ADDENDUM COVER SHEET

Addendum No. 1

Cobbs Creek Playground (700 Cobbs Creek Parkway)

Philadelphia Redevelopment Authority

Issue Date: August 18, 2022

Items:

The following items are to be issued as part of Addendum 01 for **Cobbs Creek Playground**:

1. Responses to Contractor questions. See attachment for responses.
2. Specifications:
    a. 000110 – Table of Contents
        i. Added: "282300 – Video Surveillance"
    b. 012200 – Unit Prices
        i. Added: "7. Offsite disposal of unclassified material"
    c. 282300 – Video Surveillance
        i. Added.
3. Drawings (entire construction set re-submitted):
    a. L-100 – Tree Protection and Demo Plan
        i. Added limit of work line.
        ii. Added note to remove, salvage and relocate existing sign for construction entrance.
    b. L-101 Overall Site Plan
        i. Added site plan note 6.
    c. L-102 Materials, Furnishings & Equipment Plan
        i. Added limit of work plan.
    d. L-103 Layout Plan
        i. Added limit of work line.
    e. L-105 Layout Plan
        i. Added limit of work line.
    f. L-200 Site Details
        i. Revised details 7, 8, 9 where poured-in-place surface meets concrete curb.
    g. L-201 Site Details
        i. Detail 5 – removed note for geotextile.
    h. L-203 Deduct Alt 2: Site Details
        i. Revised detail 1 where poured-in-place surface meets concrete curb.
    i. L-300 Planting Plan and Details
        i. Added limit of work line.
    j. C-100 Grading and Utility Plan
        i. Added LOD and electrical lines.
    k. C-200 Erosion Control Plan
        i. Added electrical lines.
        ii. Revised LOD and construction entrance.

l. E-100 Electrical Site Plan
    i. Added notes re: existing electrical and splice box.
    ii. Added notes re: existing fiber line.
    iii. Revised Keyed Notes.
m. E-200 - Details
    i. Detail 2 – deleted note 2.
    ii. Revised details 6, 7, 8.

Bidders must acknowledge receipt of Addendum No 1. The signed acknowledgement must be included in your bid proposal. Please sign and date below:

Acknowledgement of Addendum No.1

Cobbs Creek Playground RFP
Questions/RFIs:

1. Drawing E-100: Keyed Note #9 – Can you provide a location or distance for bid purposes of the "City Underground Pull Box" for the fiber optic line needed for CCTV?
   Response: Contractor to intercept existing underground conduit with new handhole. The existing underground handhole located adjacent to the existing light pole with CCTV cameras (located along the road to the Environmental Center Building) is approximately 170' north of the new handhole. Refer to the updated drawing E-100 for additional information.

2. Was a Service & Meter request filed with PECO for the new electrical service? Site has existing PECO manhole on property. Is this where we run the underground for the service?
   Response: The PECO S&M application is in process. Contractor to install underground conduit from service equipment to PECO approved splice box. Final PECO service point location to be determined with PECO.

3. Specification Section 100610-15 identifies various display cases. There are none shown on the plans. Please confirm the quantity of display cases.
   Response: No display cases are specified for this project.

4. Specification Section 100610-16 identified a dog waste dispenser, however this is not shown on the plans. Please confirm the quantity of dog waste dispensers.
   Response: No dog waste dispensers are specified for this project.

5. The safety surface details on Sheet L-200 do not shown geotextile fabric under the safety surface. The mound detail on Sheet L-201 does show fabric. Is fabric required under the safety surfaces?
   Response: No geotextile is needed at any safety surface location. Detail 5/L-201 will be updated in addendum to remove geotextile.

6. Regarding Keyed Note #9 on Sheet E-100, please provide a distance to the existing pull box that all bidders are to include in their price.
   Response: Contractor to intercept existing underground conduit with new handhole. The existing underground handhole located adjacent to the existing light pole with CCTV cameras (located along the road to the Environmental Center Building) is approximately 170' north of the new handhole. Refer to the updated drawing E-100 for additional information.

7. Do you have a specification and model for CCTV System?
   Response: Specification '282300 - Video Surveillance' included as an addendum.

8. Can you show a point of connection for the water service outside of construction limit lines shown as limit of work lines on L-100
   Response: For new water service see C-100. Limit of Work line in L-series drawings has been updated to match C-Series LOD line and include areas for new utility connections. See C-series and E-series for new connection locations. Any existing feature or area disturbed by the installation of the water service or electrical service to be replaced in kind.

9. Can you show a point of connection for the #9 pull box outside of construction limit lines not shown on E-100?
   Response: Contractor to intercept existing underground conduit with new handhole. The existing underground handhole located adjacent to the existing light pole with CCTV cameras (located along the road to the Environmental Center Building) is approximately 170' north of the new handhole. Refer to the updated drawing E-100 for additional information.

Cobbs Creek Playground RFP
Questions/RFIs:

10. Can you show a point of connection for the #4 service outside of construction limit lines not shown on E-100?
    Response: Contractor to install underground conduit from service equipment to PECO approved splice box. Final PECO service point location to be determined with PECO. Refer to the updated drawing E-100 for additional information.

11. (a) Is the PECO provided service splice box the point of connection for the electrical work?
    Response: Contractor responsible for work at service splice box to service equipment.

    (b) Detail 1/E-200 says Splice box to be located within 18" of property line is the property line the curb?
    Response: Contractor to install the splice box adjacent to the existing manhole on the property. Final location to be coordinated/approved by PECO. Refer to the updated drawing E-100 for additional information.

    (c) Note #4 on E-100 point of connection appears to be in the asphalt walkway but identifies it as the parkway which is outside the curb line. C-200 shows the existing electric line between the fragmented curb and guard rail, Please clarify the correct location of the splice box on the drawings.
    Response: Contractor to install the splice box adjacent to the existing manhole on the property. Final location to be coordinated/approved by PECO. Refer to the updated drawing E-100 for additional information.

12. Can the points of connection for the water and electrical work be located on the drawings?
    Response: Point of connection for water service shown on C-100. Electrical connections described in other responses and addendum drawings.

13. (a) Can the work limit lines be shown on the C-100 & 200 civil plans?
    Response: LOD is shown on C-200. The LOD can be added to the C-100 plan.

    (b) There is a lot of site improvements not shown on the "L" drawings, and not identified on the "C" drawings, that will require removal and replacement for the water & electrcial work. What site improvements are we specifically responsible for outside of the work limit lines?
    Response: It is unclear what exactly this question refers to. The LOD includes the water lateral replacement. Contractor is responsible to repair in kind any site elements or areas disturbed during the construction process.

    (c) Are we required to remove and replace the existing metal guard rail and asphalt walk where we cross it with the new water line?
    Response: Any existing feature disturbed by the installation of the water service line will need to be replaced in kind. It is the opinion of the designer that the bituminous pavement will require replacement, however, the water service line can be installed without disturbing the guiderail and will therefore not require replacement.

    (d) Are we required to remove & replace the guard rail and asphalt walk for the splice box work?

Response: Any existing features that are disturbed during the work are to be replaced in kind to the satisfaction of the owner. The engineer feels there is no need to remove or disturb the existing guiderail for any reason. If guiderail is disturbed, proper protections shall be in pace to protect the public. Asphalt that is disturbed shall be replaced in kind.

14. Please identify exact location for all the above noted work outside the work limit lines, so that we can identify scope of restoration work prior to the bid due date.
    Response: LOD and work limit lines have been coordinated in the addendum and include all water laterals and electrical connection points. Any existing feature disturbed by the installation of the water service or electrical service will need to be replaced in kind.

15. (a) What existing site improvements are to be salvaged for the owner as noted in section 024119?
    Response: One existing PPR post with sign located in the construction entrance will be salvaged and relocated. New location to be coordinated in the field with owner.

    (b) Where are these items to be relocated?
    Response: One existing PPR post with sign located in the construction entrance will be salvaged and relocated. New location to be coordinated in the field with owner.

    (c) What type of temp protection will be required for salvaged items?
    Response: No temporary protection is required.

16. Will there be a designated staging areas where we will be allowed to put our trailers?
    Response: No specific designated area. Intent is to maintain staging to within the limit of disturbance. Additional staging areas required will have locations to be reviewed and approved. Any existing area disturbed by staging activities will need to be replaced in kind. Logistics plan to be approved by owner.

17. There appears to be existing trees and a guy-wire of the overhead line on C-200 at the construction assess location. Is the intent to weave the access thru the tree CRZ?
    Response: The location of the Rock Construction Entrance has been modified and is being vetted by agencies having jurisdiction. Any site access shall be done to minimize disturbance to existing features, including trees. No tree is to be damaged to provide access to the site.

18. The construction access, CFS and soil stockpile is all outside of the work limit lines. We are assuming we will need to restore these areas. Where trucks are driving over the CRZ will we be require to put done AlturnaMATS or 1” steel plate under the stone access and along the route thru the tree drip lines?
    Response: LOD and work limit lines have been coordinated in the addendum. Rock construction entrance will provide enough protection so long as kept out of the critical root zones as indicated on L-100. Stockpile location has been moved to be inside of the LOD/work limit line. Any existing area disturbed by construction activities will need to be replaced in kind. Logistics plan to be approved by owner.

19. Existing curb is basically non-existent. Where water is cut into the street, do you want us to include any new curb? If so how many linear feet would you like replaced?

Response: Curb should be replaced if it is disturbed. Concrete. Assume it needs to be about 4 feet, or the width of the trench, whichever is greater.

20. Is it correct to assuming alternate 1 includes all plumbing work for drinking fountain, single post mister?
    Response: Yes

21. If alternate 1 is accepted does that include both the add and deduct alternates 1 or are they separate but in numerical order. Such as deduct alternate 1 will only be accepted if add alternate 1 is accepted first?
    Response: Each add alternate and deduct alternate will be considered on its own merits. Numbers are for reference only.

22. 329600 3.12 specifies a slow-release watering device at each tree. Device is to be filled with water according to manufactures written instructions. What is this device and how is to be installed? Is there any water piped to this location or is part of the excluded hose bib & hydration station work indicated on 011100-3?
    Response: Treegator Original or approved equal. If add alt 1 is rejected, trees will have to be watered by truck as necessary.

23. 022310-3 Specifies chain link fence and L-202 specifies snow fence, which is correct?
    Response: L-202 showing the Snow fence is correct. Refer to specification '015639 Temporary Tree and Plant Protection' for product information.

24. 329200 Turf & Grasses specifies all forms of seeding and sod. Do we assume the more expensive method of Sod of will seeding and over seeding be okay.
    Response: Sod will be used for this project and should be assumed for pricing purposes.

25. 329200-4 Turf & Grasses, what areas or work limit are we to use for the initial maintenance spec?
    Response: Any grass that has been installed within the work limit line.

26. 329200-4 Landscape Maintenance Since this spec section is not included can we a assume maintenance is limited to the initial maintenance spec?
    Response: Landscape maintenance is limited to initial Maintenance spec.

27. 312000-4 3.2 Excavation notes to remove all unclassified materials. Are there any boring reports or other documentation to indicate subsoil conditions? If unclassified unsuitable materials do down 10'-0" below grade are we to include 1,000's of yards off material replacement in our bids or can we classify a certain amount in a unit price allowance?
    Response: No boring reports were done. Include a unit price for removal of unclassified material and a change order will be executed if necessary.

28. 312000-4 3.2 Excavation notes to remove all unclassified materials. When the prior work was completed, was any testing been done on the soils in this areas. If so is this information available to bidders? Can we assume if unclassified unsuitable materials if contaminated and require special handling, this will be handled as a change order?
    Response: No testing was done in prior work. Include a unit price for removal of unclassified material and change order will be executed if necessary.

SECTION 000110
TABLE OF CONTENTS

DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS:

DIVISION 1 - GENERAL REQUIREMENTS

END OF SECTION 000110

SECTION 012200
UNIT PRICES

Unit Prices submitted with this bid will be utilized by the City for ***additional work (change orders)*** *not otherwise specified in this bid due to unforeseen conditions not know at the time of contract award. The City reserves the right to negotiate or otherwise bid additional work items in the event the Unit Prices submitted with this bid are not competitive. Unit Prices shall include all associated costs such as material, delivery, installation, applicable permit fees, taxes, bonds, overhead and/or profit, etc.*

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

A. This Section identifies Unit Prices and describes the method of pricing the change in quantity of the item of work for which the price is stated. Unit prices may be used to price additions and subtractions to the contract amount.

1.2 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

A. Applicable provisions of Bidding Requirements, Contract Requirements in Division 0 and all applicable Division 1 sections.

B. Field Engineering - Division 1.

C. Referenced Section of Specifications stipulate pertinent requirements for products and methods to achieve the work required for each Unit Price.

1.3 SUBMITTALS

A. Submit completed Schedule of Unit Prices not later than 15 days after the Notice to Proceed.

1.4 SCHEDULE OF UNIT PRICES

A. Payment for additional work and credit for deductions in work caused by modifications to the Contract, shall be computed in accordance with the following Schedule of Unit Prices, which schedule shall remain in effect until all Work of the Contract has been completed and accepted.

B. The Unit Prices shall be firm lump sums all-inclusive cost of the materials, work, layout, drafting, balancing, testing, tools, sundries, scaffolding, trucking, transportation, cleaning, supervision, overhead, profit, and any and all other costs for each of the items listed.

C. The calculations for determining the number of units of work shall be of actual surface, volume, length, hours or number of individual items listed for the class of work, complete in place and accepted or omitted. No allowance for waste, loss, breakage, damage, or difficulties shall be made.

D. Determination of number of units of work for work performed under Division 2 specification sections is specified in Field Engineering.

E. Number of units of work for all other work will be determined by Contractor. The City reserves the right to independently verify units of Work.

1.4 UNIT PRICE SCHEDULE

	PRODUCT	UNIT OF MEASURE	UNIT PRICE
1.	Furnish and install concrete pathway (broom finished - 4” depth)	1/SF	
2.	Furnish and install concrete pathway (exposed aggregate - 4” depth)	1/SF	
3.	Furnish and install concrete bench pad and bench	1/Each	
4.	Furnish and install asphalt pathway	1/SF	
5.	Furnish and install tree	1/Each	
6.	Furnish, install, and test poured-in-place safety surface.	1/SF	
7.	Offsite disposal of unclassified material	1/CY	

END OF SECTION 012200

SECTION 282300

VIDEO SURVEILLANCE SECURITY DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes a video surveillance system consisting of cameras, network video recorder, data transmission wiring, and a control station with its associated equipment.

B. Video surveillance system shall be integrated with existing PPR network equipment.

1.3 DEFINITIONS

A. AGC: Automatic gain control.

B. BNC: Bayonet Neill-Concelman - type of connector.

C. B/W: Black and white.

D. CCD: Charge-coupled device.

E. FTP: File transfer protocol.

F. IP: Internet protocol.

G. LAN: Local area network.

H. MPEG: Moving picture experts group.

I. NTSC: National Television System Committee.

J. PC: Personal computer.

K. PTZ: Pan-tilt-zoom.

L. RAID: Redundant array of independent disks.

M. TCP: Transmission control protocol - connects hosts on the Internet.

N. UPS: Uninterruptible power supply.

O. WAN: Wide area network.

1.4 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Video surveillance system shall withstand the effects of earthquake motions determined according to ASCE/SEI 7.

1. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."

1.5 ACTION SUBMITTALS

A. Product Data: For each type of product indicated. Include dimensions and data on features, performance, electrical characteristics, ratings, and finishes.

B. Shop Drawings: For video surveillance. Include plans, elevations, sections, details, and attachments to other work.

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

2. Functional Block Diagram: Show single-line interconnections between components for signal transmission and control. Show cable types and sizes.

3. Dimensioned plan and elevations of equipment racks, control panels, and consoles. Show access and workspace requirements.

4. UPS: Sizing calculations.

5. Wiring Diagrams: For power, signal, and control wiring (if provided).

6. Storage Device Calculations.

7. Network Bandwidth Requirements and Fiber Optic Channel Link-Loss Budgets .

8. Existing Equipment Frame Elevations, where new equipment is being added.

C. Equipment List: Include every piece of equipment by model number, manufacturer, serial number, location, and date of original installation. Add pretesting record of each piece of equipment, listing name of person testing, date of test, set points of adjustments, name and description of the view of preset positions, description of alarms, and description of unit output responses to an alarm.

1.6 INFORMATIONAL SUBMITTALS

A. Seismic Qualification Certificates: For video surveillance, cameras, camera-supporting equipment, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.

2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.

3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

B. Field quality-control reports.

C. Warranty: Sample of special warranty.

1.7 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For cameras, power supplies, infrared illuminators, monitors, videotape recorders, digital video recorders, video switches, and control-station components to include in emergency, operation, and maintenance manuals. Include the following as well:

1.8 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NECA 1.

C. Comply with NFPA 70.

D. Electronic data exchange between video surveillance system with an access-control system shall comply with SIA TVAC, if access-control system is provided.

1.9 PROJECT CONDITIONS

A. Environmental Conditions: Capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:

1. Control Station: Rated for continuous operation in ambient temperatures of 50 to 95 deg and a relative humidity of 20 to 80 percent, noncondensing.

2. Exterior Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambient temperatures of minus 30 to plus 122 deg F dry bulb and 20 to 90 percent relative humidity, condensing. Rate for continuous operation when exposed to rain as specified in NEMA 250, winds up to 85 mph and snow cover up to 24 inches thick. Use NEMA 250, Type 4X enclosures.

3. Hazardous Environment: System components located in areas where fire or explosion hazards may exist because of flammable gases or vapors, flammable liquids, combustible dust, or ignitable fibers shall be rated, listed, and installed according to NFPA 70.

4. Corrosive Environment: System components subject to corrosive fumes, vapors, and wind-driven salt spray in coastal zones. Use NEMA 250, Type 4X enclosures.

5. Security Environment: Camera housing for use in high-risk areas where surveillance equipment may be subject to physical violence.

1.10 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of cameras, equipment related to camera operation, and control-station equipment that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Three years from date of Final Acceptance by the City.

B. Warranty Requirements: Contractor shall warrant DPP (or PPR) that the equipment will be free and clear of any lien or encumbrance on the final acceptance date. Contractor shall further warrant for a period of three (3) year from the date of Substantial Completion that the Security System will, under normal use and service, be free from defects and faulty workmanship except as set forth below:

1. Contractor's obligation under this warranty is to repair or replace defective equipment, parts, and associated labor thereto at its expense. Contractor shall warrant that replacement or repaired equipment furnished hereunder and labor shall be in accordance with current industry standards.

2. PPR is granted a nontransferable fully paid license (Genetec) to use all software furnished by the Contractor as part of furnishing the security system equipment provisions under terms established by the software manufacturer. The Authority will be provided with a copy of all applicable licenses. Contractor shall warrant that it has the right to grant such licenses.

3. A copy of Contractor's standard warranty agreement must be provided and must match or exceed manufacturer's warranty, minimum of 3 years.

4. Upgrade of software during warranty period.

5. Provide Service for three (3) years after substantial completion, includes all labor and material cost associated with the repair, with the exception of third party negligence or acts of vandalism.
6. Contractor's personnel shall respond to all system failures within four (4) hours of the occurring event. All failure shall be corrected within eight (8) hours of the arrival on site of Contractor's personnel.

PART 2 - PRODUCTS

2.1 GENERAL SYSTEM REQUIREMENTS

A. Surge Protection: Protect components from voltage surges originating external to equipment housing and entering through power, communication, signal, control, or sensing leads. Include surge protection for external wiring of each conductor's entry connection to components.

B. Tamper Protection: Tamper switches on enclosures, control units, pull boxes, junction boxes, cabinets, and other system components shall initiate a tamper-alarm signal when unit is opened or partially disassembled. Control-station, control-unit alarm display shall identify tamper alarms and indicate locations.

C. Compatibility: Video Management Software must be compatible with IP video equipment. The contractor, if submitting components from different manufactures must submit with either shop drawings, or product data, statements of compatibility from each manufacturer guaranteeing IP video components are compatible with the IP video management software submitted.

2.2 IP VIDEO SYSTEMS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Genetec

2. Vivotek
3. Axis Communications
4. DVTEL

B. Description:

1. System shall provide high-quality delivery and processing of IP-based video, audio, and control data using standard Ethernet-based networks.

2. System shall have seamless integration of all video surveillance and control functions.

3. Graphical user interface software shall manage all IP-based video matrix switching and camera control functions, two-way audio communication, alarm monitoring and control, and recording and archive/retrieval management. IP system shall also be capable of integrating into larger system environments.

4. System design shall include all necessary compression software for high-performance, dual-stream, MPEG-2/MPEG-4 video and H.264 video. Unit shall provide connections for all video cameras, bidirectional audio, discreet sensor inputs, and control system outputs.

5. All camera signals shall be compressed, encoded, and delivered onto the network for processing and control by the IP video-management software.
6. Camera system units shall be ruggedly built and designed for extreme adverse and urban environments, complying with NEMA Type environmental standards. Where required provide vandal proof exterior camera housings.

7. Encoder/decoder combinations shall place video, audio, and data network stream that can be managed from multiple workstations on the user's LAN or WAN at the same time.

8. All system interconnect cables, workstation PCs, and network intermediate devices shall be provided for full performance of specified system.

2.3 STANDARD IP CAMERAS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Genetec (AutoVu SharpV)
2. Vivotek
3. Axis Communications
4. DVTEL

B. Network Outdoor Dome Camera, HD/ (3) Megapixel: Assembled and tested as a complete manufactured unit.

1. Image Sensor - 1/3" Progressive scan CMOS
2. Lens – 2.7-9mm Motorized Verifocal
3. Minimum Illumination/Light Sensitivity (lux) 0.5 color, 0 black and white
4. Maximum Resolution (pixels) - 2048x1536 (3MP)
5. Video Compression - H.264/MPEG4/M-JPEG
6. Frames per Second - 30
7. Intelligent Alarm
8. Network Protocol - TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1x, Qos
9. Power - PoE

10. Outdoor Use - Outdoor Ready
11. Vandal Resistant - Yes
12. Digital Pan/Tilt/Zoom
13. 20M IR LED
14. Heater - Integrated with housing
15. Mounting:

    a. Outdoor Wall Mount on Pole Mount Adapter, Min. Three Clamps(Vandal Proof)

2.4 VIDEO DECODERS

A.

1. Network - IPv4 or IPv6

2. Power - PoE, DC

3. Monitor Support - Up to 2 DVI or Analog

4. Network Configurable

5. Camera Viewing capability only, no control

2.5 POWER SUPPLIES

A. Low-voltage power supplies matched for voltage and current requirements of cameras and accessories, and of type as recommended by manufacturer of camera and lens.

B.

1. Enclosure: NEMA 250, Type 3.

2. Input - 115VAC

3. Output - 16 fuse protected outputs:

    a. 12VDC or 24VDC
    b. 4A total continuous supply
    c. 3.5A rated outputs

4. Temperature Operating Range - 0 to 49 C

5. Input/Output LED Indicators

6. On/Off Switch

7. Locking Enclosure

2.6 CAMERA-SUPPORTING EQUIPMENT

A. Manufacturers: Subject to compliance with requirements of:

1. Genetec

B. Minimum Load Rating: Rated for load in excess of the total weight supported times a minimum safety factor of two.

C. Mounting Brackets for Fixed Cameras: Type matched to items supported and mounting conditions. Include manual pan-and-tilt adjustment.

D. Protective Housings for Fixed Cameras: Steel enclosures with internal camera mounting and connecting provisions that are matched to camera/lens combination and mounting and installing arrangement of camera to be housed.

1. Tamper switch on access cover sounds an alarm signal when unit is opened or partially disassembled. Central-control unit shall identify tamper alarms and indicate location in alarm display.

2. Camera Viewing Window: Polycarbonate window, aligned with camera lens.

3. Duplex Receptacle: Internally mounted.

4. Alignment Provisions: Camera mounting shall provide for field aiming of camera and permit removal and reinstallation of camera lens without disturbing camera alignment.

5. Built-in, thermostat-activated heater units. Units shall be automatically controlled so the environmental limits of the camera equipment are not exceeded.

6. Sun shield shall not interfere with normal airflow around the housing.

7. Mounting bracket and hardware for wall or ceiling mounting of the housing. Bracket shall be of same material as the housing; mounting hardware shall be stainless steel.

8. Finish: Housing and mounting bracket shall be factory finished using manufacturer's standard finishing process suitable for the environment.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine pathway elements intended for cables. Check raceways and other elements for compliance with space allocations, installation tolerance, hazards to camera installation, and other conditions affecting installation.

