per IDOT Section 406, 4197 SY.

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F.B. :	.	CHECKED BY: DEA	2	2017/8/9	REVISED KEYNOTES AND BID BREAKDOWN	CBP
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CHAMPAIGN COUNTY SATELLITE JAIL
ASPHALT PROJECT ITB # 2017-010
CITY OF URBANA, CHAMPAIGN COUNTY, ILLINOIS

OVERALL SITE PLAN

FILE NO. 11217022
SHEET C2.1

0 5 10 20
BENCHMARK #1000=739.13
Chiseled square on north side of light pole base located on the east side of the south parking lot (visitor lot).
EX. 7' CONC. WALK
EX. GRAV.
EX. ASPH.
ADA DETECTABLE WARNING STRIP (TYP.)
R&R EX. ASPH. FOR SMOOTH TRANSITION
PROPOSED CONC. WALK WITH 1.8% MAX. CROSS SLOPE ALONG ADA PARKING SPACES
MATCH EX. T/C ALONG R&R CONC. WALK
R&R DEPRESSED C&G
R&R 2' WIDE STRIP OF EX. ASPH. ALONG NEW C&G
B.M. #1000=739.13 (LIGHT POLE BASE)
EX. 6' CONC. WALK
EX. 48"Ø PRECAST MH RIM=736.05 N 4" ADS INF.=732.74 E 12" RCP INF.=729.66 W 15" RCP EFF.=729.62
EX. 48"Ø PRECAST MH RIM=736.22 N 4" ADS INF.=733.47 E 12" RCP INF.=729.47 W 15" RCP EFF.=729.50
CONTINUE EX. B-6.24 C&G
NEW CURB TO MATCH EX. CURB
REMOVE EX. ASPH. AND BASE AND REPLACE WITH 6" CONC. PER DETAIL
SAWCUT SMOOTH EDGE AND MATCH EX. ASPH.
VISITOR LOT
EX. LARGE SIGN
12"SS
15"SS
6"W
R15'

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Design Firm Registration Number: 184-006020 Expires: April 30, 2019

CHAMPAIGN COUNTY SATELLITE JAIL
ASPHALT PROJECT ITB # 2017-010
CITY OF URBANA, CHAMPAIGN COUNTY, ILLINOIS

GRADING AND PAVING DETAIL (SOUTH)

FILE NO. 11217022

SHEET C2.2

0 5 10 20
BENCHMARK #1000=739.13
Chiseled square on north side of light pole base located on the east side of the south parking lot (visitor lot).
EX. 6' CONC. WALK
EX. 7' CONC. WAL
PROPOSED CONC. WALK WITH 1.8% MAX. CROSS SLOPE ALONG ADA PARKING SPACES
EX. 6' CONC. WALK
CONTINUE EX. B-6.24 C&G
MATCH EX. B/C ALONG R&R CONC. WALK
MATCH EX. T/C ALONG R&R CONC. WALK
EX. ASPH.
EX. 48"Ø PRECAST MH
RIM=736.22
N 4" ADS INF.=733.47
E 12" RCP INF.=729.47
W 15" RCP EFF.=729.50
REMOVE OR RELOCATE EX. SIGN; COORDINATE WITH OWNER
SAWCUT SMOOTH EDGE AND MATCH EX. ASPH.
EX. ASPH.
EMPLOYEE LOT
EX. ASPH.
6'
18.5'
9'
21.5'
18.5'
R15'
12"SS
15"SS
6"W

PROJECT NO.: 11217022	SCALE: AS SHOWN	NO.	DATE	REVISION	BY
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CHAMPAIGN COUNTY SATELLITE JAIL
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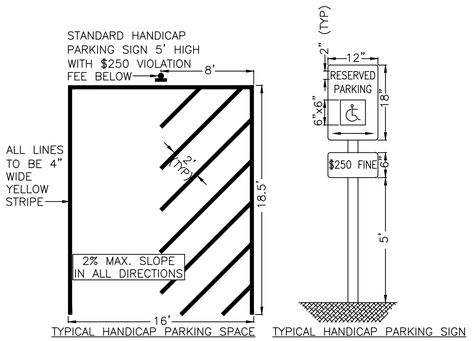
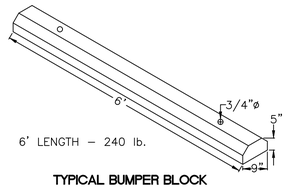
CITY OF URBANA, CHAMPAIGN COUNTY, ILLINOIS

GRADING AND PAVING DETAIL (NORTH)

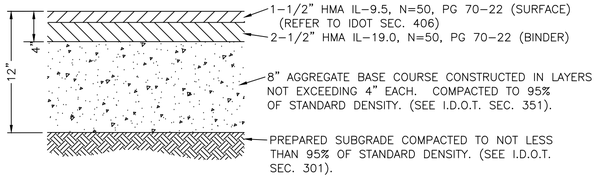
FILE NO. 11217022
SHEET C2.3



HANDICAP STRIPING/SIGN DETAIL

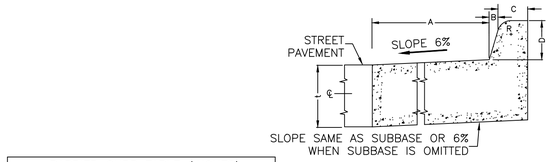


TYPICAL BUMPER BLOCK



STANDARD PAVEMENT

TYPICAL DETAIL OF BITUMINOUS PAVEMENT OVER A CRUSHED STONE BASE

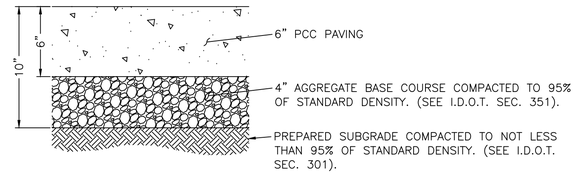


BARRIER CURB TABLE (INCHES)					
TYPE	A	B	C	D	R
B–6.24	(24)	(1)	(6)	(6)	(1)

(t=THICKNESS OF PAVEMENT)

SPILL BARRIER CURB

NOTE: CONTRACTION JOINTS SHALL BE PROVIDED AT NOT LESS THAN 15 FOOT INTERVALS FOR CURB AND GUTTER ADJACENT TO PAVED AREAS



TYPICAL SECTION OF NEW PCC PAVEMENT OR SIDEWALK OVER A CRUSHED STONE BASE

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DETAILS

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SHEET C3.1