B. Examine roughing-in for LAN, WAN, and IP network before device installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 WIRING

A. Comply with requirements in Division 26 – Raceways and Boxes for Electrical Systems. If Division 26 is not provided, install wiring per below.

B. Wiring Method: Install cables in raceways unless otherwise indicated.

1. Except raceways are not required in accessible indoor ceiling spaces and attics.

2. Except raceways are not required in hollow gypsum board partitions.

3. Conceal raceways and wiring except in unfinished spaces.

C. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii. Provide and use lacing bars and distribution spools.

D. Splices, Taps, and Terminations: For power and control wiring, use numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

E. For LAN connection and fiber-optic and copper communication wiring, comply with Section 271500-1.4 "Horizontal Cabling Description."

F. Grounding: Provide independent-signal circuit grounding recommended in writing by manufacturer.

3.3 VIDEO SURVEILLANCE SYSTEM INSTALLATION

A. Install cameras and infrared illuminators level and plumb.

B. Install cameras with an 84-inch minimum clear space below cameras and their mountings to the finished floor or grade. Change type of mounting to achieve required clearance. For exterior camera mount cameras on building exteriors or steel poles to match exterior lighting system poles.

C. Set pan unit and pan-and-tilt unit stops to suit final camera position and to obtain the field of view required for camera. Connect all controls and alarms, and adjust.

D. Install power supplies and other auxiliary components at control stations unless otherwise indicated.

E. Install tamper switches on components indicated to receive tamper switches, arranged to detect unauthorized entry into system-component enclosures and mounted in self-protected, inconspicuous positions.

F. Avoid ground loops by making ground connections only at the control station.

1. For 12- and 24-V dc cameras, connect the coaxial cable shields only at the monitor end.

G. Identify system components, wiring, cabling, and terminals.

3.4 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

B. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust components, assemblies, and equipment installations, including connections.

C. Perform tests and inspections:

1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.

D. Tests and Inspections:

1. Inspection: Verify that units and controls are properly installed, connected, and labeled, and that interconnecting wires and terminals are identified.

2. Pre-testing: Align and adjust system and pretest components, wiring, and functions to verify that they comply with specified requirements. Conduct tests at varying lighting levels, including day and night scenes as applicable. Prepare video-surveillance equipment for acceptance and operational testing as follows:

   a. Prepare equipment list described in "Informational Submittals" Article.
   b. Verify operation of auto-iris lenses.
   c. Set back-focus of fixed focal length lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Adjust until image is in focus with and without the filter.
   d. Set back-focus of zoom lenses. At focus set to infinity, simulate nighttime lighting conditions by using a dark glass filter of a density that produces a clear image. Additionally, set zoom to full wide angle and aim camera at an object 50 to 75 away. Adjust until image is in focus from full wide angle to full telephoto, with the filter in place.
   e. Set and name all preset positions; consult Owner's personnel.
   f. Set sensitivity of motion detection.
   g. Connect and verify responses to alarms.
   h. Verify operation of control-station equipment.

3. Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least 14 days. Provide a minimum of 10 days' notice of test schedule.

4. Operational Tests: Perform operational system tests to verify that system complies with Specifications. Include all modes of system operation. Test equipment for proper operation in all functional modes.

5. Video surveillance system will be considered defective if it does not pass tests and inspections.

6. Prepare test and inspection reports and submit to PPR for review.

3.5 LABELING OF CAMERA DEVICES AND CONTROL SYSTEMS

A. Contractor to provide a recommended Labeling System to Project Coordinator prior to camera installation.

3.6 ADJUSTING

A. Occupancy Adjustments: When requested within 12 months of date of Substantial Completion, provide on-site assistance in adjusting system to suit actual occupied conditions. Provide up to two visits for this purpose at 6 months and 12 months. Tasks shall include, but are not limited to, the following:

1. Check cable connections.

2. Check proper operation of cameras and lenses. Verify operation of auto-iris lenses and adjust back-focus as needed.

3. Adjust all preset positions; consult Owner's personnel.

4. Recommend changes to cameras, lenses, and associated equipment to improve Owner's use of video surveillance system.

5. Provide a written report of adjustments and recommendations.

6. Cleaning per Section 3.7

3.7 CLEANING

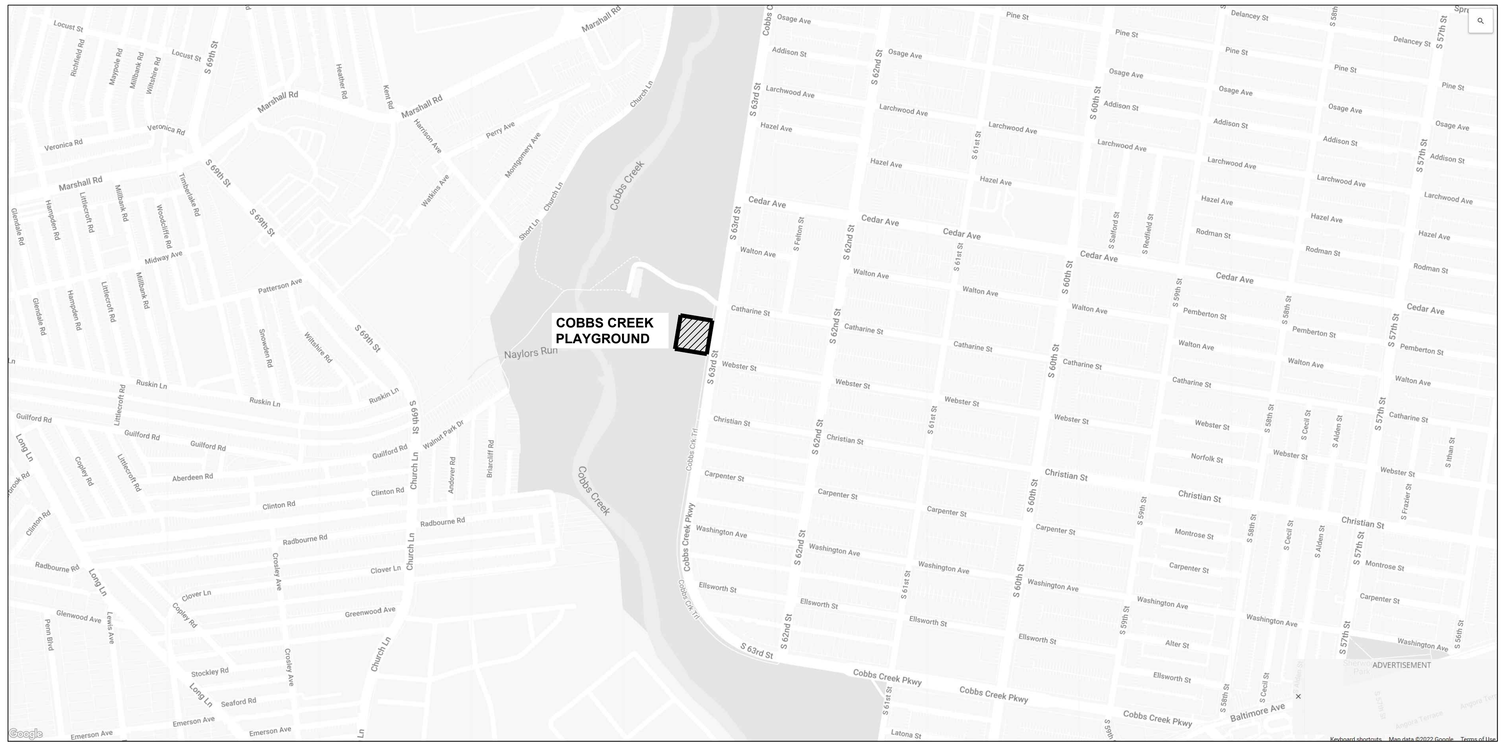
A. Clean installed items using methods and materials recommended in writing by manufacturer.

B. Clean video-surveillance-system components, including camera-housing windows, lenses, and monitor screens.

3.8 DEMONSTRATION/TRAINING

A. Provide a minimum of 8 hours of training to Owner's maintenance personnel to adjust, operate, and maintain video-surveillance equipment.

END OF SECTION



PROJECT LOCATION AND AREA
NOT TO SCALE

COBBS CREEK PLAYGROUND

AT COBBS CREEK ENVIRONMENTAL CENTER
63RD AND CATHARINE STREETS, PHILADELPHIA, PA 19143

PREPARED FOR:
REBUILD PHILADELPHIA & PHILADELPHIA PARKS AND RECREATION
CONTRACT #1920644

PREPARED BY:

port
Urban Design + Landscape Architecture
Philadelphia / Chicago

100% CONSTRUCTION DOCUMENTS
ISSUE DATE: 07/22/2022

DRAWING LIST

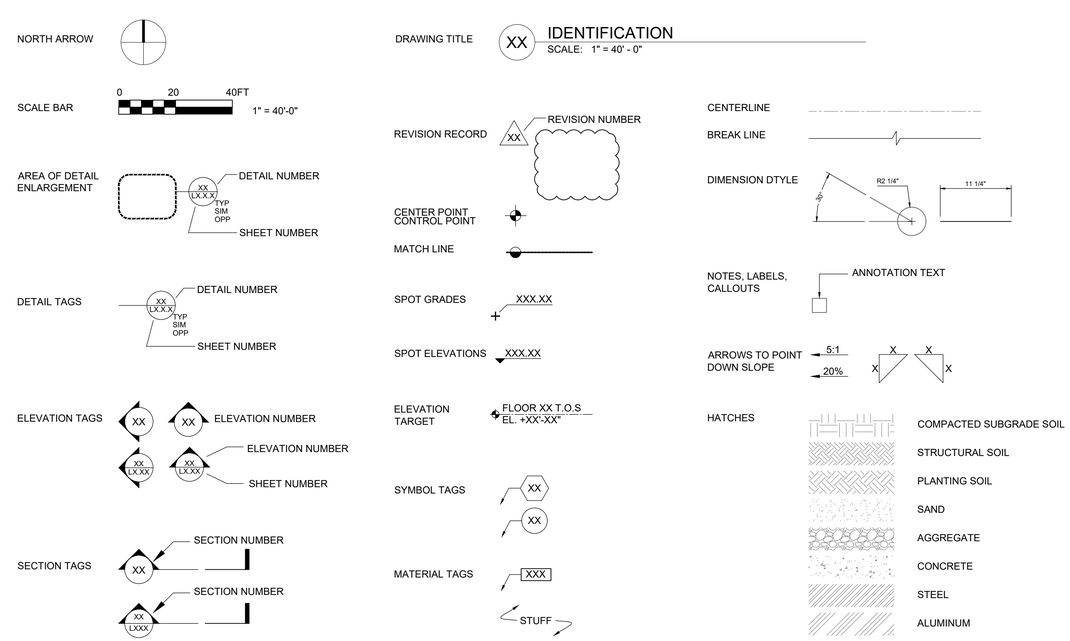
GENERAL NOTES

1. THE HORIZONTAL AND VERTICAL SURVEY DATA SHOWN HERE TO ON THE PLANS ARE FROM A DIGITAL FILE SUPPLIED BY SCI-TEK CONSULTANTS, INC.
2. THE CONTRACTOR SHALL SECURE ALL PERMITS REQUIRED FOR WORK BY ANY FEDERAL, STATE OR LOCAL DEPARTMENTS, UTILITY COMPANIES OR JURISDICTION AFFECTED BY WORK.
3. THE CONTRACTOR SHALL PERFORM ALL WORK AND SERVICES SPECIFICALLY DESCRIBED IN AND REQUIRED BY THE CONTRACT DOCUMENTS (AS DEFINED IN THE CONTRACT) INCLUDING, WITHOUT LIMITATION, THE SCOPE OF WORK DOCUMENTS AND THE DRAWINGS AND DESIGN SPECIFICATIONS.
4. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND FIELD CONDITIONS, NOTIFY ARCHITECT OF ANY DISCREPANCIES IN CONTRACT DOCUMENTS AND OBTAIN CLARIFICATION BEFORE PROCEEDING WITH WORK AFFECTED BY THE DISCREPANCIES.
5. THE CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE CONTRACT DOCUMENTS PRIOR TO PROCEEDING WITH THAT PORTION OF THE WORK. FAILURE TO NOTIFY ARCHITECT WILL NOT RELIEVE CONTRACTOR OF RESPONSIBILITY TO COMPLETE THE WORK AS INDICATED BY THE CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY WORK RESULTING FROM SUCH FAILURE TO COORDINATE DISCREPANCIES WITHOUT THE ARCHITECT'S APPROVAL.
6. IN THE EVENT OF DISCREPANCIES BETWEEN DRAWINGS AND SPECIFICATIONS, CONTRACTOR TO NOTIFY ARCHITECT AND OBTAIN RESOLUTION PRIOR TO PROCEEDING WITH THAT PORTION OF WORK. FOR PRICING PURPOSES, THE ALTERNATE WITH THE GREATER VALUE IS TO BE USED UNTIL THE DISCREPANCY IS RESOLVED BY THE ARCHITECT.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION WITH ALL LOCAL UTILITY COMPANIES. THE CONTRACTOR SHALL NOTIFY THE OWNER 48 HOURS PRIOR TO DIGGING IN ORDER THAT UNDERGROUND UTILITIES IN THE AREA CAN BE LOCATED.
8. THE CONTRACTOR SHALL LOCATE, PROTECT AND IDENTIFY ALL UNDERGROUND AND OVERHEAD UTILITIES AND SERVICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING THEMSELVES AS TO THE LOCATION OF UTILITIES, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITIES OR STRUCTURES. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.
9. EXISTING CONSTRUCTION INCLUDING UTILITIES, SUBSURFACE GRADING, DRAINAGE, BUILDING FOUNDATION WORK, AND OTHER MISCELLANEOUS IS TO REMAIN UNDISTURBED AND TO BE PROTECTED UNLESS OTHERWISE INDICATED.
10. CONTRACTOR SHALL ADJUST ALL EXISTING UTILITY STRUCTURES AS REQUIRED TO MEET PROPOSED GRADES, INCLUDING DRAIN INLETS, MANHOLES AND LIGHT POLE BASES. CONTRACTOR SHALL MEET EXISTING GRADES AT ALL EDGES OF LIMITS OF WORK.
11. THE CONTRACTOR SHALL PROTECT THE WORK AND ALL NEARBY PEOPLE AND PROPERTY INCLUDING EXISTING BUILDINGS, PAVING, DRAINAGE STRUCTURES, FENCES, LAWNS, PLANTING, ETC. FROM DAMAGE. COST OF REPAIR, RESTORATION OR REPLACEMENT TO THEIR ORIGINAL OR BETTER CONDITION TO SITE COMPONENTS REMAINING OR WORK AREAS OUTSIDE OF LIMIT OF WORK SHALL BE AT CONTRACTOR'S EXPENSE UNLESS PROVISION FOR PAYMENT IS MADE IN THE PROPOSAL. ALL CONSTRUCTION AREAS SHALL BE RESTORED, INCLUDING GRADING, PAVING, SEEDING, ETC.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEAN-UP OF ANY MATERIALS DEPOSITED OUTSIDE THE WORK AREA. EXISTING CONSTRUCTION DRAINAGE SYSTEM AND EROSION CONTROL SHALL BE MAINTAINED, MODIFIED, AND/OR REMOVED AS NOTED ON CIVIL ENGINEERING PLANS.
13. THE CONTRACTOR SHALL ABIDE BY ALL APPLICABLE FEDERAL, STATE AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.
14. THE CONTRACTOR SHALL SCHEDULE WORK IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL ENVIRONMENTAL PROTECTION STANDARDS, LAWS AND REGULATIONS.
15. FOLLOW FIGURED DIMENSIONS AND DO NOT SCALE CONTRACT DRAWINGS.

ABBREVIATIONS

TBD	TO BE DETERMINED
PPR	PHILADELPHIA PARKS & RECREATION
POB	POINT OF BEGINNING
SQ	SQUARE
FT	FOOT
LF	LINEAR FOOT
GA	GAUGE
TYP	TYPICAL
EX	EXISTING
VIF	VERIFY IN FIELD
FG	FINISH GRADE
ADJ	ADJACENT
PIP	POURED IN PLACE
MIN	MINIMUM
MAX	MAXIMUM
CRZ	CRITICAL ROOT ZONE

SYMBOL LEGEND



REVISIONS

NO.	DATE	DESCRIPTION
1	08.18.2022	ADDENDUM 1 REVISIONS

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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

REGISTERED ARCHITECT
COMMONWEALTH OF PENNSYLVANIA
CHRISTOPHER MARCINKOSKI
RA007765

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	NJ
CHECKED:	CM

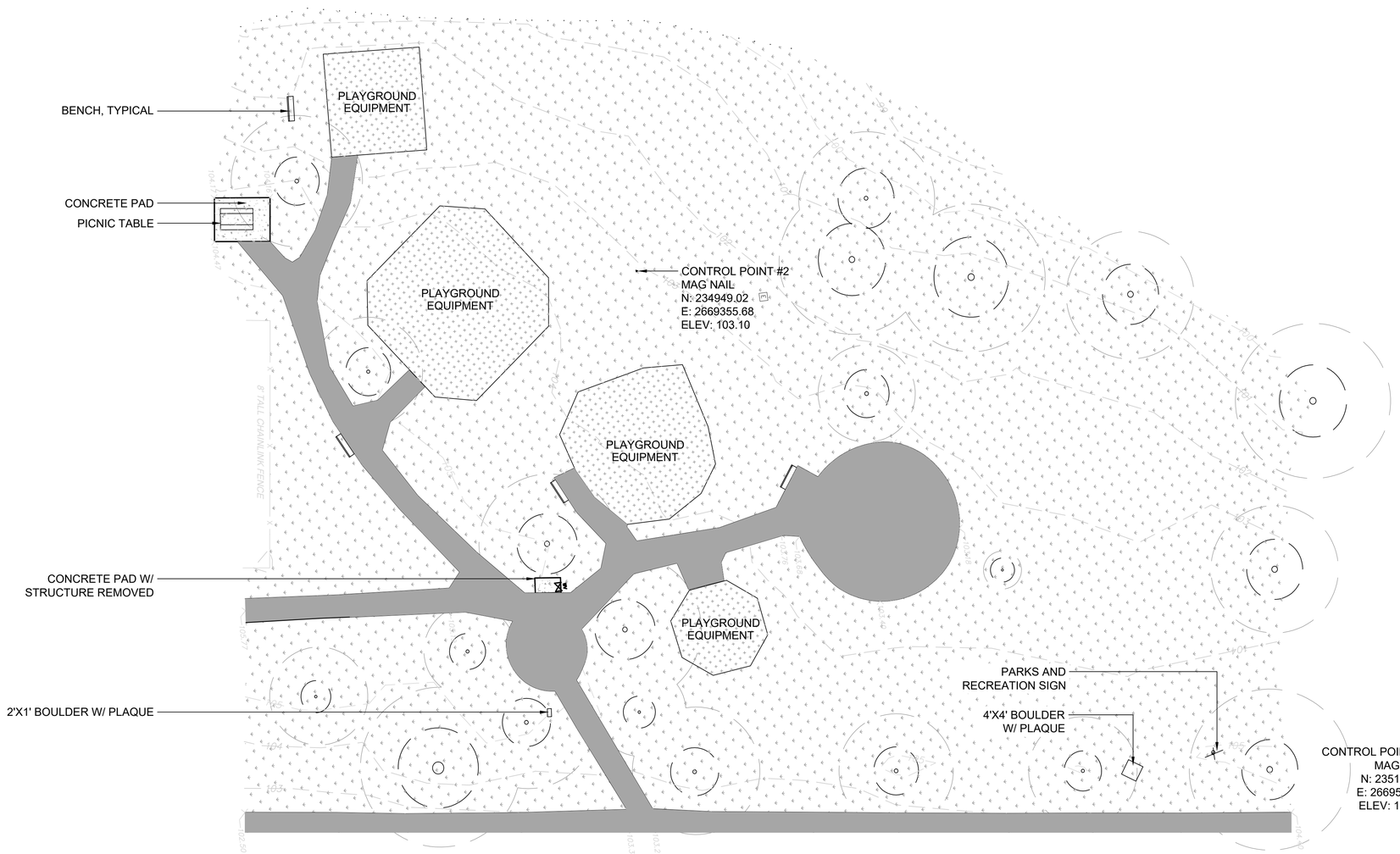
DRAWING TITLE:

DRAWING LIST AND GENERAL NOTES

DRAWING NO:

G-000

SHEET 01 OF 22



01 EXISTING CONDITIONS PLAN

SCALE: 1" = 16'-0"

LEGEND

- PAVEMENT AREAS
- MULCH AREAS
- GRASS AREAS
- CONCRETE AREAS
- ELECTRIC UTILITY VAULT
- SIGN
- WATER VALVE
- APPROX. EXTENTS OF CANOPY
- TREE
- CRITICAL ROOT ZONE
- TREE LINE
- APPROXIMATE ROAD RIGHT OF WAY LINE
- FENCE
- 100 MAJOR TOPOGRAPHIC CONTOUR LINE WITH ELEVATION
- 102 MINOR TOPOGRAPHIC CONTOUR LINE WITH ELEVATION

EXISTING CONDITIONS NOTES:

1. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY SCI-TEK CONSULTANTS, INC., COMPLETED IN JANUARY 2021 AND PROVIDED TO THE ARCHITECT IN JUNE 2021.
2. A COPY OF THE SIGNED AND STAMPED SURVEY IS AVAILABLE FROM THE CLIENT UPON REQUEST.
3. SEE CIVIL DRAWINGS FOR UTILITY LOCATIONS.
4. HORIZONTAL DATUM: PA STATE PLANE COORDINATES (SOUTH ZONE) NAD83(2011); VERTICAL DATUM: NAVD88 (GEOID18). GRID NORTH, BEARINGS AND ELEVATIONS DERIVED FROM THE KEYNET GPS VRS NETWORK. THE STATE PLANE COORDINATES HAVE BEEN SCALED TO GROUND FROM A POINT AT N: 234949.02 AND E:2669355.68 USING A COMBINED FACTOR OF 1.0000024745.
5. SURVEY MEASUREMENTS WERE MADE IN US SURVEY FEET (US FT).
6. CONTOURS SHOWN WERE PRODUCED FROM AN ACTUAL GROUND SURVEY. CONTOUR INTERVAL IS 1 FOOT.
7. UNDERGROUND UTILITY LOCATIONS SHOWN ARE BASED ON INFORMATION PROVIDED BY UTILITY COMPANIES THAT RESPONDED THROUGH THE PA ONE CALL SYSTEM. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND UTILITIES CANNOT BE ACCURATELY, COMPLETELY, AND RELIABLY DEPICTED. IN ADDITION, UTILITY LOCATION REQUESTS FROM SURVEYORS MAY BE IGNORED OR RESULT IN AN INCOMPLETE RESPONSE. THEREFORE THE SURVEYOR MAKES NO REPRESENTATIONS AS TO THE COMPLETENESS OR ACCURACY OF THE PROVIDED MARKINGS WITH RESPECT TO THE ACTUAL LOCATIONS OF THE UNDERGROUND UTILITIES.

0 16 32FT

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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA CHRISTOPHER A. MARCINKOSKI No. RA401795

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	NJ
CHECKED:	CM

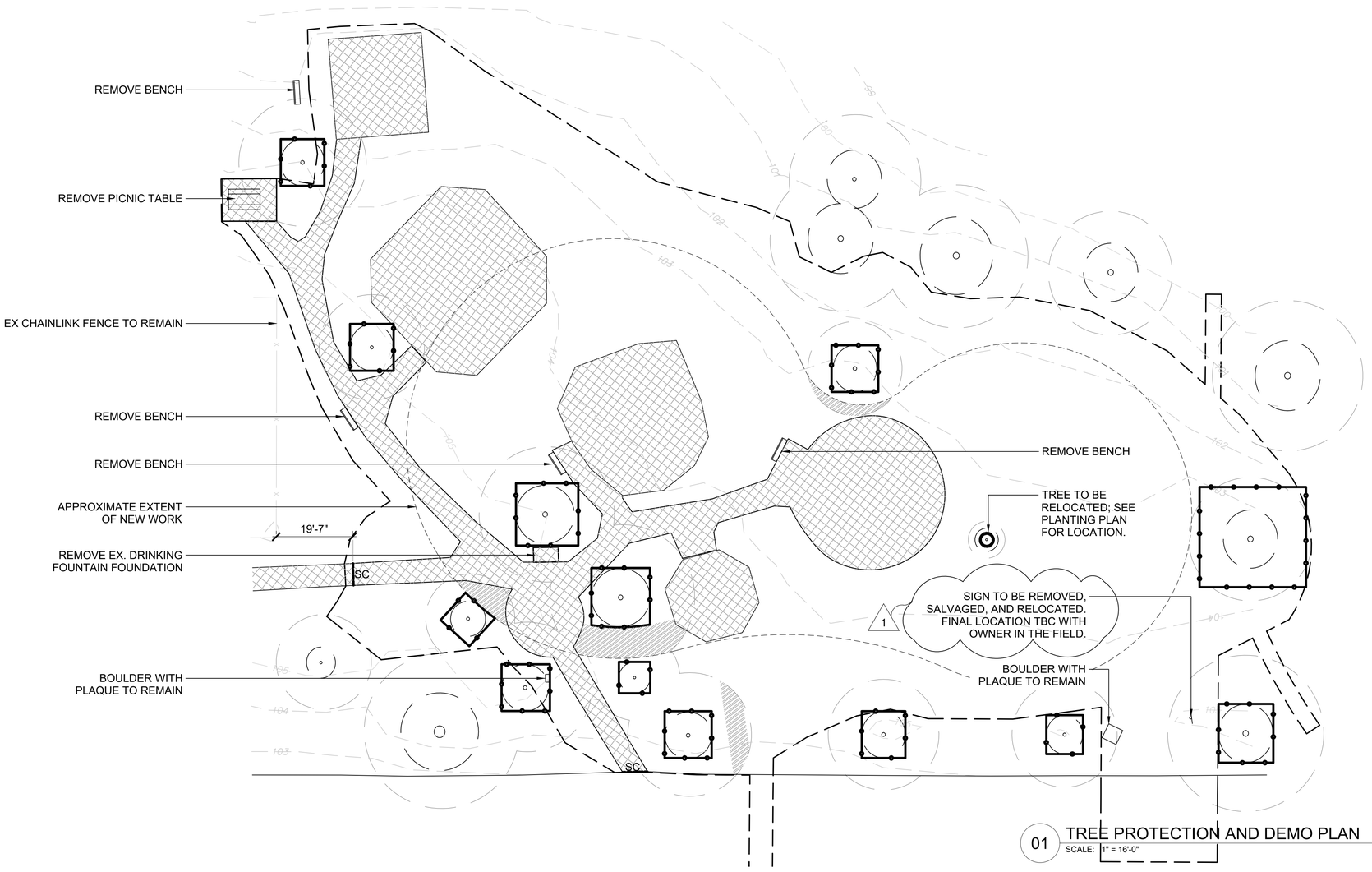
DRAWING TITLE:

EXISTING CONDITIONS PLAN

DRAWING NO:

G-100

SHEET 02 OF 22



01 TREE PROTECTION AND DEMO PLAN
SCALE: 1" = 16'-0"

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS (1)
- APPROXIMATE EXTENT OF NEW WORK
- TREE PROTECTION FENCE, REFER TO 1/L202 FOR DETAILS
- REMOVE ASPHALT, CONCRETE, SAFETY SURFACE, & PLAY EQPT
- AIR EXCAVATION + ROOT PRESERVATION ZONE. REFER TO 2/L202 FOR DETAILS. REFER TO SPECIFICATIONS FOR PROCEDURES.
- APPROX. EXTENTS OF CANOPY
- EXISTING TREE TO REMAIN
- CRITICAL ROOT ZONE
- EXISTING TREE TO BE REMOVED AND RELOCATED
- SC — SAW CUT EXISTING PAVEMENT

TREE PROTECTION NOTES

1. ALL EXISTING TREES TO REMAIN SHALL BE PROTECTED WITH TREE PROTECTION FENCING. LOCATION OF TREE PROTECTION FENCING IS INDICATED ON DRAWINGS.
2. TREE PROTECTION FENCE SHALL BE MAINTAINED FOR THE DURATION OF THE CONSTRUCTION PROCESS. IF TREE PROTECTION IS MOVED OR REMOVED FOR THE INSTALLATION OF THE WORK REPLACE IT IMMEDIATELY AT THE COMPLETION OF THE WORK.
3. TRENCHING OR EXCAVATION WITHIN THE TREE PROTECTION FENCE SHALL BE COMPLETED WITH EXTREME CARE AND UNDER THE SUPERVISION OF A CERTIFIED ARBORIST. USE HAND TOOLS ONLY.
4. AVOID DAMAGING EXISTING TREES. DAMAGE INCLUDES BUT IS NOT LIMITED TO: CUTTING, BREAKING, SKINNING, OR COMPACTING OF ROOTS, SKINNING AND BRUISING OF BARK AND BREAKING OF BRANCHES AND LIMBS.
5. CONTRACTOR SHALL NOT PARK OR STORE EQUIPMENT AND SUPPLIES WITHIN THE TREE PROTECTION FENCING.
6. IF AREA WITHIN DRIP LINES OF TREES IS IMPACTED BY CONSTRUCTION ACTIVITY, TREES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. IF REPLACEMENT TREES ARE NEEDED, ARCHITECT WILL SPECIFY TREE SPECIES, SIZE, AND EXACT REPLACEMENT LOCATIONS.

0 16 32FT

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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

REGISTERED ARCHITECT PENNSYLVANIA CHRISTOPHER MARCINKOSKI RA007785

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	NJ
CHECKED:	CM

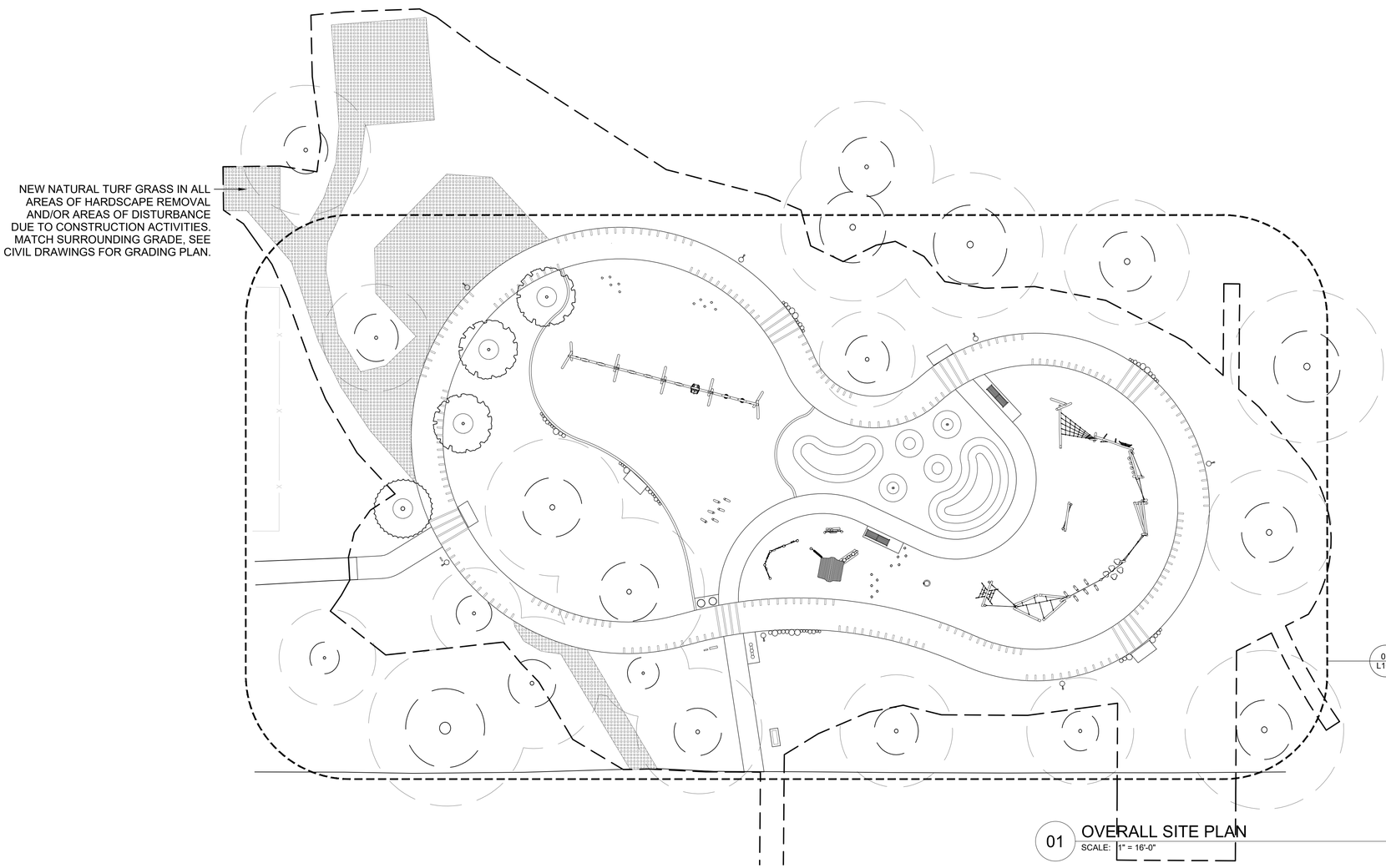
DRAWING TITLE:

TREE PROTECTION AND DEMO PLAN

DRAWING NO:

L-100

SHEET 03 OF 22



01 OVERALL SITE PLAN
SCALE: 1" = 16'-0"

0 16 32FT

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS (1)
- NATURAL TURF GRASS
- APPROX. EXTENTS OF CANOPY
- EXISTING TREE TO REMAIN
- CRITICAL ROOT ZONE
- NEW TREE, SEE L300 FOR MORE INFORMATION
- RELOCATED TREE, SEE SPECS FOR MORE INFORMATION

SITE PLAN NOTES

1. SURVEY INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY SCI-TEK CONSULTANTS, INC. COMPLETED JANUARY 2021 AND PROVIDED TO THE ARCHITECT IN JUNE 2021.
2. ALL CONSTRUCTION SHALL CONFORM TO CITY, COUNTY, STATE, AND FEDERAL REGULATIONS.
3. VERIFY DIMENSIONS AND ACCEPT CONDITIONS BEFORE PROCEEDING WITH ANY WORK. REPORT DISCREPANCIES TO ARCHITECT.
4. THESE CONSTRUCTION DOCUMENTS MAKE NO REPRESENTATIONS AS TO THE MEANS AND METHODS OF CONSTRUCTION
5. TOPOGRAPHIC INFORMATION NOT SHOWN FOR CLARITY. SEE CIVIL DRAWINGS FOR GRADING INFORMATION.
6. ALL AREAS OF NATURAL TURF GRASS DISTURBED DUE TO CONSTRUCTION ACTIVITIES MUST BE REPLACED IN KIND UNLESS OTHERWISE NOTED. (1)

01 L102 MATERIALS, FURNISHINGS & EQUIPMENT PLAN

REVISIONS

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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA CHRISTOPHER A. MARCINKOSKI, No. RA407705

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	NJ
CHECKED:	CM

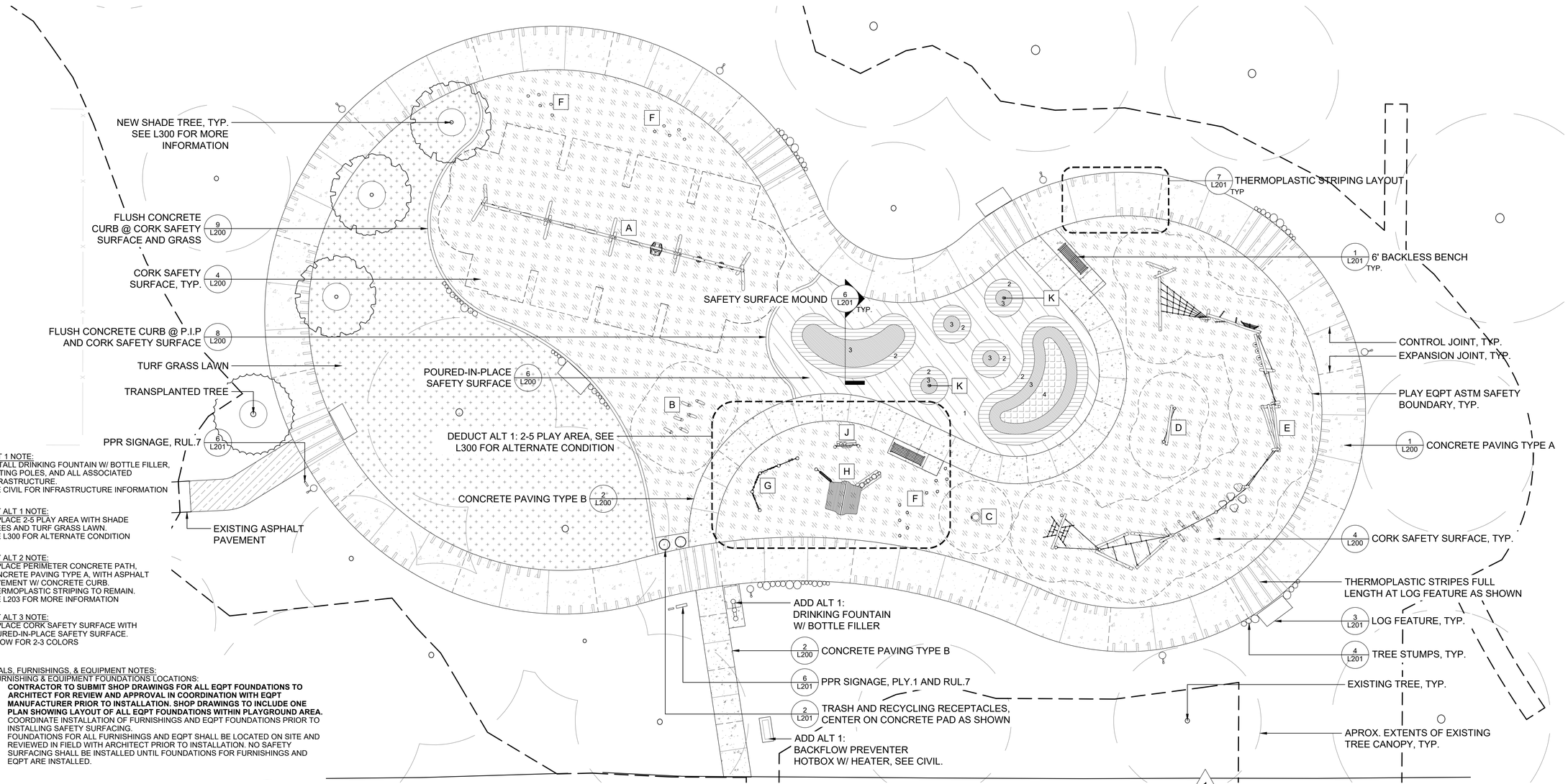
DRAWING TITLE:

OVERALL SITE PLAN

DRAWING NO:

L-101

SHEET 04 OF 22



ADD ALT 1 NOTE:
- INSTALL DRINKING FOUNTAIN W/ BOTTLE FILLER, MISTING POLES, AND ALL ASSOCIATED INFRASTRUCTURE.
- SEE CIVIL FOR INFRASTRUCTURE INFORMATION

DEDUCT ALT 1 NOTE:
- REPLACE 2-5 PLAY AREA WITH SHADE TREES AND TURF GRASS LAWN.
- SEE L300 FOR ALTERNATE CONDITION

DEDUCT ALT 2 NOTE:
- REPLACE PERIMETER CONCRETE PATH, CONCRETE PAVING TYPE A, WITH ASPHALT PAVEMENT W/ CONCRETE CURB.
- THERMOPLASTIC STRIPING TO REMAIN.
- SEE L203 FOR MORE INFORMATION

DEDUCT ALT 3 NOTE:
- REPLACE CORK SAFETY SURFACE WITH POURED-IN-PLACE SAFETY SURFACE.
- ALLOW FOR 2-3 COLORS

MATERIALS, FURNISHINGS, & EQUIPMENT NOTES:

1. FURNISHING & EQUIPMENT FOUNDATIONS LOCATIONS:
   - **1.1. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR ALL EQPT FOUNDATIONS TO ARCHITECT FOR REVIEW AND APPROVAL IN COORDINATION WITH EQPT MANUFACTURER PRIOR TO INSTALLATION. SHOP DRAWINGS TO INCLUDE ONE PLAN SHOWING LAYOUT OF ALL EQPT FOUNDATIONS WITHIN PLAYGROUND AREA.**
   - 1.2. COORDINATE INSTALLATION OF FURNISHINGS AND EQPT FOUNDATIONS PRIOR TO INSTALLING SAFETY SURFACING.
   - 1.3. FOUNDATIONS FOR ALL FURNISHINGS AND EQPT SHALL BE LOCATED ON SITE AND REVIEWED IN FIELD WITH ARCHITECT PRIOR TO INSTALLATION. NO SAFETY SURFACING SHALL BE INSTALLED UNTIL FOUNDATIONS FOR FURNISHINGS AND EQPT ARE INSTALLED.

PLAY EQUIPMENT SCHEDULE:

ITEM	QTY	PRODUCT NAME	PRODUCT NUMBER	MANUFACTURER	NOTES & OPTIONS	MAX. FALL HT.
A	1	ROBINIA SWINGS	NRO899647	KOMPAN	5 BELT SWING SEATS, 1 ADA SEAT, 2 BABY SEATS; STAINLESS STEEL CHAINS	7'-11"
B	1	ROBINIA STILTS	NRO806	KOMPAN	N/A	3'-7"
C	1	ROBINIA SPINNER BOWL	ELE400024	KOMPAN	COLOR: YELLOW	2'-0"
D	1	ROBINIA ROPE BRIDGE	NRO811	KOMPAN	ROPE COLOR: YELLOW	2'-0"
E	1	ROBINIA CUSTOM PARKOUR 5	US-NRO894027	KOMPAN	ROPE COLOR: YELLOW	2'-0"
F	10	ROBINIA SITTING POLE	NRO209	KOMPAN	N/A	N/A

DEDUCT ALT. 1: PLAY EQUIPMENT SCHEDULE: (SEE L300 FOR ALTERNATE CONDITION)

G	1	ROBINIA SCHOOL PLAY PANEL 4	NRO616	KOMPAN	N/A	N/A
H	1	ROBINIA THEATER & MUSIC COTTAGE	NRO606	KOMPAN	N/A	N/A
J	1	ROBINIA DRESS-UP WALL WITH MIRROR	NRO603	KOMPAN	N/A	N/A
F	10	ROBINIA SITTING POLE	NRO209	KOMPAN	N/A	N/A

MATERIALS & FURNISHINGS SCHEDULE:

SYMBOL	PRODUCT NAME & MODEL NUMBER	QTY	MANUFACTURER	OPTIONS/FINISHES/COLOR	INSTALLATION
	TRASH AND RECYCLING RECEPTACLES WITH BONNET COVER; 157-32-SH	2	DU MOR	COLOR: BLACK (1) & RECYCLE BLUE (1)	SURFACE MOUNT
	6' BACKLESS BENCH; 166-60D (BACKLESS)	2	DU MOR	COLOR: BLACK; WITH CENTER ARMREST	SURFACE MOUNT
	14' PEDESTRIAN LIGHT; DSC4L DG S1 MP350 3015 BK UNV TLR / AT535 14 BK BC3	7	SELUX	COLOR: BLACK; SEE ELECTRICAL DRAWINGS FOR SECURITY CAMERA LOCATIONS	SURFACE MOUNT/ CONC. FOOTING
	STANDARD PPR SIGNS. ONE (1) PLY.1 AND TWO (2) RUL.7	SEE NOTE	PLAYGROUND RULES (PLY.1) AT MAIN ENTRY PLUS ONE RULES SIGN (RUL.7) AT EACH SIDEWALK ENTRANCE WITH ANIMAL FREE ZONE LOGO.		CONC. FOOTING

ADD ALT 1: DRINKING FOUNTAIN AND MISTING FEATURE SCHEDULE

	BOTTLE FILLING STATION TRI-LEVEL PEDESTAL; LK4430BF1U	1	ELKAY	COLOR: BLACK	SURFACE MOUNT
K	SINGLE POST MISTER; 155071	2	LANDSCAPE STRUCTURES INC.	COLOR: MATTE GRAY; PUSH BUTTON ACTIVATION	DIRECT BURY/ CONC. FOOTING

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS
- ASTM SAFETY BOUNDARY
- THERMOPLASTIC MARKING ON CONCRETE, VARIES
- 4 L201 TREE STUMPS
- 3 L201 LOG FEATURE
- TURF GRASS LAWN
- 4 L200 CORK SAFETY SURFACE
- 6 L200 POURED IN PLACE (P.I.P) SAFETY SURFACE (COLOR NOTED BY NUMBER)
- 2 L203 ASPHALT PAVING
- 2 L200 CONCRETE PAVING TYPE A
- 2 L200 CONCRETE PAVING TYPE B
- EXPANSION JOINT
- CONTROL JOINT

01 MATERIALS, FURNISHINGS & EQUIPMENT PLAN
SCALE: 1" = 10'

0 10 20FT

REVISIONS

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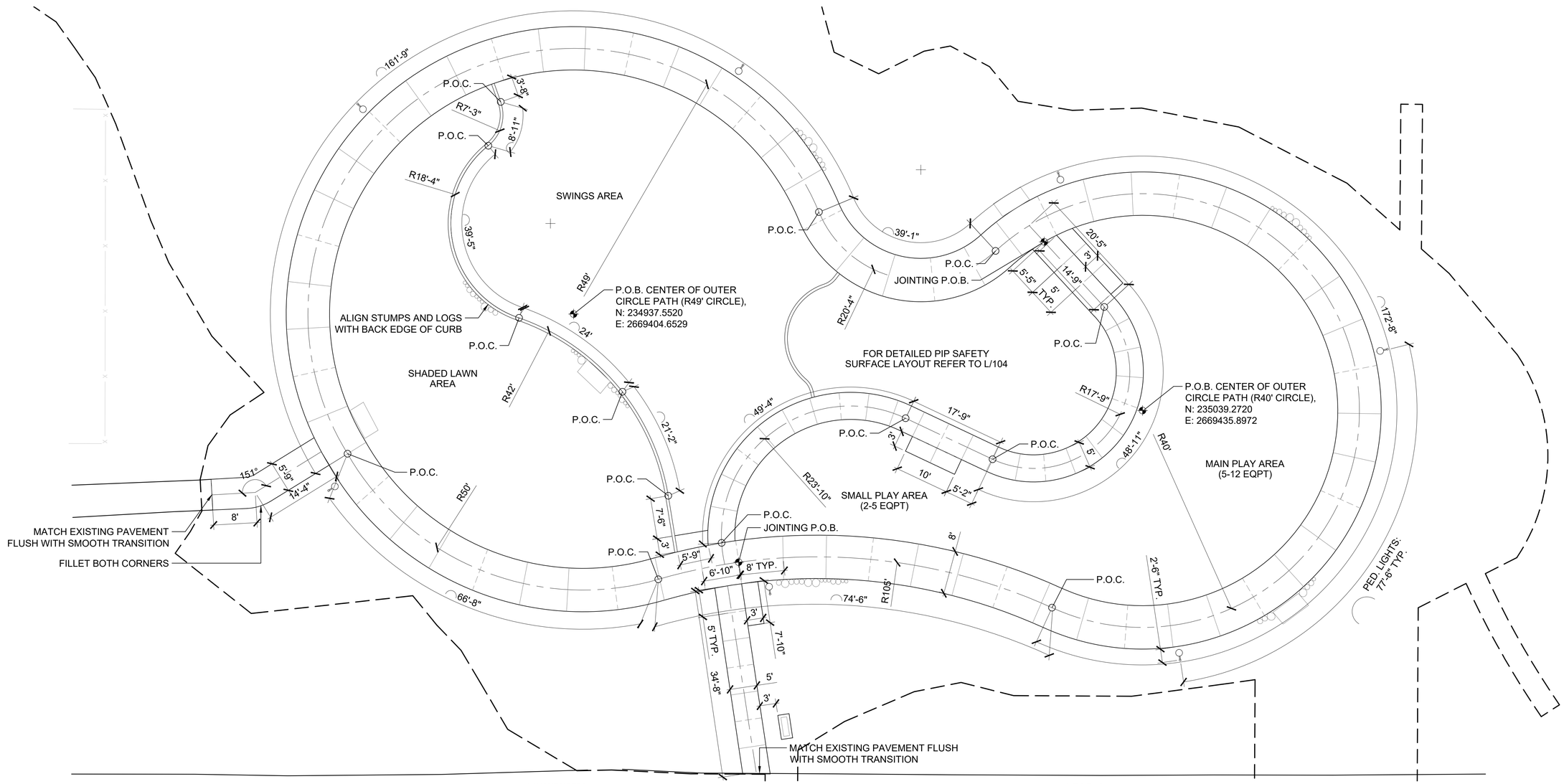
COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

JOB NO: 2131
DATE: 07/22/2022
DRAWN: NJ
CHECKED: CM
DRAWING TITLE:
MATERIALS, FURNISHING & EQUIPMENT PLAN
DRAWING NO:
L-102



LAYOUT NOTES:

1. DO NOT SCALE DRAWINGS; CONSULT ARCHITECT FOR ANSWERS TO ALL DIMENSIONAL QUESTIONS.
2. CONTACT UTILITY COMPANIES AS REQUIRED BY STATE AND LOCAL REGULATIONS BEFORE DIGGING TO LOCATE AND MARK EXISTING UTILITIES.
3. CONTRACTOR TO OBTAIN THE ARCHITECT'S APPROVAL OF LAYOUT OF ALL SITE IMPROVEMENTS PRIOR TO INSTALLATION.
4. DIMENSIONS ARE PROVIDED TO EDGE OF PAVEMENT, FRONT OF CURB, OR PATH CENTERLINES, UNLESS NOTED OTHERWISE.
5. PROVIDE SLOPES ON PAVEMENT SURFACES AS INDICATED ON GRADING AND DRAINAGE PLAN TO ALLOW FOR POSITIVE DRAINAGE.
   5.1. NO PONDING SHALL BE PERMITTED ON FINISHED GRADE OF SITE PAVEMENTS. AREAS WHERE PONDING OCCURS SHALL BE REGRADED AND REPAIRED AT CONTRACTOR'S EXPENSE.
6. SEE SHEET L-102 FOR LAYOUT OF SITE FURNISHING AND EQUIPMENT.
7. LOG FEATURES AND STUMPS SHOWN FOR REFERENCE. DIMENSIONS REFER TO OVERALL LAYOUT, NOT LOCATION OF LOG FEATURES AND STUMPS.

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS
- PATH CENTER LINE
- EDGE OF PAVEMENT, SEE L-102 MATERIALS, FURNISHING, & EQUIPMENT PLAN FOR TYPES
- 4 / L201 TREE STUMPS
- 3 / L201 LOG FEATURE
- P.O.B. POINT OF BEGINNING (P.O.B.)
- P.O.C. POINT OF CURVATURE (P.O.C.)
- 1 EXPANSION JOINT
- CONTROL JOINT

01 LAYOUT PLAN
SCALE: 1" = 10'

0 10 20FT

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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

REGISTERED ARCHITECT COMMONWEALTH OF PENNSYLVANIA CHRISTOPHER M. MARCINKOSKI No. RA-077195

JOB NO:	2131
DATE:	07/22/2022
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CHECKED:	CM

DRAWING TITLE:

LAYOUT PLAN

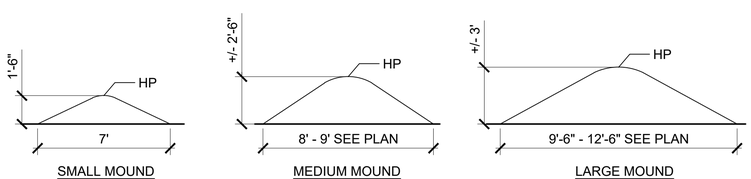
DRAWING NO:

L-103

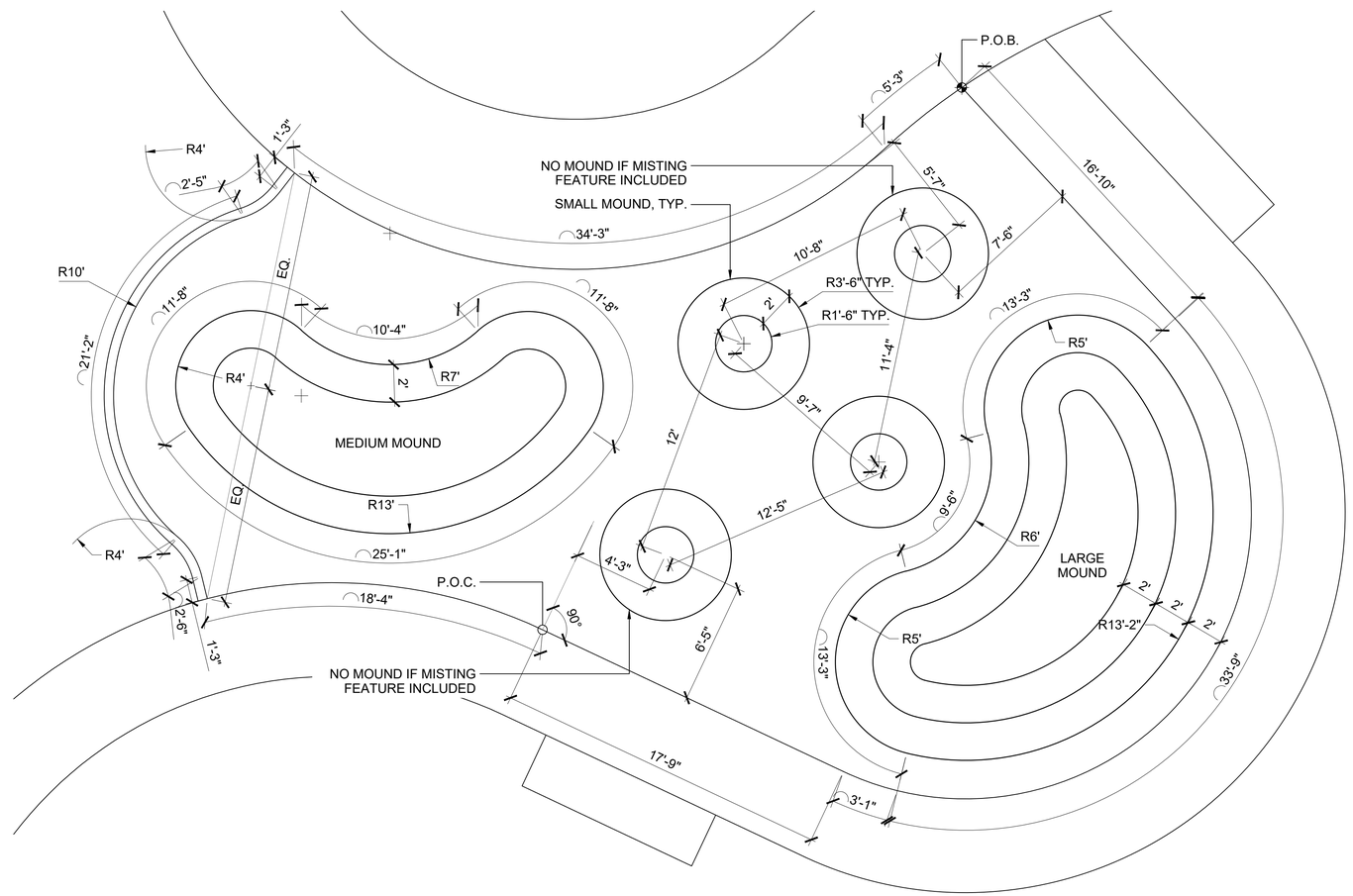
SHEET 06 OF 22

NOTE:

1. SEE 5 / L201 FOR TYPICAL MOUND DETAIL



2 PLAY MOUND TYPICAL ELEVATIONS
SCALE: 1/4" = 1'-0"



1 PIP SAFETY SURFACE DETAIL LAYOUT PLAN
SCALE: 1/4" = 1'-0"

0 4 8FT

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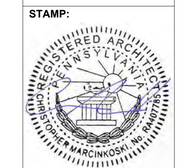

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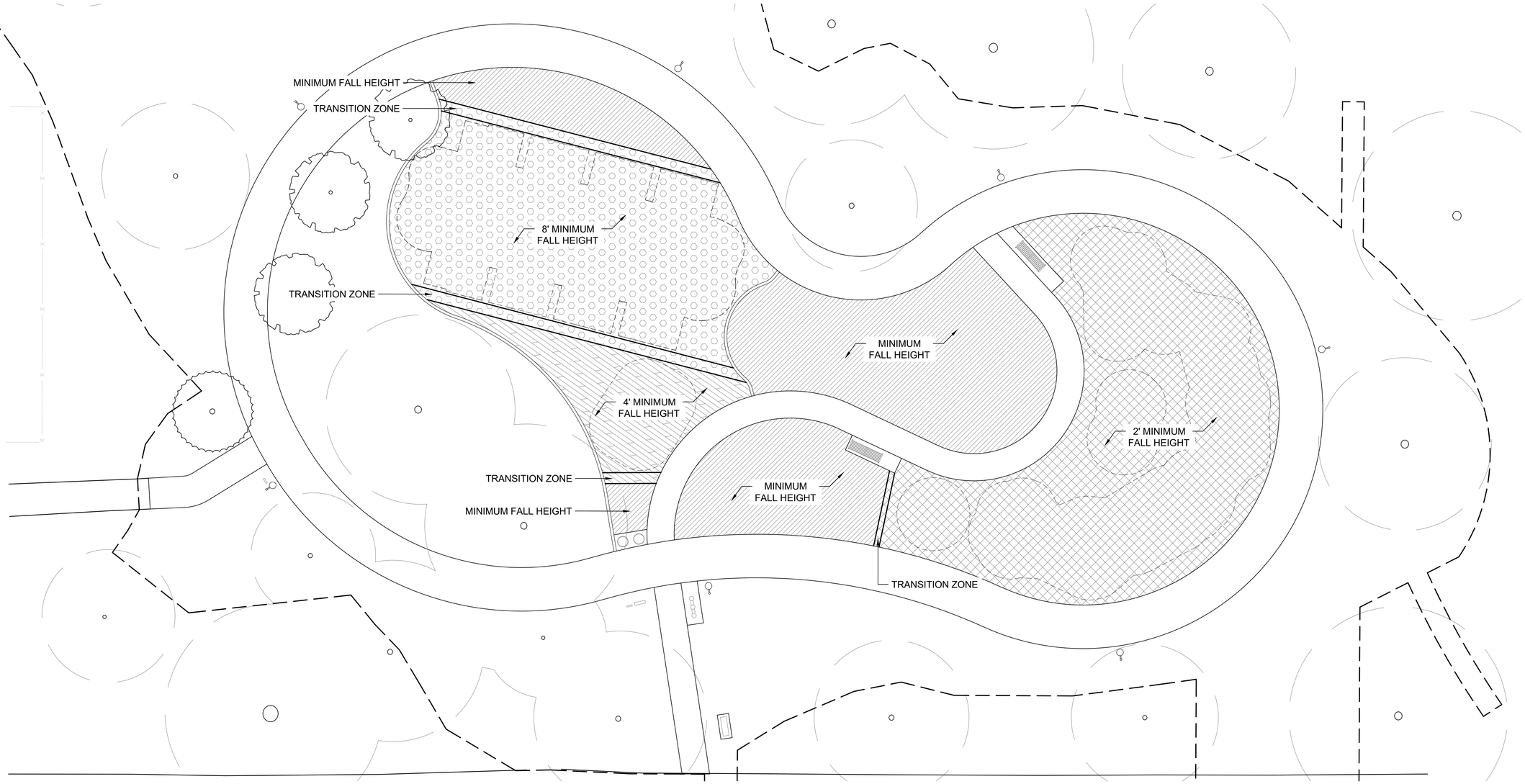
DRAWING TITLE:

DETAIL LAYOUT PLANS

DRAWING NO:

L-104

SHEET 07 OF 22



NOTES:

1. SAFETY SURFACE DEPTH MUST MEET OR EXCEED THAT WHICH IS REQUIRED TO MEET THE CRITICAL FALL HEIGHT CRITERIA OF EACH PIECE OF EQUIPMENT, ASTM-F1292-13, OR MOST RECENT EDITION STANDARD.
2. CONFIRM FALL HEIGHT EXTENTS BASED ON FINAL LOCATION OF EACH PIECE OF EQUIPMENT BEFORE TRANSITIONING BETWEEN SAFETY SURFACE DEPTHS.
3. FOR TRANSITION ZONES, SEE 5/L-200 FOR DETAILS.
4. FOR AREAS OF 'MINIMUM FALL HEIGHT' SEE SPECS FOR MINIMUM DEPTH OF BASE OR CUSHION COURSE FOR SAFETY SURFACE.
5. PLAN DETAIL REMOVED FOR CLARITY. SEE L-102 FOR MATERIALS, FURNISHINGS & EQUIPMENT PLAN.

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS (1)
- ASTM SAFETY BOUNDARY
- EDGE OF PAVEMENT, SEE L-102 MATERIALS, FURNISHING, & EQUIPMENT PLAN FOR TYPES
- EXISTING TREE TO REMAIN
- APPROX. EXTENTS OF CANOPY
- NEW TREE, SEE L300 FOR MORE INFORMATION

01 SAFETY SURFACE FALL HEIGHT PLAN
SCALE: 1" = 10'

0 10 20FT

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LAYOUT PLAN

DRAWING NO:

L-105

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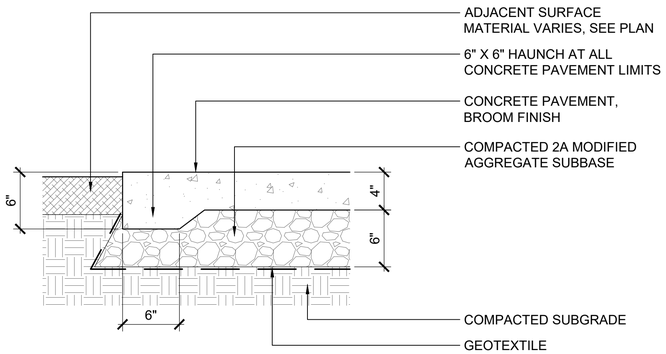
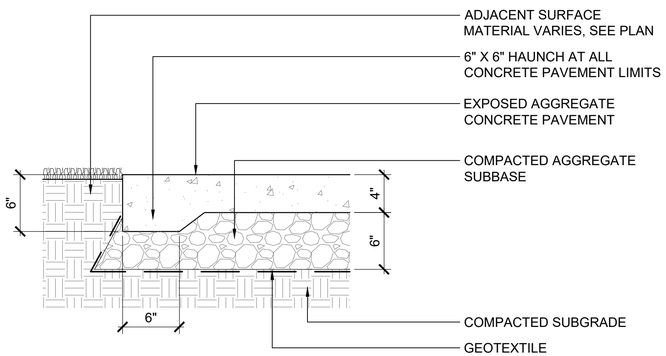


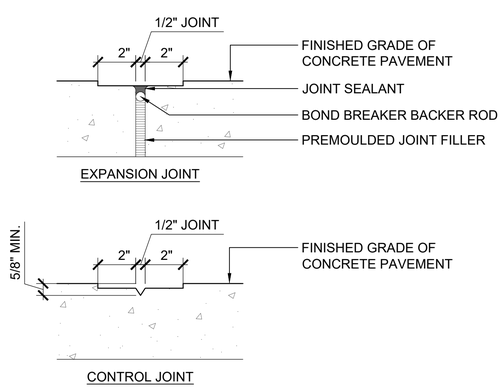
1 CONCRETE PAVING TYPE A
SCALE: 1 1/2" = 1'-0"



2 CONCRETE PAVING TYPE B
SCALE: 1 1/2" = 1'-0"

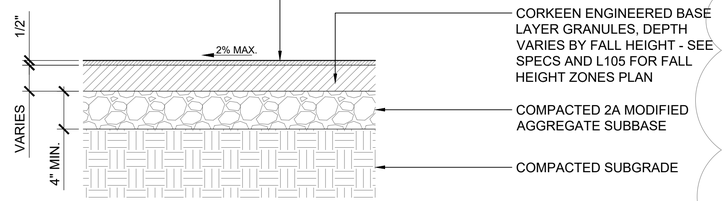
NOTES:

1. SEE PLANS FOR EXPANSION AND CONTROL JOINT LOCATIONS.
2. INSTALL PRE-MOLDED EXPANSION JOINT FILLER OR BACKER ROD WITH SEALANT WHERE CONCRETE PAVING MEETS CURBS, EX. PAVEMENT, OTHER STRUCTURES, AND WHERE SHOWN ON OTHER DETAILS.
3. TOOLED JOINT TO OCCUR AT EACH CONTROL JOINT AS SHOWN ON PLANS. TOOLING SHALL ALSO OCCUR AROUND ENTIRE PERIMETER OF CONCRETE PAVEMENT.



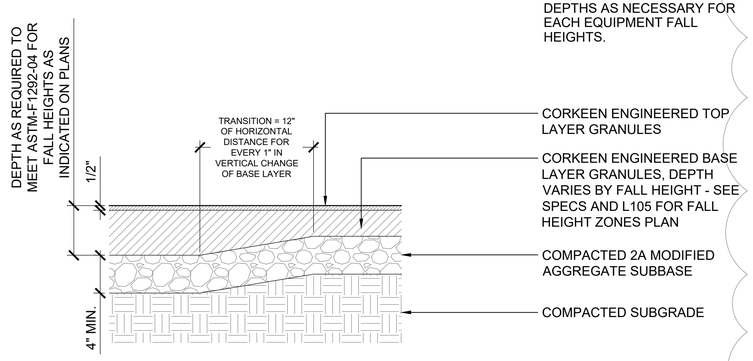
3 EXPANSION AND CONTROL JOINTS
SCALE: 3" = 1'-0"

NOTE:
CONTRACTOR TO VERIFY DEPTH OF BASE LAYER WITH SURFACING MANUFACTURER PRIOR TO INSTALLATION



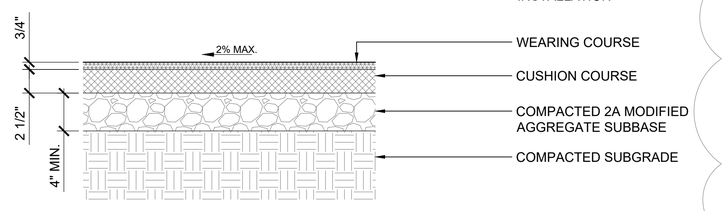
4 CORK SAFETY SURFACE, TYP.
SCALE: 1 1/2" = 1'-0"

NOTE:
ALL DIMENSIONS ARE THE RECOMMENDED MINIMUMS. CONTRACTOR TO CONFIRM DEPTHS AS NECESSARY FOR EACH EQUIPMENT FALL HEIGHTS.

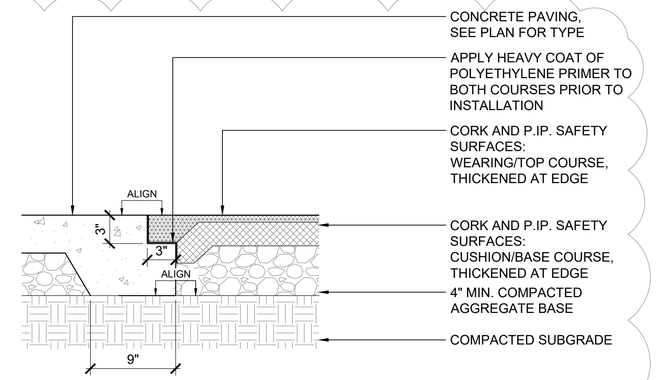


5 CORK SAFETY SURFACE @ DEPTH TRANSITION
SCALE: 1 1/2" = 1'-0"

NOTE:
CONTRACTOR TO VERIFY DEPTH OF CUSHION COURSE WITH SURFACING MANUFACTURER PRIOR TO INSTALLATION

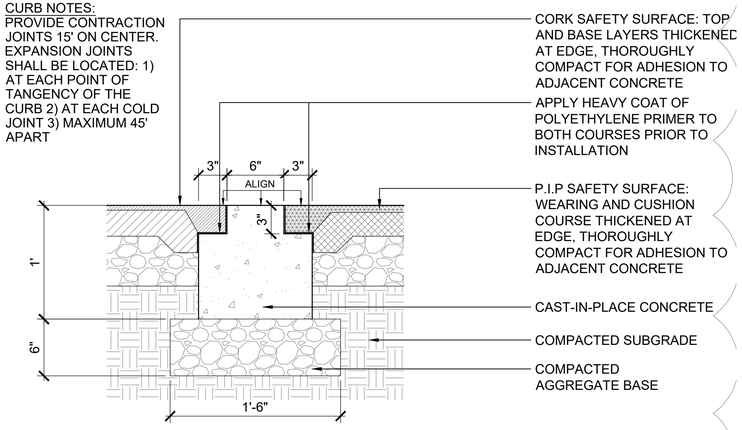


6 POURED IN PLACE (P.I.P) SAFETY SURFACE, TYP.
SCALE: 1 1/2" = 1'-0"



7 SAFETY SURFACE / CONCRETE PAVEMENT TRANSITION
SCALE: 1 1/2" = 1'-0"

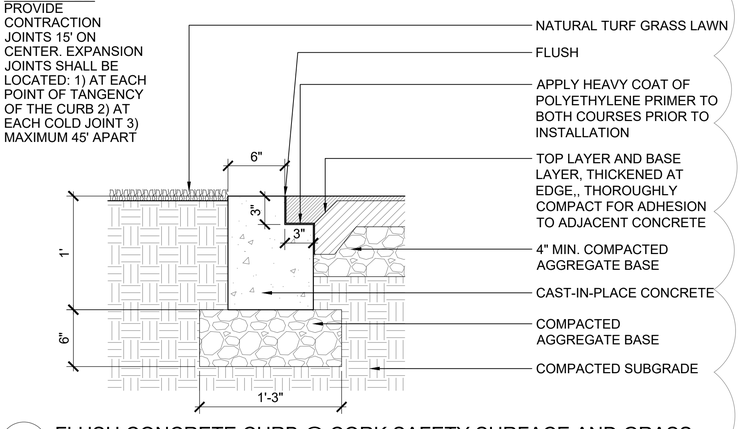
CURB NOTES:
PROVIDE CONTRACTION JOINTS 15' ON CENTER. EXPANSION JOINTS SHALL BE LOCATED: 1) AT EACH POINT OF TANGENCY OF THE CURB 2) AT EACH COLD JOINT 3) MAXIMUM 45' APART



8 FLUSH CONCRETE CURB @ P.I.P AND CORK SAFETY SURFACE
SCALE: 1 1/2" = 1'-0"

CURB NOTES:
PROVIDE CONTRACTION JOINTS 15' ON CENTER. EXPANSION JOINTS SHALL BE LOCATED: 1) AT EACH POINT OF TANGENCY OF THE CURB 2) AT EACH COLD JOINT 3) MAXIMUM 45' APART

1



9 FLUSH CONCRETE CURB @ CORK SAFETY SURFACE AND GRASS
SCALE: 1 1/2" = 1'-0"

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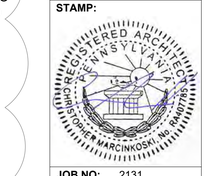

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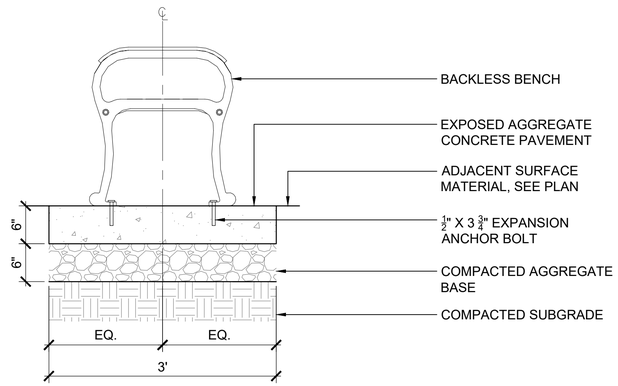
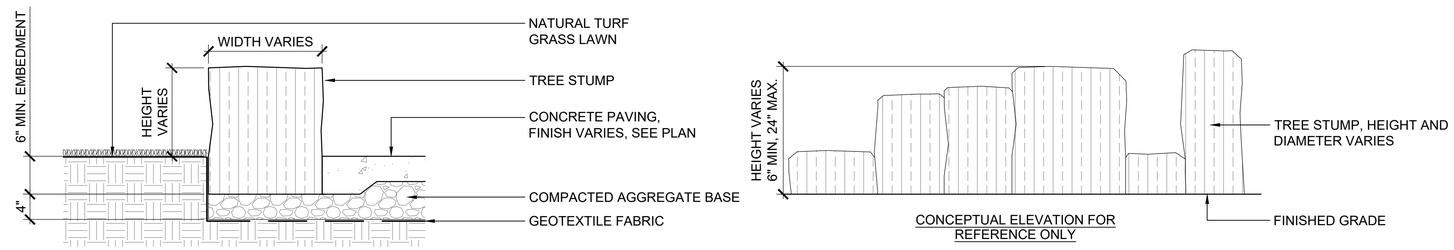


1 6' BACKLESS BENCH
SCALE: 1" = 1'-0"

NOTES:

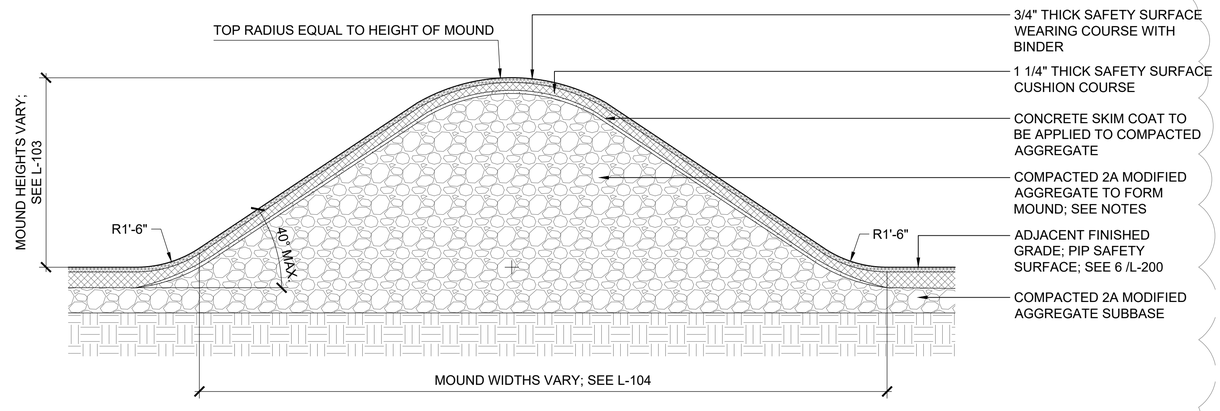
1. TREE STUMPS FOR FEATURES MAY BE OBTAINED FROM CITY OF PHILADELPHIA RECYCLING CENTER. 3850 W. FORD ROAD, PHILADELPHIA, PA 19131.
2. LOGS SHALL BE TAGGED BY ARCHITECT. IF LOGS ARE NOT AVAILABLE AT RECYCLING CENTER, CONTRACTOR SHALL IDENTIFY OTHER MATERIAL SOURCE AND SUBMIT TO ARCHITECT FOR APPROVAL. CONTRACTOR SHALL COORDINATE WITH ARCHITECT TO TAG MATERIALS AT SOURCE.



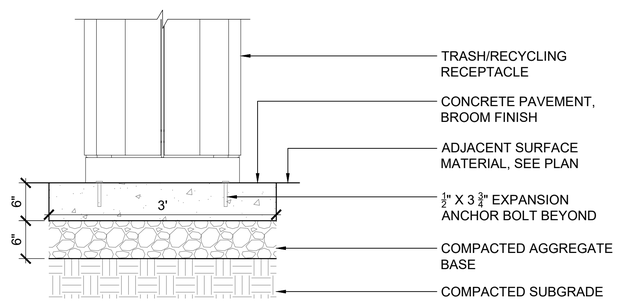
4 TREE STUMPS
SCALE: 1" = 1'-0"

NOTES:

1. FOR FORMATION OF PLAY MOUNDS, 2A MODIFIED AGGREGATE SHALL BE INSTALLED IN 6" LIFTS. LIGHTLY MOISTEN EACH LAYER TO ENSURE SOLID COMPACTION. DO NOT OVER SATURATE AGGREGATE.
2. APPLY BINDING PRIMER COAT TO TOP OF CONCRETE SKIM COAT TO ENSURE SAFETY SURFACE COURSES ADHERE TO CONCRETE.
3. INSTALL POURED-IN-PLACE SAFETY SURFACE PER MANUFACTURER'S RECOMMENDATIONS.
4. HEIGHTS AND WIDTHS OF MOUNDS VARY; SEE 2/L-104



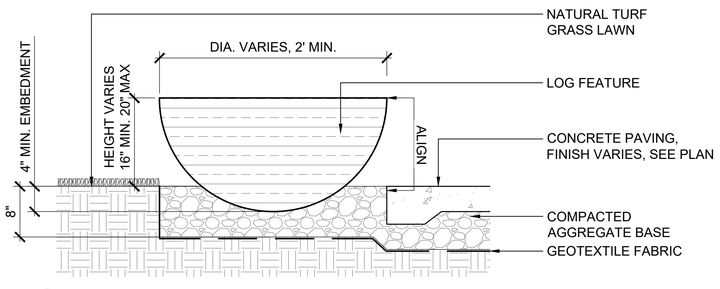
5 SAFETY SURFACE MOUND
SCALE: 1" = 1'-0"



2 TRASH AND RECYCLING RECEPTACLES
SCALE: 1" = 1'-0"

NOTES:

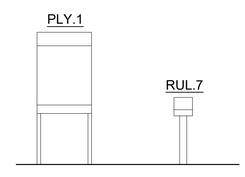
1. LOGS FOR FEATURES MAY BE OBTAINED FROM CITY OF PHILADELPHIA RECYCLING CENTER. 3850 W. FORD ROAD, PHILADELPHIA, PA 19131.
2. LOGS SHALL BE TAGGED BY ARCHITECT. IF LOGS ARE NOT AVAILABLE AT RECYCLING CENTER, CONTRACTOR SHALL IDENTIFY OTHER MATERIAL SOURCE AND SUBMIT TO ARCHITECT FOR APPROVAL. CONTRACTOR SHALL COORDINATE WITH ARCHITECT TO TAG MATERIALS AT SOURCE.



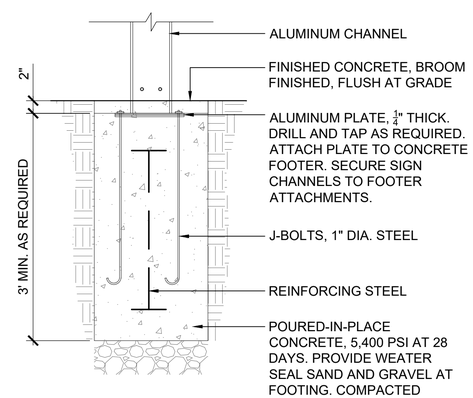
3 LOG FEATURE
SCALE: 1" = 1'-0"

NOTES:

1. DETAIL AND ELEVATION INFORMATION FOR REFERENCE ONLY. REFER TO 'PHILADELPHIA PARKS & RECREATION SIGNAGE STANDARDS MANUAL' VERSION 1.1, JUNE 2018 OR MOST RECENT.
2. SEE SPECIFICATIONS FOR MORE INFORMATION.
3. ALL FINAL GRAPHICS TO BE APPROVED BY CLIENT/PPR.

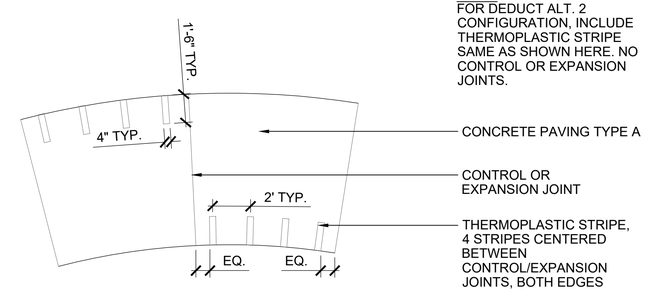


SIGN ELEVATION



FOOTING DETAIL

6 PARK SIGNAGE
SCALE: NTS



NOTE:
FOR DEDUCT ALT. 2 CONFIGURATION, INCLUDE THERMOPLASTIC STRIPE SAME AS SHOWN HERE. NO CONTROL OR EXPANSION JOINTS.

7 THERMOPLASTIC STRIPING LAYOUT
SCALE: 1/4" = 1'-0"

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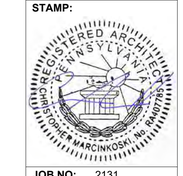

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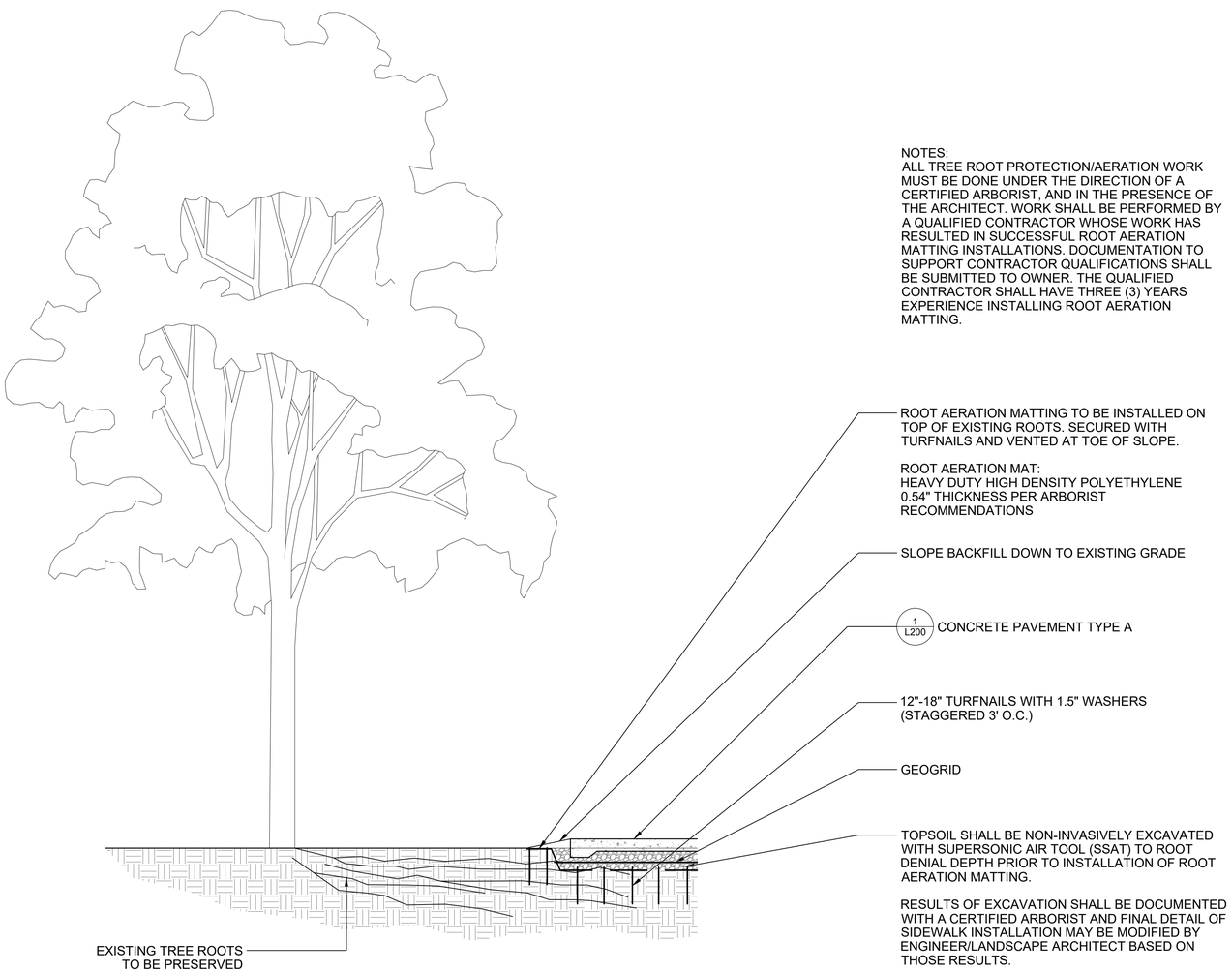
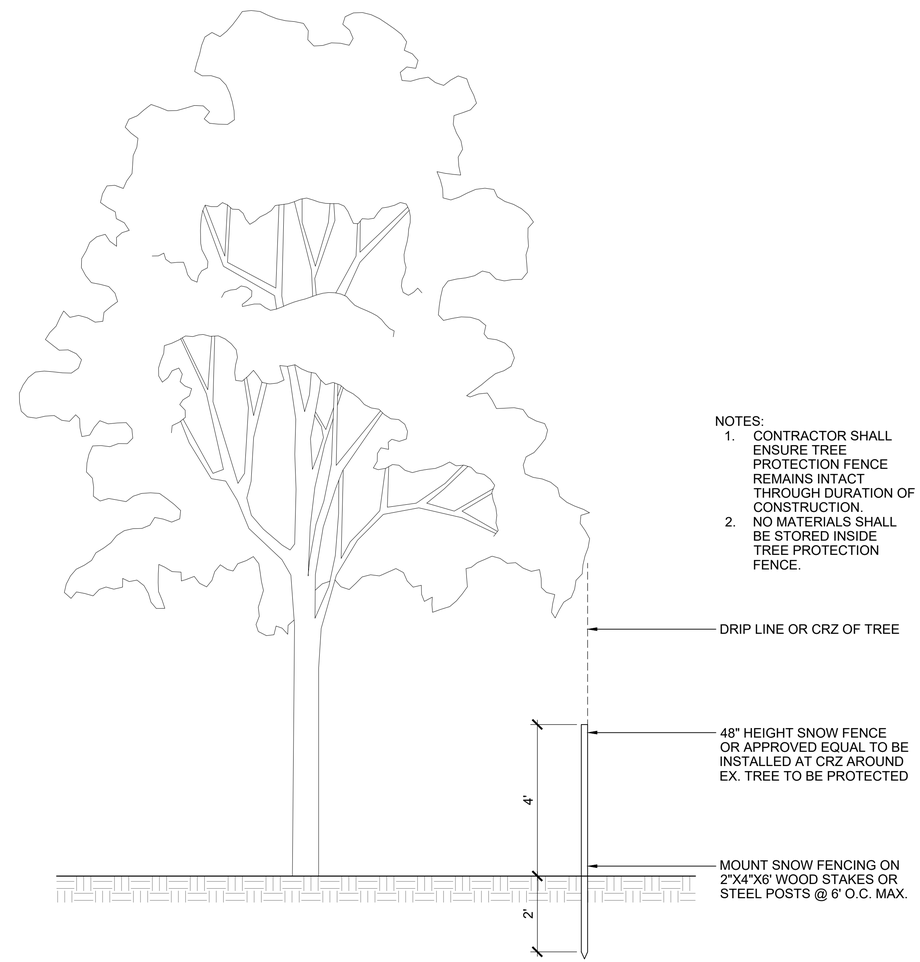
DRAWING NO:	L-201



NOTES:
ALL TREE ROOT PROTECTION/AERATION WORK MUST BE DONE UNDER THE DIRECTION OF A CERTIFIED ARBORIST, AND IN THE PRESENCE OF THE ARCHITECT. WORK SHALL BE PERFORMED BY A QUALIFIED CONTRACTOR WHOSE WORK HAS RESULTED IN SUCCESSFUL ROOT AERATION MATTING INSTALLATIONS. DOCUMENTATION TO SUPPORT CONTRACTOR QUALIFICATIONS SHALL BE SUBMITTED TO OWNER. THE QUALIFIED CONTRACTOR SHALL HAVE THREE (3) YEARS EXPERIENCE INSTALLING ROOT AERATION MATTING.

2 BELOW GRADE ROOT AERATION MATTING
SCALE: 1/2" = 1'-0"



NOTES:
1. CONTRACTOR SHALL ENSURE TREE PROTECTION FENCE REMAINS INTACT THROUGH DURATION OF CONSTRUCTION.
2. NO MATERIALS SHALL BE STORED INSIDE TREE PROTECTION FENCE.

1 TREE PROTECTION FENCE
SCALE: 1/2" = 1'-0"

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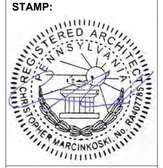

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SITE DETAILS

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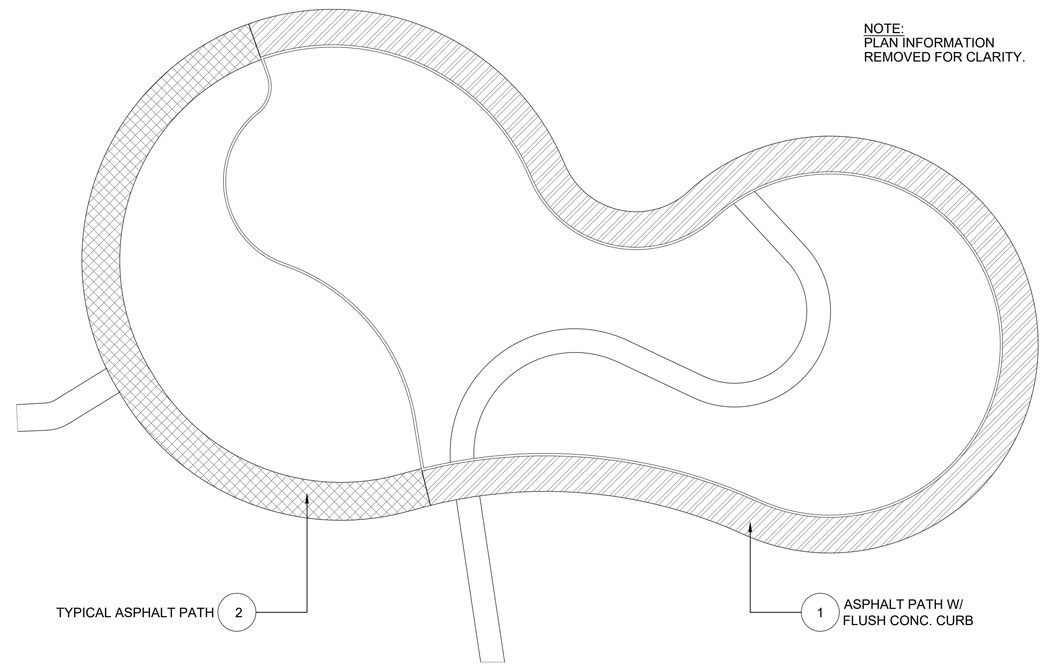
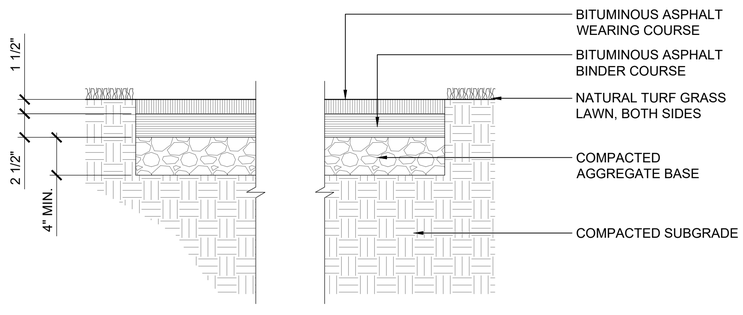
SHEET 11 OF 22

NOTE:
PLAN INFORMATION
REMOVED FOR CLARITY.



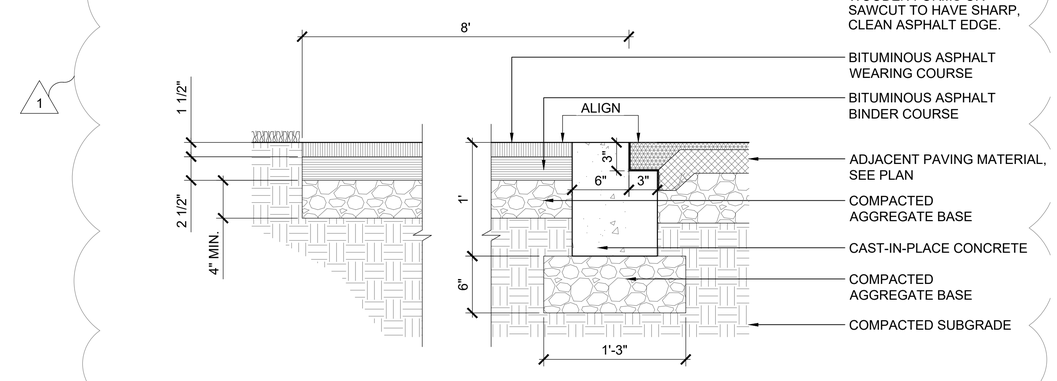
3 DEDUCT ALT 2: ASPHALT PATH KEY PLAN
SCALE: 1/16" = 1'-0"

NOTE:
PROVIDE TEMPORARY
WOODEN FORMS OR
SAWCUT TO HAVE SHARP,
CLEAN ASPHALT EDGE.



2 DEDUCT ALT 2: TYPICAL ASPHALT PATH
SCALE: 1 1/2" = 1'-0"

NOTE:
PROVIDE TEMPORARY
WOODEN FORMS OR
SAWCUT TO HAVE SHARP,
CLEAN ASPHALT EDGE.



1 DEDUCT ALT 2: ASPHALT PATH W/ FLUSH CONCRETE CURB
SCALE: 1 1/2" = 1'-0"

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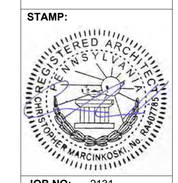

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DEDUCT ALT 2: SITE DETAILS

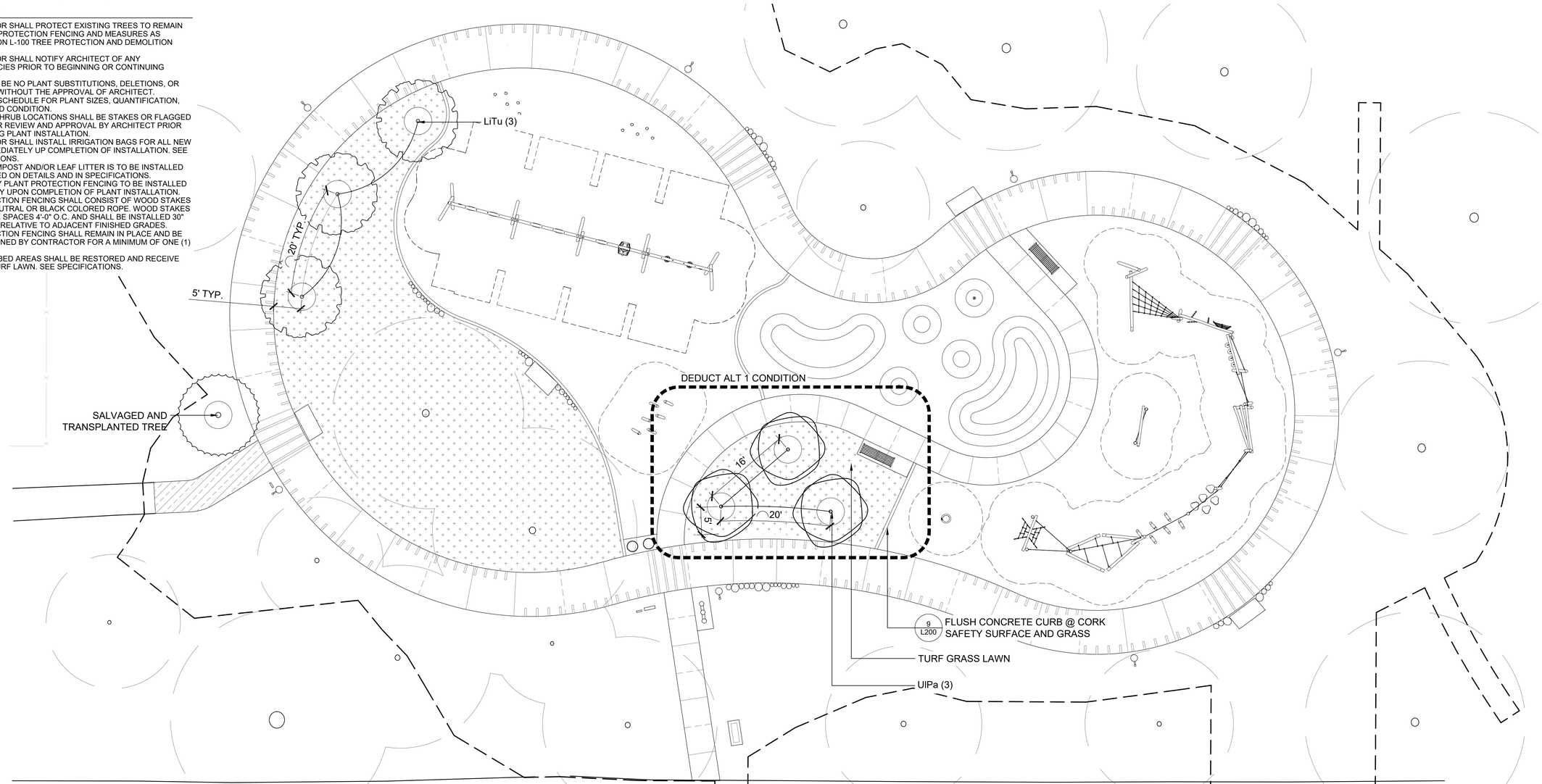
DRAWING NO:

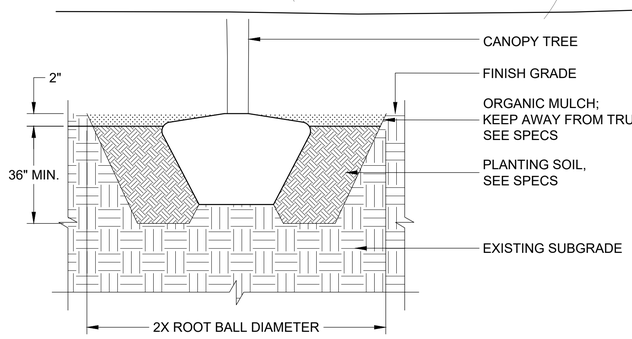
L-203

SHEET 12 OF 22

PLANTING NOTES:

1. CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN WITH TREE PROTECTION FENCING AND MEASURES AS INDICATED ON L-100 TREE PROTECTION AND DEMOLITION PLAN
2. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES PRIOR TO BEGINNING OR CONTINUING WORK.
3. THERE WILL BE NO PLANT SUBSTITUTIONS, DELETIONS, OR ADDITIONS WITHOUT THE APPROVAL OF ARCHITECT.
4. SEE PLANT SCHEDULE FOR PLANT SIZES, QUANTIFICATION, SPECIES AND CONDITION.
5. TREE AND SHRUB LOCATIONS SHALL BE STAKES OR FLAGGED IN FIELD FOR REVIEW AND APPROVAL BY ARCHITECT PRIOR TO STARTING PLANT INSTALLATION.
6. CONTRACTOR SHALL INSTALL IRRIGATION BAGS FOR ALL NEW TREES IMMEDIATELY UP COMPLETION OF INSTALLATION. SEE SPECIFICATIONS.
7. MULCH, COMPOST AND/OR LEAF LITTER IS TO BE INSTALLED AS INDICATED ON DETAILS AND IN SPECIFICATIONS.
8. TEMPORARY PLANT PROTECTION FENCING TO BE INSTALLED IMMEDIATELY UPON COMPLETION OF PLANT INSTALLATION.
   - 8.1. PROTECTION FENCING SHALL CONSIST OF WOOD STAKES AND NEUTRAL OR BLACK COLORED ROPE. WOOD STAKES HALL BE SPACES 4'-0" O.C. AND SHALL BE INSTALLED 30" HEIGHT RELATIVE TO ADJACENT FINISHED GRADES.
   - 8.2. PROTECTION FENCING SHALL REMAIN IN PLACE AND BE MAINTAINED BY CONTRACTOR FOR A MINIMUM OF ONE (1) YEAR.
9. ALL DISTURBED AREAS SHALL BE RESTORED AND RECEIVE NATURAL TURF LAWN. SEE SPECIFICATIONS.





02 TREE PLANTING DETAIL
SCALE: 1" = 1'-0"

PLANTING SCHEDULE:

SYMBOL	KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING
	LiTu	3	*Liriodendron tulipifera*	TULIPTREE	2.5-3" CAL.	B&B	AS SHOWN

ADD ALT 1 PLANTING SCHEDULE:

SYMBOL	KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING
	UlPa	3	*Ulmus x 'Patriot'*	PATRIOT ELM	2.5-3" CAL.	B&B	AS SHOWN

LEGEND

- LIMIT OF WORK, SEE C-100 FOR FULL EXTENTS (1)
- NATURAL TURF GRASS LAWN
- EXISTING TREE TO REMAIN
- NEW TREE, SYMBOL VARIES, SEE PLANTING SCHEDULE

01 PLANTING PLAN
SCALE: 1" = 10'

0 10 20FT

REVISIONS

NO.	DATE	DESCRIPTION
1	08.18.2022	ADDENDUM 1 REVISIONS

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1315 Walnut Street,
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Philadelphia, PA. 19107

CIVIL ENGINEER
KS Engineers, P.C.
530 Walnut Street,
Suite 460
Philadelphia, PA. 19106

MEP ENGINEER
Arora Engineers, Inc.
61 Wilmington-West
Chester Pike,
Chadds Ford, PA 19317

COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:

JOB NO: 2131
DATE: 07/22/2022
DRAWN: NJ
CHECKED: CM
DRAWING TITLE:

PLANTING PLAN AND DETAILS

DRAWING NO:

L-300

SHEET 13 OF 22

EXISTING LEGEND

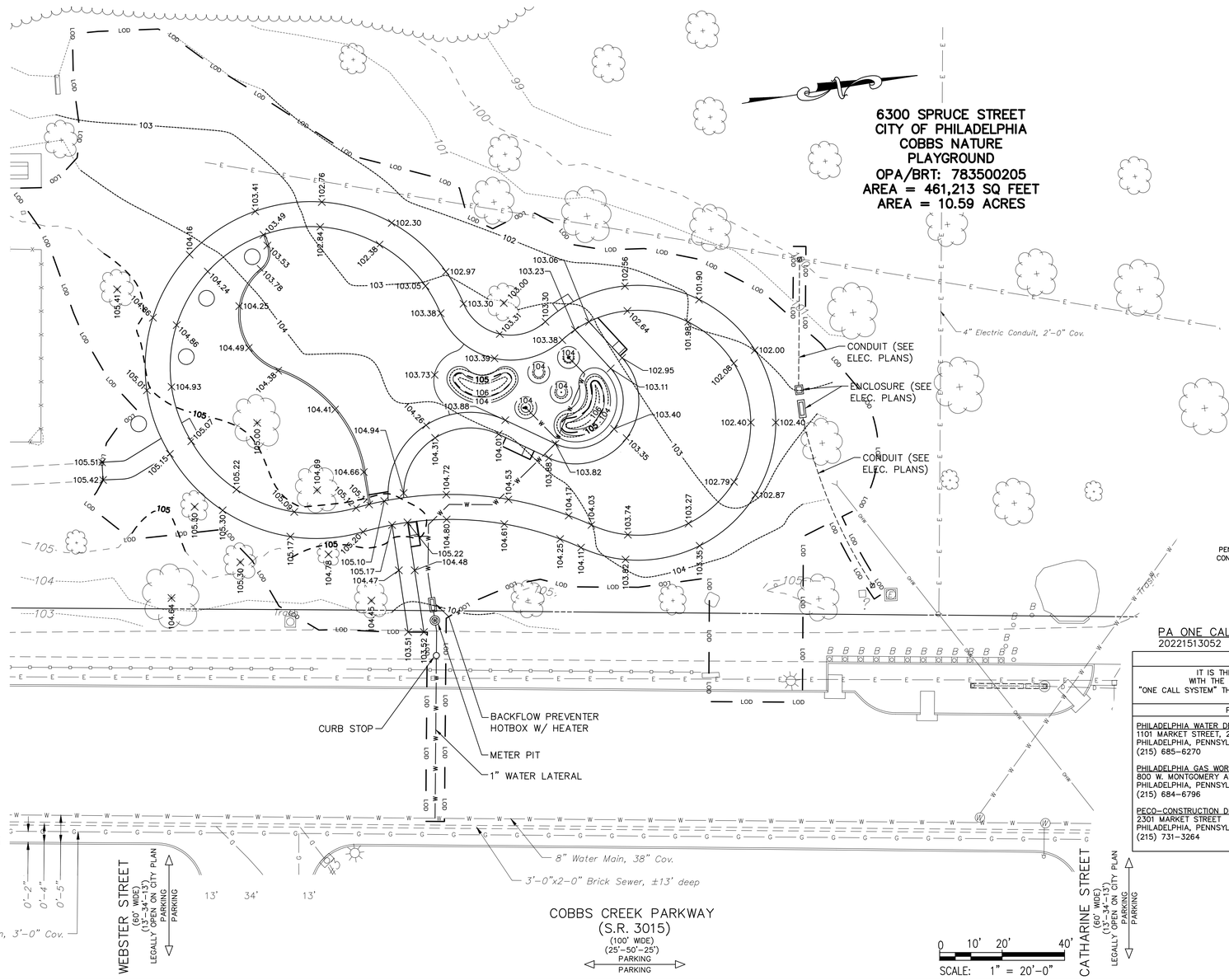
- WOODS LINE
- BUILDING
- CONCRETE CURB
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- GAS LINE
- POTABLE WATER
- COMBINED SEWER
- STORM SEWER
- TELECOMMUNICATION CONDUIT
- ELECTRIC CONDUIT
- OVERHEAD UTILITY LINE
- GUIDERAIL
- FENCE
- UNKNOWN MANHOLE
- TELEPHONE MANHOLE
- SANITARY MANHOLE
- STORM MANHOLE
- STORM/SANITARY MANHOLE
- ELECTRIC MANHOLE
- WATER MANHOLE
- WATER VALVE
- GAS VALVE
- UNKNOWN VALVE
- SEWER VENT
- FIRE HYDRANT
- UTILITY POLE/STREET LIGHT
- LIGHT POLE
- SIGN
- FLAG POLE
- TREE
- CITY INLET
- GRATE INLET
- WETLANDS
- PROPERTY LINE
- SUBSURFACE STONE STORAGE

UTILITY LEGEND

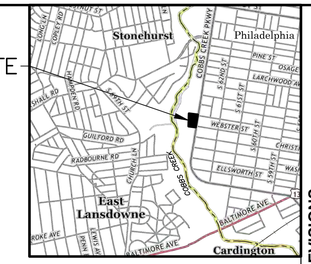
- BENCH
- TRASH RECPTACLE
- DRINKING FOUNTAIN
- WATER LATERAL
- ELECTRIC CONDUIT
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- LIMIT OF DISTURBANCE

GENERAL NOTES:

1. TOPOGRAPHIC INFORMATION SHOWN IS BASED ON A FIELD SURVEY PERFORMED BY SCI–TEK CONSULTANTS, INC., COMPLETED IN JANUARY 2021.
2. HORIZONTAL DATUM: PA STATE PLANE COORDINATES (SOUTH ZONE) NAD83(2011); VERTICAL DATUM: NAVD88 (GEOID 18). GRID NORTH, BEARINGS AND ELEVATIONS WERE DERIVED FROM THE KEYNET GPS VRS NETWORK. THE STATE PLANE COORDINATES HAVE BEEN SCALED TO GROUND FROM A POINT AT N: 234949.02 AND E: 2669355.68 USING A COMBINED FACTOR OF 1.0000024745.
3. SURVEY MEASUREMENTS WERE MADE IN US SURVEY FEET (US FT).
4. THE ACCURACY REGARDING LOCATION AND OR DEPTH OF ALL UTILITIES CANNOT BE GUARANTEED. PRIOR TO ANY DIGGING, DRILLING, TRENCHING OR OTHER EARTHMOVING ACTIVITIES, THE CONTRACTOR SHALL VERIFY DIMENSIONS AND EXISTING CONDITIONS AT THE SITE. FOR INFORMATION REGARDING UTILITIES, CONSULT PENNSYLVANIA ONE CALL 1–800–242–1776.
5. CONTOURS SHOWN WERE PRODUCED FROM AN ACTUAL GROUND SURVEY. CONTOUR INTERVAL IS 1 FOOT.
6. ALL SITE WORK TO BE COMPLETED IN ACCORDANCE WITH LOCAL ORDINANCES AND SPECIFICATIONS INCLUDING, BUT NOT LIMITED TO, PHILADELPHIA DEPARTMENT OF STREETS, PHILADELPHIA WATER DEPARTMENT, AND THE PHILADELPHIA CODE.
7. COBBS CREEK IS LOCATED APPROXIMATELY 285 L.F. TO THE WEST OF THE PROJECT SITE.



SITE



VICINITY MAP

1" = 1000'

DARBY & COBBS CREEKS WATERSHED
FLOOD MANAGEMENT DISTRICT B–2
COMBINED SEWER SERVICE AREA

PROPERTY OWNER:

CITY OF PHILADELPHIA
COBBS NATURE PLAYGROUND
1401 JOHN F. KENNEDY BLVD.
PHILADELPHIA, PA 19102–1617

PROPERTY ADDRESS:

6300 SPRUCE STREET
PHILADELPHIA, PA 19122

OPA/BRT ACCOUNT NO.:

783500205

PROTECT YOURSELF

PENNSYLVANIA UNDER GROUND LOCATION 1–800–242–1776 STOP – CALL BEFORE YOU DIG!

WHAT YOU DON'T KNOW CAN HURT YOU.

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE & 10 WORKING DAYS IN DESIGN STAGE

Pennsylvania One Call System, Inc.
1–800–242–1776

PA ONE CALL SERIAL NO.
20221513052

ACT 187

IT IS THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE PENNSYLVANIA ACT 187 AND TO CONTACT THE "ONE CALL SYSTEM" THREE (3) WORKING DAYS (UNLESS OTHERWISE NOTED) PRIOR TO START OF CONSTRUCTION.

PENNSYLVANIA ONE CALL: 1–800–242–1776

PHILADELPHIA WATER DEPARTMENT
1101 MARKET STREET, 2nd FLOOR
PHILADELPHIA, PENNSYLVANIA
(215) 685–6270

PHILADELPHIA GAS WORKS
800 W. MONTGOMERY AVENUE, 3RD FLOOR
PHILADELPHIA, PENNSYLVANIA 19122
(215) 684–6796

PECO–CONSTRUCTION DEPARTMENT
2301 MARKET STREET
PHILADELPHIA, PENNSYLVANIA 19103
(215) 731–3264

VERIZON
900 RACE STREET
PHILADELPHIA, PENNSYLVANIA 19107
(215) 351–8947

COMCAST
1351 S. COLUMBUS BOULEVARD
PHILADELPHIA, PENNSYLVANIA 19147
(215) 952–4935

KSE KS ENGINEERS, P.C.

ENGINEERS•SURVEYORS•CONSTRUCTION MANAGERS
530 WALNUT STREET SUITE 460
PHILADELPHIA, PENNSYLVANIA 19106
PHONE: 215.925.0425 • FAX: 215.925.0430

REVISIONS

NO.	DATE	DESCRIPTION
1	08.16.2022	PRE-BID REVISIONS

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CIVIL ENGINEER
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530 Walnut Street,
Suite 460
Philadelphia, PA. 19106

MEP ENGINEER
Arora Engineers, Inc.
61 Wilmington-West
Chester Pike,
Chadds Ford, PA 19317

COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:
FRANK ANTHONY FREGA
PA P.E. LICENSE NO. PE041605R
COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
FRANK ANTHONY FREGA
ENGINEER
NP PE041605R

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	RDC
CHECKED:	RSB
DRAWING TITLE:	GRADING AND UTILITY PLAN
DRAWING NO:	C-100

Plotted: 8/18/2022 1:46 PM by Richard Burrell File Name: Z:\2021-2474-01\06 - Technical (Survey, Reports, Calc, CADD)\CADD\Plans\C100 Grading and Utility Plan.dwg

EXISTING LEGEND

- WOODS LINE
- BUILDING
- CONCRETE CURB
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- GAS LINE
- POTABLE WATER
- COMBINED SEWER
- STORM SEWER
- TELECOMMUNICATION CONDUIT
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- UTILITY POLE/STREET LIGHT
- LIGHT POLE
- SIGN
- FLAG POLE
- TREE
- CITY INLET
- GRATE INLET
- WETLANDS
- PROPERTY LINE
- SUBSURFACE STONE STORAGE

EROSION CONTROL LEGEND

- BENCH
- TRASH RECPTACLE
- DRINKING FOUNTAIN
- REMOVE TREE
- LIMIT OF DISTURBANCE AND PROJECT SITE BOUNDARY
- TEMPORARY CONSTRUCTION FENCE
- PROPOSED OVERLAND FLOW ARROW
- MAJOR CONTOUR LINE
- MINOR CONTOUR LINE
- PROPOSED CURB
- 8" COMPOST FILTER SOCK
- 12" COMPOST FILTER SOCK
- FB — FILTER BAG INLET PROTECTION
- ST — STONE INLET PROTECTION
- CFS — COMPOST FILTER SOCK INLET PROTECTION

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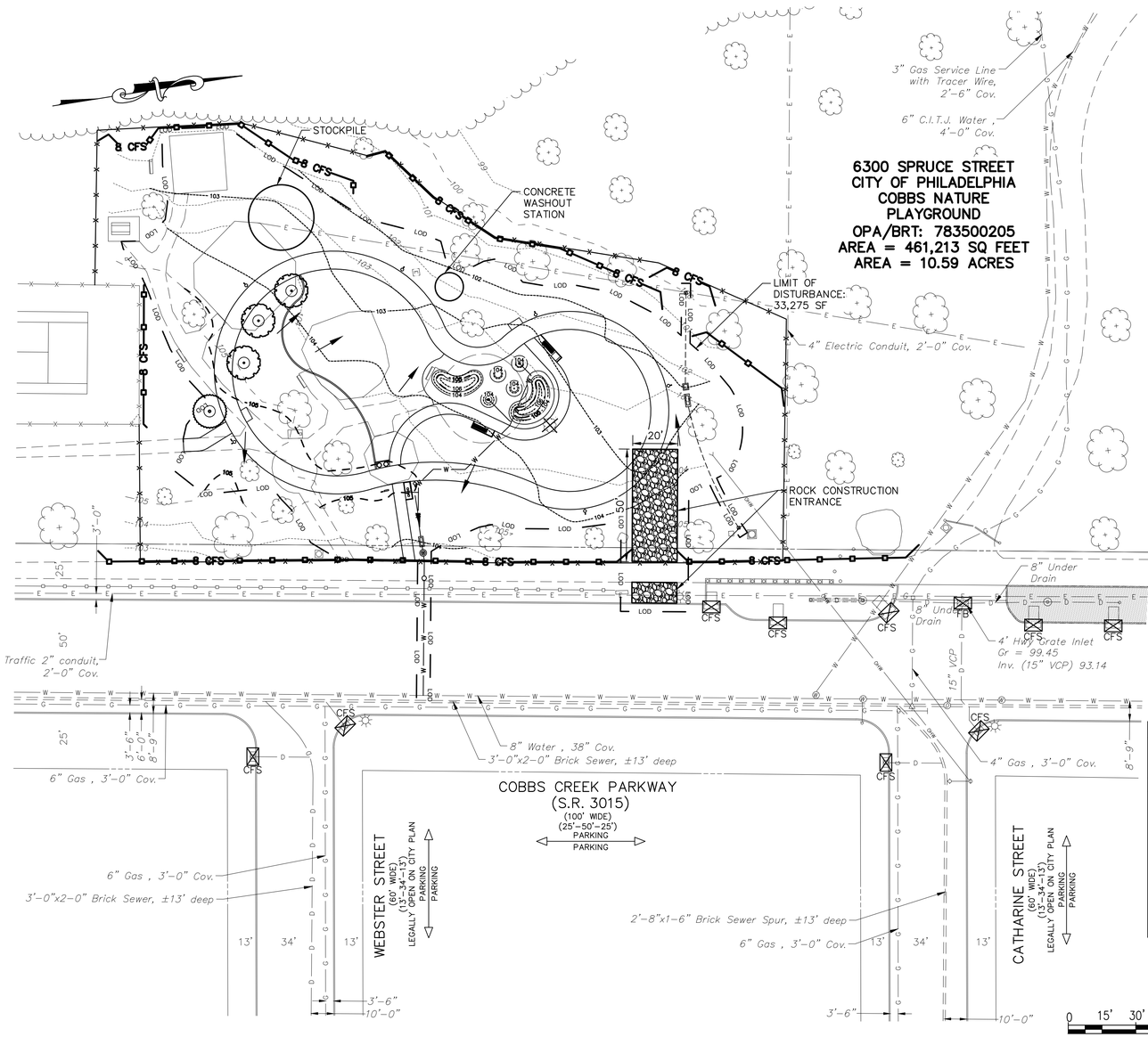
7. COBBS CREEK IS LOCATED APPROXIMATELY 285 L.F. TO THE WEST OF THE PROJECT SITE.

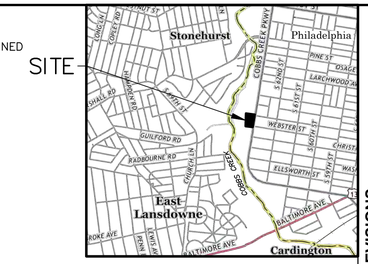
EROSION CONTROL NOTES:

1. ALL INLETS WITHIN 1 BLOCK OF LIMIT OF DISTURBANCE SHALL HAVE INLET PROTECTION INSTALLED AND MAINTAINED THROUGHOUT CONSTRUCTION.

SOIL SYMBOL	SOIL DESCRIPTION	% OF SITE	RUNOFF CLASS	HYDRIC SOIL	SLOPE RANGE	DEPTH
Ub	URBAN–LAND	100.00%	VERY HIGH	NO	0–8%	0"–10"

LIMIT OF DISTURBANCE (LOD) SUMMARY TABLE		
TOTAL SITE AREA	461,213 S.F.	10.59 ACRES
LOD ON SITE	31,749 S.F.	0.73 ACRES
LOD IN R.O.W.	1,526 S.F.	0.04 ACRES
TOTAL LOD	33,275 S.F.	0.76 ACRES





VICINITY MAP

1" = 1000'

DARBY & COBBS CREEKS WATERSHED
FLOOD MANAGEMENT DISTRICT B–2
COMBINED SEWER SERVICE AREA

PROPERTY OWNER:

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PROPERTY ADDRESS:

6300 SPRUCE STREET
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OPA/BRT ACCOUNT NO.:

783500205

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1–800–242–1776

PA ONE CALL SERIAL NO.
20221513052

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COMCAST
1351 S. COLUMBUS BOULEVARD
PHILADELPHIA, PENNSYLVANIA 19147
(215) 952–4935

PWD TRACKING NO.: FY22–COBB–6972–01

KSE KS ENGINEERS, P.C.

ENGINEERS•SURVEYORS•CONSTRUCTION MANAGERS
530 WALNUT STREET SUITE 460
PHILADELPHIA, PENNSYLVANIA 19106
PHONE: 215.925.0425 • FAX: 215.925.0430

REVISIONS

NO.	DATE	DESCRIPTION
1	08.18.2022	PRE-BID REVISIONS

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1315 Walnut Street,
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Philadelphia, PA. 19107

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MEP ENGINEER
Arora Engineers, Inc.
61 Wilmington-West
Chester Pike,
Chadds Ford, PA 19317

COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:
FRANK ANTHONY FREGA
PA P.E. LICENSE NO. PE041605R

JOB NO: 2131
DATE: 07/22/2022
DRAWN: RDC
CHECKED: RSB
DRAWING TITLE:
EROSION CONTROL PLAN

DRAWING NO:
C-200
SHEET 15 OF 22

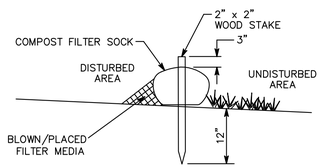
Plotted: 8/18/2022 1:24 PM by Richard Burrell File Name: Z:\2021-2474-01\06 - Technical (Survey, Reports, Calc, CADD)\CADD\Plans\C200 Erosion Control Plan.dwg

TABLE 4.1
Compost Sock Fabric Minimum Specifications

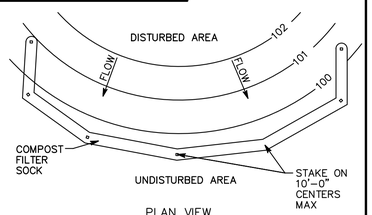
Material Type	3 mil HDPE	5 mil HDPE	5 mil HDPE	Multi-Filament Polypropylene (MFPP)	Heavy Duty Multi-Filament Polypropylene (HDMFPP)
Material Characteristics	Photo-degradable	Photo-degradable	Bio-degradable	Photo-degradable	Photo-degradable
Sock Diameters	12" 18"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"	12" 18" 24" 32"
Mesh Opening	3/8"	3/8"	3/8"	3/8"	1/8"
Tensile Strength		26 psi	26 psi	44 psi	202 psi
Ultraviolet Stability % Original Strength (ASTM G-155)	23% at 1000 hr.	23% at 1000 hr.		100% at 1000 hr.	100% at 1000 hr.
Minimum Functional Longevity	6 months	9 months	6 months	1 year	2 years
Two-ply systems					
Inner Containment Netting	HDPE biaxial net				
	Continuously wound				
	Fusion-welded junctures				
	3/4" X 3/4" Max. aperture size				
Outer Filtration Mesh	Composite Polypropylene Fabric (Woven layer and non-woven fleece mechanically fused via needle punch)				
	3/16" Max. aperture size				
Sock fabrics composed of burlap may be used on projects lasting 6 months or less.					

TABLE 4.2
Compost Standards

Organic Matter Content	80% - 100% (dry weight basis)
Organic Portion	Fibrous and elongated
pH	5.5 - 8.0
Moisture Content	35% - 55%
Particle Size	98% pass through 1" screen
Soluble Salt Concentration	5.0 dS/m (mmhos/cm) Maximum



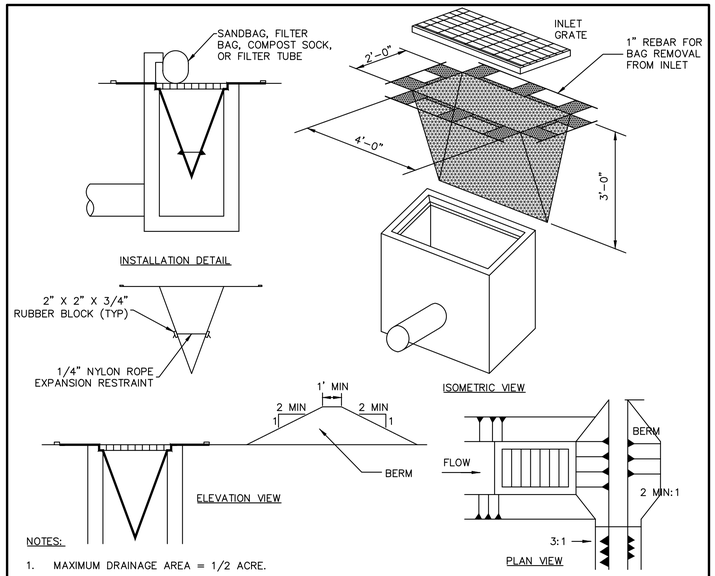
SECTION VIEW



PLAN VIEW

1. REMOVE DEPOSITS WHEN SEDIMENT ACCUMULATION IS ONE HALF THE HEIGHT OF THE EXPOSED COMPOST FILTER SOCK.
2. PLACE COMPOST FILTER SOCK ON LEVEL GRADE. EXTEND BOTH ENDS OF THE COMPOST FILTER SOCK AT LEAST 8'-0" UPSLOPE AT 45 DEGREES TO THE MAIN ALIGNMENT.
3. REPLACE BIODEGRADABLE FILTER SOCK AFTER 6 MONTHS; PHOTODEGRADABLE AFTER 12 MONTHS.
4. ALL DIMENSIONS ARE IN U.S. CUSTOMARY UNITS.
5. CONTRACTOR SHALL PROVIDE SAND BAGS, CONCRETE BLOCKS, OR OTHER SUITABLE MATERIAL TO STABILIZE COMPOST FILTER SOCK ON PAVED AREAS AND PREVENT IT FROM MOVING OR SHIFTING.
6. STABILIZING DEVICES SHALL BE SPACED 10 FEET ON CENTER OR AS RECOMMENDED BY THE MANUFACTURER, WHICHEVER IS LESS.
7. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
8. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.

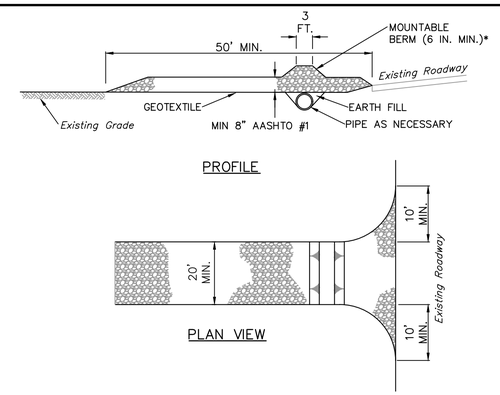
COMPOST FILTER SOCK



NOTES:

1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION IS NOT REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS REQUIRED FOR ALL INSTALLATIONS.
3. EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR TO REMAIN PERMANENTLY.
4. DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS

FILTER BAG INLET PROTECTION



* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:

REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY. IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

ROCK CONSTRUCTION ENTRANCE

TOPSOIL APPLICATION

Graded areas should be scarified or otherwise loosened to a depth of 3 to 5 inches to permit bonding of the topsoil to the surface areas and to provide a roughened surface to prevent topsoil from sliding down slope.

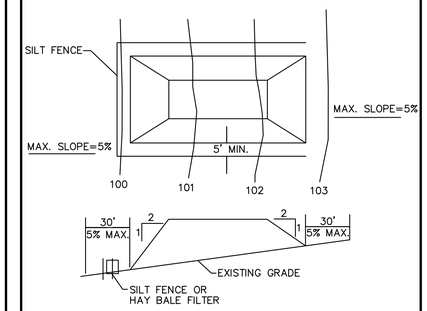
Topsoil should be uniformly distributed across the disturbed area to a depth of 4 to 8 inches minimum — 2 inches on fill outslopes. Spreading should be done in such a manner that sodding or seeding can proceed with a minimum of additional preparation or tillage. Irregularities in the surface resulting from topsoil placement should be corrected in order to prevent formation of depressions unless such depressions are part of the PCSM plan.

Topsoil should not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet, or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. Compacted soils should be scarified 6 to 12 inches along contour wherever possible prior to seeding.

TABLE 11.1
Cubic Yards of Topsoil Required for Application to Various Depths

Depth (in)	Per 1,000 Square Feet	Per Acre
1	3.1	134
2	6.2	268
3	9.3	403
4	12.4	537
5	15.5	672
6	18.6	806
7	21.7	940
8	24.8	1,074

Adapted from VA DSWC



NOTES:

1. PLACE STOCKPILES AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. ALL SIDE SLOPES SHALL BE 2 TO 1 OR FLATTER.
3. STOCKPILE SHALL RECEIVE A VEGETATIVE COVER IN ACCORDANCE WITH MINIMUM STABILIZATION REQUIRED.
4. SILT FENCE SHALL BE INSTALLED AS DETAILED HEREON.
5. STOCKPILE NOT TO EXCEED 20 FEET IN HEIGHT.

TEMPORARY STOCKPILE

PWD TRACKING NO.: FY22-COBB-6972-01

KSE KS ENGINEERS, P.C.
ENGINEERS•SURVEYORS•CONSTRUCTION MANAGERS
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COBBS CREEK PLAYGROUND
PHILADELPHIA, PA

STAMP:
FRANK ANTHONY FREGA
PA P.E. LICENSE NO. PE041605R

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
FRANK ANTHONY FREGA
ENGINEER
Nº PE041605R

JOB NO: 2131
DATE: 07/22/2022
DRAWN: RDC
CHECKED: RSB
DRAWING TITLE: E&S CONTROL DETAILS
DRAWING NO: C-250
SHEET 16 OF 22

STANDARD EROSION AND SEDIMENT CONTROL NOTES:

1. AN INDUSTRIAL WASTE PERMIT WILL BE REQUIRED SHOULD PUMPING TO CITY–OWNED INFRASTRUCTURE BECOME NECESSARY DURING CONSTRUCTION. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.
2. INLET PROTECTION SHOULD BE PROVIDED FOR ALL INLETS OWNED BY PWD THAT ARE LOCATED WITHIN ONE BLOCK OF THE PROJECT SITE.
3. PWD IS NOT RESPONSIBLE FOR ANY CLEANING OR REPAIRS NEEDED ON CITY–OWNED INFRASTRUCTURE DUE TO FAILURE OF ANY EROSION AND SEDIMENT CONTROL PRACTICES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT ALL EROSION AND SEDIMENT CONTROL PRACTICES ARE FUNCTIONING IN ACCORDANCE WITH THE APPROVED PLANS.
4. INSPECTION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES SHALL OCCUR ON A WEEKLY BASIS, BEFORE ANY ANTICIPATED PRECIPITATION EVENTS, AND AFTER ALL PRECIPITATION EVENTS.
5. THE MAXIMUM HEIGHT FOR STOCKPILES AREAS SHALL BE 20 FEET. THE MAXIMUM SIDE SLOPE FOR STOCKPILE AREAS SHALL NOT EXCEED 2:1.
6. THE ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED ON–SITE. A STOCKPILE SHALL BE MAINTAINED ON–SITE FOR THIS PURPOSE. AT THE END OF EACH CONSTRUCTION DAY, ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.
7. FILTER FABRIC FENCE SHOULD BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION SHOULD BE EXTENDED AT LEAST 8 FEET UPSLOPE AT 45 DEGREES TO THE MAIN BARRIER ALIGNMENT. SUPPORT STAKES SHALL BE SPACED AT A MAXIMUM OF 8 FEET. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FILTER FENCE.
8. ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FILTER OUTLET. SEDIMENT MUST BE REMOVED WHEN ACCUMULATIONS REACH 1/3 THE HEIGHT OF THE OUTLET.
9. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
10. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY PWD AND PA DEP.
11. UNTIL THE SITE IS STABILIZED, ALL E&S BMP'S SHALL BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL E&S BMP'S PRIOR TO ANY ANTICIPATED STORM EVENT, AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING, AND RENETTING, MUST BE PERFORMED IMMEDIATELY. IF THE E&S BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS OF THOSE INSTALLED, WILL BE REQUIRED.
12. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING, AS WELL AS CUTS AND FILLS, SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. PWD SHALL BE NOTIFIED OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. PWD MAY REQUIRE A WRITTEN SUBMITTAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.
13. AT LEAST THREE (3) DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1–800–242–1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.
14. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING BY PWD AND THE PA DEP PRIOR TO IMPLEMENTATION.
15. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL.
16. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING, AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP'S SEQUENCE FOR THAT STAGE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THIS E&S PLAN.
17. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS. THESE AREAS MUST BE CLEARLY MARKED AND FENCED OFF BEFORE CLEARING AND GRUBBING OPERATIONS BEGIN.
18. A LOG SHOWING DATES THAT E&S BMP'S WERE INSPECTED AS WELL AS ANY DEFICIENCIES FOUND AND THE DATE THEY WERE CORRECTED SHALL BE MAINTAINED ON THE SITE AND BE MADE AVAILABLE TO PWD AT THE TIME OF INSPECTION.
19. ALL SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF IN THE FOLLOWING MANNER: REMOVAL AND DISPOSAL TO BE AT AN OFF–SITE LOCATION IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
20. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF THREE TO FIVE INCHES –– SIX TO 12 INCHES ON COMPACTED SOILS –– PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM FOUR INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUTSLOPES SHALL HAVE A MINIMUM OF TWO INCHES OF TOPSOIL.
21. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE, OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES, AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.
22. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED NINE INCHES IN THICKNESS.
23. FILL MATERIALS SHALL BE FREE OF FROZEN PARTICLES, BRUSH, ROOTS, SOD, OR OTHER FOREIGN OR OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
24. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.
25. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.
26. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.
27. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. SEEDED AREAS WITHIN 50 FEET OF A SURFACE WATER, OR AS OTHERWISE SHOWN ON THE PLAN DRAWINGS, SHALL BE BLANKETED ACCORDING TO THE STANDARDS OF THIS PLAN.
28. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE IN ANY AREA OR SUB–AREA OF THE PROJECT, THE OPERATOR SHALL STABILIZE ALL DISTURBED AREAS. DURING NON–GERMINATING MONTHS, MULCH OR PROTECTIVE BLANKETING SHALL BE APPLIED AS DESCRIBED IN THE PLAN. AREAS NOT AT FINISHED GRADE, WHICH WILL BE REACTIVATED WITHIN ONE YEAR, MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY STABILIZATION SPECIFICATIONS. THOSE AREAS WHICH WILL NOT BE REACTIVATED WITHIN ONE YEAR SHALL BE STABILIZED IN ACCORDANCE WITH THE PERMANENT STABILIZATION SPECIFICATIONS.
29. PERMANENT STABILIZATION IS DEFINED AS A MINIMUM UNIFORM, PERENNIAL 70% VEGETATIVE COVER OR OTHER PERMANENT NON–VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.
30. E&S BMP'S SHALL REMAIN FUNCTIONAL AS SUCH UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP'S APPROVED BY PWD AND PA DEP.
31. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY E&S BMP'S MUST BE REMOVED OR CONVERTED TO PERMANENT POST–CONSTRUCTION STORMWATER MANAGEMENT PRACTICES. AREAS DISTURBED DURING REMOVAL OR CONVERSION OF THE E&S BMP'S SHALL BE STABILIZED IMMEDIATELY. IN ORDER TO ENSURE RAPID REVEGETATION OF DISTURBED AREAS, SUCH REMOVAL/CONVERSIONS ARE TO BE DONE ONLY DURING THE GERMINATING SEASON.
32. SEDIMENT BASINS AND/OR TRAPS SHALL BE KEPT FREE OF ALL CONSTRUCTION WASTE, WASH WATER, AND OTHER DEBRIS HAVING POTENTIAL TO CLOG THE BASIN/TRAP OUTLET STRUCTURES AND/OR POLLUTE THE SURFACE WATERS. (WHEN APPLICABLE)
33. DURING CONSTRUCTION, THE SELECTED CONTRACTOR IS EXPECTED TO FOLLOW THE PCSMP APPROVED BY PWD (WHERE APPLICABLE). NO CHANGE OR DEVIATION FROM THE APPROVED PCSMP IS PERMITTED WITHOUT PRIOR APPROVAL FROM PWD.
34. ALL WORK ASSOCIATED WITH PWD WATER CONVEYANCE AND SEWER INFRASTRUCTURE SHALL BE DONE IN ACCORDANCE WITH THE CITY OF PHILADELPHIA WATER DEPARTMENT "WATER MAIN STANDARD DETAILS AND CORROSION CONTROL SPECIFICATIONS", 1985 EDITION, AND "STANDARD DETAILS AND STANDARD SPECIFICATIONS FOR SEWERS", 1985 EDITION.
35. CONTACT PWD WATER TRANSPORT RECORDS (1101 MARKET STREET, 2ND FLOOR, PHONE: 215–685–6271) FOR ADDITIONAL APPROVALS AND PERMITS REQUIRED FOR ALL WATER SERVICES, METERS, AND CONNECTIONS TO THE EXISTING AND/OR PROPOSED PWD FACILITIES.
36. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

SITE STABILIZATION METHODS (TEMPORARY & PERMANENT STABILIZATION)

1. STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
2. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES GREATER THAN 3:1.
3. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.

TEMPORARY SEEDING

1. THE FOLLOWING SURFACES OF THE SITE SHALL BE TEMPORARILY SEEDED AND MULCHED:
   - A. THE SURFACE OF TOPSOIL STOCKPILES.
   - B. THE SURFACE OF EXPOSED EARTH AREAS THAT WILL BE EXPOSED WITHOUT CONSTRUCTION ACTIVITY THEREON.
2. SEEDING SHALL OCCUR IMMEDIATELY AFTER ESTABLISHMENT OF THE TOPSOIL STOCKPILES OR ROUGH GRADED AREAS. THE FOLLOWING SHALL BE PLANTED:
   - A. 40 LBS./ACRE ANNUAL RYE GRASS – COMMON, 100% P.L.S.
3. PREPARE AREAS TO BE SEEDED AS FOLLOWS:
   - A. REMOVE ALL DEBRIS, INCLUDING LARGE STONES. APPLY LIME AT A RATE OF 3 TONS PER ACRE AND FERTILIZER AT THE RATE OF 50–50–50 PER ACRE AND WORK INTO SOIL.
   - B. SOW SEED AT THE INDICATED RATE. DIVIDE SEED INTO TWO EQUAL LOTS. SOW ONE LOT IN ONE DIRECTION. SOW SECOND LOT AT RIGHT ANGLE TO FIRST. RAKE SEEDED AREA SLIGHTLY. ROLL SURFACE LIGHTLY TO FIRM SOIL AROUND SEED.
4. PLACE CLEAN DRY STRAW OR HAY MULCH WITHIN 48 HOURS AFTER SEEDING. PLACE AT THE RATE OF 3 TONS PER ACRE.
5. SEEDING DATES SHALL BE BETWEEN MARCH 1 AND NOVEMBER 15.

TEMPORARY MULCHING

1. MULCH PROPOSED LANDSCAPE AREAS OR TOPSOIL STOCKPILES IF EARTHWORK IS COMPLETED OUTSIDE OF THE RECOMMENDED PLANTING SEASONS FOR TEMPORARY SEEDING OR DUE TO UNFAVORABLE WEATHER CONDITIONS.
2. MULCH SHALL BE APPLIED IMMEDIATELY FOLLOWING THE ESTABLISHMENT OF THE TOPSOIL STOCKPILE OR ROUGH GRADING.
3. MULCH WITH SUITABLE FIBROUS GROUND, SHREDDED AGED HARDWOOD, PINE WOOD BARK OR STRAW, UNIFORMLY AND CONTINUOUSLY TO A LOOSE DEPTH OF 3 INCHES MINIMUM. ANCHOR AS REQUIRED.
4. PROPERLY MAINTAIN MULCHED AREAS UNTIL PERMANENT STABILIZATION MEASURES ARE COMPLETE. REAPPLY MULCH MATERIALS WHICH BECOME DISLODGED AS INITIAL OR MODIFIED RATES AS NECESSARY. IF A SLOPE FAILURE OCCURS WHICH REQUIRES REDRESSING, EXCAVATION, OR THE ESTABLISHMENT OF A NEW SLOPE, REPLACE MULCH AS NECESSARY.

PERMANENT SEEDING

1. PERMANENT SEEDING SHALL OCCUR IMMEDIATELY AFTER THE FINAL GRADING IS COMPLETED. THE FOLLOWING SEED SHALL BE PLACED UNLESS OTHERWISE SPECIFIED ON THE PLANS OR DIRECTED IN THE FIELD. THE FOLLOWING SEED MIX SHALL BE USED:
   - A. 40% PENNLAWN FINE FESCUE
   - B. 3% RED TOP
   - C. 20% CHAMPION PERENNIAL RYE GRASS QUANTITIES ARE OF PURE LIVE SEED (P.L.S.) SPREAD AT A RATE OF 63 LBS. PER ACRE.
2. REMOVE ALL DEBRIS, INCLUDING LARGE STONES. TILL SOIL TO A DEPTH OF FOUR INCHES TO SIX INCHES. APPLY LIME AT A RATE OF 4 TONS PER ACRE. APPLY COMMERCIAL 10–20–20 FERTILIZER AT A RATE OF 930 LBS. PER ACRE. WORK FERTILIZER INTO TOP INCH OF SOIL.
3. SEED ONLY AT THE FOLLOWING TIMES:
   - A. SPRING: MARCH 1 TO APRIL 30
   - B. LATE SUMMER/EARLY FALL: AUGUST 15 TO NOVEMBER 15
4. DIVIDE SEED INTO TWO EQUAL LOTS. SOW ONE LOT IN ONE DIRECTION. SOW SECOND LOT AT RIGHT ANGLE TO FIRST LOT. RAKE SEEDED AREA SLIGHTLY. ROLL SURFACE LIGHTLY TO FIRM SOIL AROUND SEED.
5. MULCH SEEDED AREAS WITH STRAW OR HAY AT THE RATE OF 3 TONS PER ACRE. ANCHOR MULCH. COMPLY WITH THE REQUIREMENTS OF SECTION 805 – MULCHING, PENNDOT PUBLICATION 408. ANCHOR MULCH AS SPECIFIED.
6. MULCHING SHALL BE DONE AT THE MINIMUM RATE OF 3 TONS PER ACRE WITH SALT HAY, HAY OR STRAW MULCHES. PLACE MULCH IMMEDIATELY AFTER SEEDING OR WITHIN 48 HOURS AFTER SEEDING IS COMPLETED. PROPERLY MAINTAIN MULCHED AREAS UNTIL THE ENTIRE PROJECT HAS BEEN COMPLETED. PROMPTLY REAPPLY MULCH MATERIALS WHICH BECOME DISLODGED OR LOST DUE TO WIND, RAIN, OR OTHER CAUSES AT INITIAL RATES OR AS DIRECTED.
7. LIQUID MULCH BINDERS MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCHES.
   - A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND CATCHES THE MULCH IN VALLEYS AND AT CRESTS OF BANKS. REMAINDER OF AREAS SHOULD BE UNIFORM IN APPEARANCE.
   - B. USE ONE OF THE FOLLOWING: EMULSIFIED ASPHALT. CLASS E–1 OR E–6. APPLY 31 GALLONS PER 1,000 SQUARE YARDS ON SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET HIGH OR MORE, USE 58 GALLONS PER 1,000 SQUARE YARDS. CUTBACK ASPHALT. CLASS RC–250. APPLY 31 GALLONS PER 1,000 SQUARE YARDS ON FLAT AREAS AND ON SLOPES LESS THAN 8 FEET HIGH. ON SLOPES 8 FEET HIGH OR MORE, USE 58 GALLONS PER 1,000 SQUARE YARDS. NON–ASPHALTIC EMULSION – NATURAL VEGETABLE GUM BLENDED WITH GELLING AND HARDENING AGENTS (TERRA TACK, AR) AS MANUFACTURED BY GRASS GROWERS COMPANY OR EQUAL. APPLY 25 LBS. PER 1,000 SQUARE YARDS.

MAINTENANCE PROGRAM

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE PROPER CONSTRUCTION STABILIZATION, AND MAINTENANCE OF ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR THE PROPER CONSTRUCTION AND STABILIZATION OF PERMANENT CONTROL MEASURES AND RELATED ITEMS INCLUDED WITHIN THIS PLAN.
2. THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL PERMANENT CONTROL MEASURES.
3. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMP'S MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT CONTROL BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTATIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING CLEAN OUT, REPAIR, REPLACEMENT, REGRADING, RESEEDING, REMULCHING,AND RENETTING, MUST BE DONE IMMEDIATELY. IF EROSION AND SEDIMENT CONTROL BMP'S FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMP'S, OR MODIFICATIONS TO THOSE INSTALLED WILL BE REQUIRED.
4. SEDIMENT REMOVED FROM BMP'S SHALL BE DISPOSED OF AT AN OFF–SITE LOCATION IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS.
5. SOIL SEDIMENT REMOVED FROM SILT FENCE DURING REGULAR MAINTENANCE WILL BE INCORPORATED BACK INTO THE EARTHWORK AS FILL ON THE SITE. SOIL SEDIMENT MATERIAL SHALL BE DISTRIBUTED ON–SITE WITHOUT CHANGING DRAINAGE PATTERNS DURING A SPECIFIC CONSTRUCTION STAGE. SILT FENCE INSTALLED ON THE PROJECT SITE SHALL BE MAINTAINED AS FOLLOWS:
   - A. THE FENCE CONDITION WILL BE INSPECTED ONCE A WEEK OR AFTER EVERY STORM EVENT, WHICHEVER COMES FIRST. ANY NECESSARY REPAIRS WILL BE MADE IMMEDIATELY.
   - B. ACCUMULATED SEDIMENTS WILL BE REMOVED AS REQUIRED TO KEEP THE FENCE FUNCTIONAL. DEPOSITS WILL BE REMOVED WHERE ACCUMULATIONS REACH ONE–HALF THE ABOVE–GROUND HEIGHT OF THE FENCE.
   - C. UNDERCUTTING OR EROSION OF THE TOE ANCHOR WILL BE REPLACED IMMEDIATELY WITH ROCK FILTER OUTLETS.
   - D. ANY MANUFACTURER'S RECOMMENDATIONS WILL BE ADHERED TO WHEN REPLACING FILTER FABRIC FENCE DUE TO WEATHERING.
6. AT THE END OF EACH CONSTRUCTION DAY, ANY SEDIMENT DEPOSITED ON PUBLIC ROADWAYS, WILL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. WASHING OF THE ROADWAY WITH WATER WILL NOT BE PERMITTED.
7. OTHER BMP'S
   - A. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.

EROSION AND SEDIMENT CONTROL (E&SC) NOTES:

1. EXISTING CONCRETE AND BITUMINOUS PAVING TO BE SAW–CUT ALONG LIMIT OF DISTURBANCE LINE WITH A CLEAN CUT LINE TO A SUFFICIENT DEPTH TO ALLOW THE REMOVAL OF PAVING WITHOUT DISTURBING THE EXISTING PAVING THAT IS TO REMAIN
2. THE CONTRACTOR SHALL REMOVE FROM THE SITE ALL DEBRIS, RUBBISH AND OTHER MATERIALS RESULTING FROM DEMOLITION AND SHALL SAFELY AND LEGALLY DISPOSE OF ALL THESE ITEMS IN ACCORDANCE WITH APPLICABLE LOCAL, FEDERAL, STATE AND REGULATORY AUTHORITY HAVING JURISDICTION. RECYCLING MUST BE DONE IN ACCORDANCE WITH APPLICABLE REGULATIONS. BURNING OF ANY DEMOLISHED MATERIALS ON–SITE SHALL NOT BE PERMITTED. RECYCLING OF DEMOLITION DEBRIS SHALL BE APPROVED BY THE OWNER. ALL EXISTING FILL TO BE REMOVED FROM SITE IN ACCORDANCE WITH THE PA DEP MANAGEMENT OF FILL POLICY AND REGULATIONS.
3. COMPOST FILTER SOCK ON PAVING TO BE WEIGHTED DOWN BY OBJECTS OF CONSIDERABLE MASS (SAND BAGS, CONCRETE BLOCK OR OTHER SUITABLE MATERIAL). COMPOST FILTER SOCK TO BE INSTALLED DOWNSTREAM OF ALL EARTH MOVING ACTIVITIES.
4. INLET PROTECTION IN ROADWAYS NOT TO INCLUDE STONE OR BERMS FOR ROADWAY MAINTENANCE PURPOSES.
5. MAXIMUM HEIGHT FOR STOCKPILE AREAS TO BE 20 FEET. THE MAXIMUM SIDE SLOPE FOR STOCKPILE AREAS NOT TO EXCEED 2:1.
6. RUMBLE PAD CONSTRUCTION ENTRANCE TO BE SIZED IN ACCORDANCE WITH PA DEP MINIMUM REQUIREMENTS OF 50'L X 20'W AND BE INSTALLED IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.
7. CONSTRUCTION, DEMOLITION AND EARTHWORK DUST CONTROL TO BE COMPLETED IN ACCORDANCE WITH THE CITY OF PHILADELPHIA DUST CONTROL REQUIREMENTS (AIR MANAGEMENT REGULATION (AMR) II. SECTION IX.) AND TO INCLUDE BUT NOT LIMITED TO:
   - a. NOTIFY OCCUPANTS OF NEARBY PROPERTIES, IN WRITING 10 DAYS BEFORE ENGAGING IN EARTHWORK, CONSTRUCTION AND DEMOLITION ACTIVITIES.
   - b. USE OF VACUUM OR SIMILAR SUCTION SYSTEMS TO CAPTURE DUST KICKED UP BY POWER TOOLS WHEN GRINDING OR CUTTING.
   - c. APPLICATION OF WATER OR APPROVED DUST CONTROL SUPPRESSANT DURING EXCAVATION, DEMOLITION AND/OR CONSTRUCTION TO SUPPRESS DUST FORMATION.
   - d. COVERING AND WETTING OF STOCKPILES EARTH, SAND, GRAVEL AND OTHER SIMILAR CONSTRUCTION MATERIALS.
   - e. ALL PERIMETER FENCING MUST HAVE DUST CONTROL FABRIC AND MUST MEASURE A MINIMUM OF 5 FT IN HEIGHT FROM THE BOTTOM OF FENCING.
   - f. 10 MILE PER HOUR SPEED LIMIT FOR ALL EQUIPMENT AND TRUCKS TRAVELING WITHIN THE WORK SITE.
   - g. WETTING AND SWEEPING OF ROADWAYS / ACCESS ROAD IN A WORK SITE TO PREVENT DUST FORMATION.
8. PERMANENT INLET PROTECTION TO BE INSTALLED ON ALL INLETS THAT DRAIN TO THE UNDERGROUND STORMWATER MANAGEMENT SYSTEMS IN ACCORDANCE WITH THE SPECIFICATIONS.

CONSTRUCTION SEQUENCE:

1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN EARTH MOVING ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE CITY OFFICIALS, THE EROSION AND SEDIMENT CONTROL PREPARER, AND REPRESENTATIVE OF THE CITY OF PHILADELPHIA EROSION AND SEDIMENT CONTROL OFFICE TO AN ON–SITE MEETING. INCLUDE A REPRESENTATIVE FROM PWD'S EROSION AND SEDIMENT CONTROL INSPECTION GROUP BY CONTACTING THE INSPECTIONS COORDINATOR OF PWD (OFFICE 215–685–6387).
2. AT LEAST 3 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES SHALL NOTIFY THE PENNSYLVANIA ONE CALL SYSTEM INCORPORATED AT 1–800–242–1776 FOR BURIED UTILITY LOCATIONS.
3. CONSTRUCTION FENCE TO BE INSTALLED WHERE NEEDED TO PROTECT THE PUBLIC FROM LAND DISTURBANCE ACTIVITIES AND TO MAINTAIN PEDESTRIAN ACCESS.
4. INSTALL COMPOST FILTER SOCK DOWNHILL FROM ALL EARTH MOVING ACTIVITIES. COMPOST FILTER SOCK OR OTHER EROSION CONTROL PRACTICES SHALL BE INSTALLED AROUND THE PERIMETER OF THE SITE AS SHOWN ON THE PLAN.
5. INSTALL INLET PROTECTION AS SHOWN ON THE PLAN. EXISTING INLETS SHALL BE PROTECTED THROUGHOUT THE DURATION OF THE CONSTRUCTION.
6. INSTALL CONSTRUCTION ENTRANCE AS SHOWN AND IN ACCORDANCE WITH THE CONSTRUCTION ENTRANCE DETAIL.
7. CONTRACTOR SHALL PROVIDE PROTECTION OF ANY EXISTING UTILITIES, SURFACE FEATURES AND PAVEMENTS THAT ARE TO REMAIN THROUGHOUT THE DURATION OF PROJECT CONSTRUCTION.
8. CLEAR SITE WITHIN LIMIT OF DISTURBANCE AREA, DEMOLISH EXISTING ASPHALT AND CONCRETE PAVING, PLAYGROUND EQUIPMENT, AND TREES MARKED FOR REMOVAL. SAWCUT PAVED AREAS AS NEEDED TO MINIMIZE EARTH DISTURBANCE. DEMOLISHED MATERIAL SHALL BE REMOVED FROM THE SITE AND DISCARDED IN ACCORDANCE WITH APPLICABLE CITY, STATE AND FEDERAL REGULATIONS.
9. EXCAVATE AND INSTALL PROPOSED METER PIT AND BACKFLOW PREVENTER PAD AS SHOWN ON THE PLANS.
10. EXCAVATE TRENCHES FOR PROPOSED WATER SERVICE CONNECTION.
11. INSTALL NEW WATER SERVICE LATERAL AS SHOWN ON THE PLANS.
12. INSTALL PROPOSED PLAYGROUND EQUIPMENT, BENCHES, SPRAYGROUND EQUIPMENT, AND DRINKING FOUNTAIN AS SHOWN ON THE PLANS.
13. ROUGH GRADE REMAINING SUBBASE TO REQUIRED DEPTHS.
14. AS SOON AS SLOPES, CHANNEL DITCHES AND OTHER DISTURBED AREAS REACH FINAL GRADE, THEY MUST BE STABILIZED. CESSATION OF ACTIVITY FOR FOUR (4) DAYS OR LONGER REQUIRES TEMPORARY STABILIZATION.
15. CONSTRUCT FULL DEPTH PAVEMENT AS SHOWN ON THE PLANS.
16. TOPSOIL AND SEED GRASSED AREAS, INSTALL PLANTS, TREES, AND MULCH AS REQUIRED.
17. SWEEP PAVED AREAS DAILY TO PREVENT TRACKING OF SOIL OFF–SITE.
18. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE CONTRACTOR AND/OR OPERATOR SHALL CONTACT INSPECTIONS COORDINATOR OF PWD (OFFICE: 215–685–6387) FOR A FINAL INSPECTION PRIOR TO REMOVAL ON THE E&SC BMP'S.
19. REMOVE SOIL EROSION MEASURES AFTER SITE HAS BEEN INSPECTED AND STABILIZED.

MAINTENANCE NOTES:

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. COMPOST FILTER SOCKS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES ONE–HALF THE HEIGHT OF THE EXPOSED COMPOST FILTER SOCK.
4. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCE AS CONDITIONS DEMAND.
5. BMPs ARE TO BE INSPECTED ON A WEEKLY BASIS AND AFTER STORMWATER EVENTS. INSPECTIONS ARE TO BE LOGGED, DATED AND KEPT ON–SITE AT ALL TIMES.

PWD TRACKING NO.: FY22–COBB–6972–01

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PA P.E. LICENSE NO. PE041605R

FRANK ANTHONY FREGA
ENGINEER
Nº PE041605R

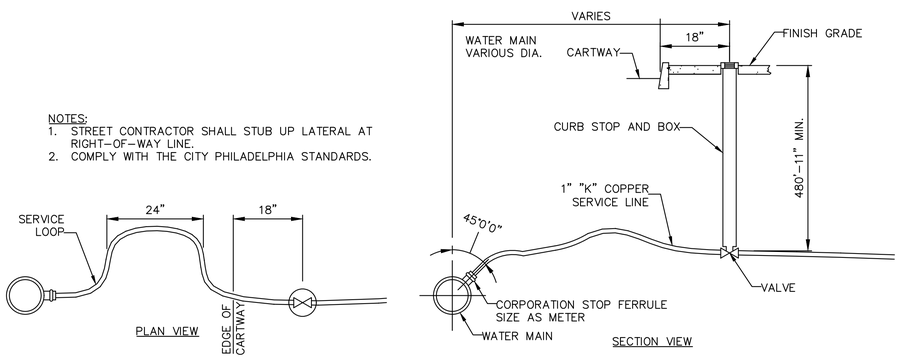
JOB NO:	2131
DATE:	07/22/2022
DRAWN:	RDC
CHECKED:	RSB

DRAWING TITLE:
E&S
CONTROL
NOTES

DRAWING NO:
C-251
SHEET 17 OF 22

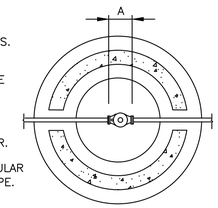
Plotted: 8/18/2022 1:24 PM by Richard Burrell File Name: Z:\2021-2474-01\06 - Technical (Survey, Reports, Calc, CADD.)\CADD\Plans\C251 ESC Notes.dwg

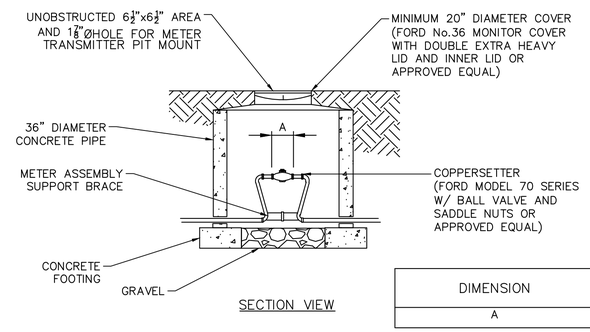
NOTES:
1. STREET CONTRACTOR SHALL STUB UP LATERAL AT RIGHT-OF-WAY LINE.
2. COMPLY WITH THE CITY PHILADELPHIA STANDARDS.



WATER SERVICE CONNECTION
SCALE: N.T.S.

NOTES:
1. LOCATE METER PIT OUTSIDE TRAFFIC LANES.
2. PLUMBER SHALL SPECIFY THE TYPE OF CONNECTIONS THE COPPERSETTER WILL BE EQUIPPED WITH.
3. PLUMBER ALSO TO SPECIFY THE EXACT LAYING LENGTH NEEDED IN THE COPPERSETTER FOR BACKFLOW PREVENTER.
4. WALL OPENING FOR PIPE SHALL BE CIRCULAR WITH DIAMETER 1" GREATER THAN THE PIPE.
5. BACKFLOW PREVENTION PLAN MUST BE REVIEWED BY THE BACKFLOW COMPLIANCE OFFICE.

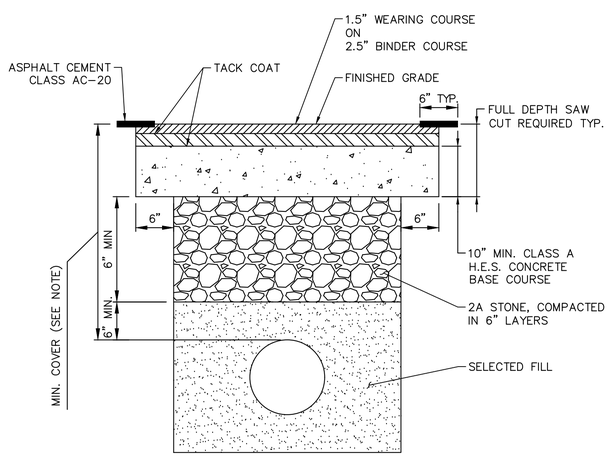




DIMENSION	PIPE SIZE	
	5/8"	1"
A	7 – 1/2"	10 – 3/4"

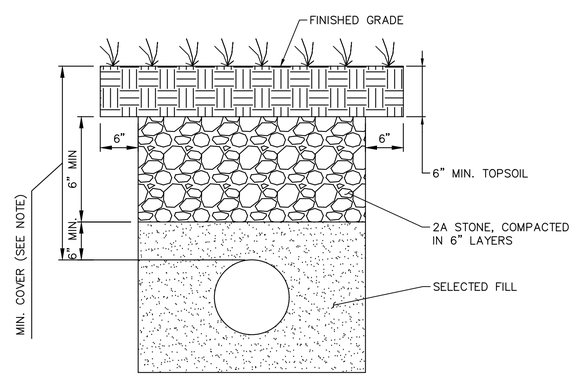
METER PIT
SCALE: N.T.S.

WATER METER NOTES:
1. WATER METER SHALL BE CONNECTED TO THE SERVICE PIPE WITH FLANGES
2. SERVICE PIPE SHALL BE DUCTILE IRON FLANGED PIPE IN ACCORDANCE WITH ANSI/AWWA C115/A21.15.
3. FLANGES SHALL BE PRODUCES OF BRONZE AND SHALL BE FACED, DRILLED AND TAPPED IN CONFORMANCE WITH ANSI B.2.1. FLANGE DIMENSION SHALL CONFORM TO AWWA C700.
4. FLANGED FITTINGS SHALL BE PRODUCED OF DUCTILE IRON AND CONFORM TO THE APPLICABLE REQUIREMENTS FOR DUCTILE IRON FITTINGS SPECIFIED IN ANSI/AWWA C110/A21.10
5. FLANGES OF BOTH DUCTILE IRON FLANGED PIPE AND FITTINGS SHALL BE ADEQUATE FOR WATER SERVICE OF 250 PSI WORKING PRESSURE. THE BOLT CIRCLE AND BOLT HOLES OF THE FLANGES SHALL MATCH THOSE OF THE CLASS 125 FLANGES SHOWN IN ANSI B16.1.
6. NUTS AND BOLTS SHALL BE IN ACCORDANCE WITH ASTM STANDARD A 193-B7 AND A 194, GRADE 4.
7. GASKETS SHALL BE ⅛" THICK AND MADE OF EITHER SBR OR NEOPRENE RUBBER MEETING THE MATERIAL REQUIREMENTS OF ANSI/AWWA C111/A21.11 MECHANICAL JOINT GASKETS
8. GATE VALVES SHALL BE SUITABLE FOR WATER SERVICE OF 150 PSI WORKING PRESSURE AND SHALL BE IN ACCORDANCE WITH AWWA C500.
9. PRECAST METER PITS AND MANUFACTURES SHALL BE CERTIFIED IN ACCORDANCE WITH QC-1 FOR PRECAST CONCRETE PRODUCTS BY THE PWD CERTIFICATION STAFF.
10. METER PITS SHALL BE DESIGNED FOR H-20 LOADING AND ALL PRECAST SEGMENTS SHALL BE KEYED AND THEIR JOINTS WATERTIGHT.
11. CONCRETE SHALL CONSIST OF PORTLAND CEMENT WHICH CONFORMS TO ASTM C150 AND AGGREGATE WHICH CONFORMS TO ASTM C33. MINIMUM COMPRESSIVE STRENGTH SHALL BE 4000 PSI.
12. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60 FOR BARS OR ASTM A185 FOR WELDED WIRE FABRIC.



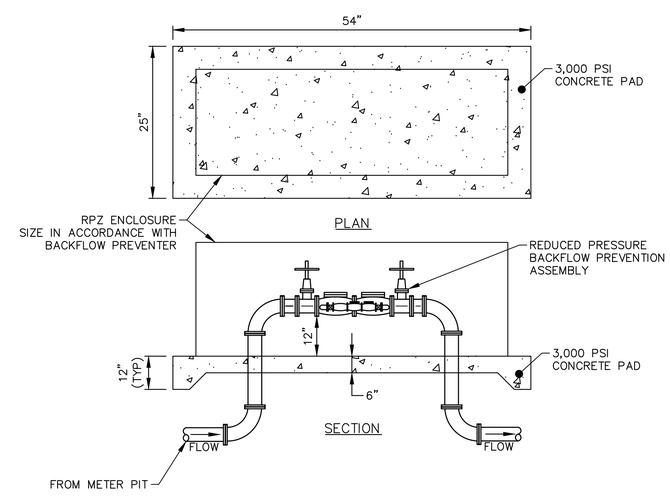
NOTE:
1. MINIMUM COVER: NO STRUCTURE SHALL BE PLACED LESS THAN 24-INCHES BELOW THE CARTWAY OR 15-INCHES BELOW THE FOOTWAY.
2. REPLACE ALL DISTURBED PAVEMENT MARKINGS WITH THERMOPLASTIC TAPE.
3. PAVEMENT MARKINGS MUST BE RESTORED WITHIN 7 DAYS OF TRENCH RESTORATION.
4. ALL RESTORATION TO BE IN ACCORDANCE WITH THE LATEST STREETS DEPARTMENT STANDARDS.

PERMANENT TRENCH RESTORATION DETAIL FOR ROADWAY REPAIR
SCALE: N.T.S.



NOTE:
1. MINIMUM COVER: NO STRUCTURE SHALL BE PLACED LESS THAN 24-INCHES BELOW THE CARTWAY OR 15-INCHES BELOW THE FOOTWAY.
2. ALL RESTORATION TO BE IN ACCORDANCE WITH THE LATEST STREETS DEPARTMENT STANDARDS.

PERMANENT TRENCH RESTORATION DETAIL FOR EARTH REPAIR
SCALE: N.T.S.



BACKFLOW PREVENTER
SCALE: N.T.S.

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FRANK ANTHONY FREGA
PA P.E. LICENSE NO. PE041605R

JOB NO: 2131
DATE: 07/22/2022
DRAWN: RDC
CHECKED: RSB
DRAWING TITLE: UTILITY DETAILS

DRAWING NO: C-500
SHEET 18 OF 22

ELECTRICAL GENERAL NOTES:

1. ALL WORK SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS ADOPTED BY MUNICIPAL, COUNTY, STATE, AND FEDERAL AUTHORITIES, INCLUDING THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE (NEC) NFPA 70, AND WITH THE REQUIREMENTS/AMENDMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
2. CONTRACTOR SHALL COORDINATE EXISTING SECURITY SYSTEM INFRASTRUCTURE, FINAL INSTALLATION, AND REQUIRED DEVICE/EQUIPMENT FOR A FULLY OPERATIONAL SYSTEM WITH THE SECURITY SYSTEM (FIDELITY ALARM) REPRESENTATIVE FOR THE NEW SECURITY CAMERA INSTALLATION PRIOR TO BIDDING.
3. CONTRACT DRAWINGS ARE DIAGRAMMATIC IN NATURE AND ARE INTENDED TO CONVEY SCOPE, DESIGN INTENT, AND GENERAL ARRANGEMENT ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL WORK OF ALL TRADES INCLUDING RESOLUTION OF FIELD CONFLICTS THAT MAY ARISE.
4. WIREWAY, JUNCTION AND PULL BOXES ARE NOT NECESSARILY INDICATED, BUT SHALL BE PROVIDED WHERE MANDATED BY THE NEC, AND AS REQUIRED FOR EASE OF INSTALLATION. BOXES SHALL BE SIZED (MINIMUM) IN ACCORDANCE WITH NEC ARTICLE 314. TROUGHS SHALL BE SIZED PER NEC ARTICLE 376.
5. PROVIDE A DEDICATED NEUTRAL FOR ALL 120V CIRCUITS.
6. VERIFY EXACT LOCATION OF ALL EQUIPMENT WITH EQUIPMENT INSTALLER PRIOR TO ROUGH-IN.
7. CONTRACTOR SHALL FIELD VERIFY DIMENSIONS AND LOCATIONS OF FINISHED CONSTRUCTION PRIOR TO FABRICATION AND INSTALLATION OF FIXTURES AND EQUIPMENT. ANY DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER.
8. EXISTING CONDITIONS AND UTILITIES INDICATED ARE TAKEN FROM EXISTING CONSTRUCTION DOCUMENTS, VARIOUS SURVEYS AND FIELD INVESTIGATIONS. CONTRACTOR IS TO FIELD VERIFY DIMENSIONS OF ALL SITE UTILITIES, ETC., PRIOR TO BID AND INCLUDE ANY DEVIATIONS IN THE CONTRACT.
9. LOCATE ALL EXISTING UTILITIES AND PROTECT THEM FROM DAMAGE.
10. ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL, CONNECT AND MAINTAIN TEMPORARY ELECTRICAL SERVICES AND LIGHTING THROUGHOUT THE ENTIRE PROJECT AREA WHERE REQUIRED BY OTHER TRADES UNTIL NEW, PERMANENT SERVICES ARE INSTALLED. CONTRACTOR SHALL RELOCATE OR OTHERWISE MODIFY TEMPORARY SERVICES AS MANY TIMES AS NECESSARY FOR THE WORK OF ALL CONTRACTORS TO PROCEED UNTIL COMPLETION OF THE PROJECT. ALL TEMPORARY ELECTRICAL WIRING AND/OR ELECTRICAL DEVICES SHALL HAVE GROUND FAULT PROTECTION DURING THE ENTIRE CONSTRUCTION PROJECT LENGTH. THE INSTALLATION AND MAINTENANCE OF ALL TEMPORARY SERVICES SHALL COMPLY WITH APPLICABLE NEC AND OSHA REQUIREMENTS.
11. CONTRACTOR SHALL, UPON COMPLETION OF THE WORK, SUBMIT AS-BUILT RECORD DRAWINGS SHOWING ALL CHANGES FROM THE CONTRACT DRAWINGS MADE DURING THE INSTALLATION. DIMENSION LOCATIONS OF CONCEALED EQUIPMENT.
12. UNLESS OTHERWISE NOTED, ALL PARTS, EQUIPMENT, MATERIALS SHALL BE NEW AND FROM SAME MANUFACTURER AND UL LISTED.
13. UPON COMPLETION OF WORK, CONTRACTOR SHALL THOROUGHLY CLEAN ALL WORK AREAS AND EQUIPMENT AS REQUIRED.
14. COORDINATE ALL CONDUIT ROUTING WITH EXISTING CONDITIONS AND UTILITIES.
15. ALL EXPOSED CONDUITS SHALL BE RGS UNLESS OTHERWISE NOTED.
16. PROVIDE PULL STRINGS IN ALL EMPTY CONDUIT, RACEWAYS AND LABEL AT EACH END.
17. ALL CONDUCTORS INCREASED IN SIZE FOR VOLTAGE DROP CONSIDERATION SHALL BE SPLICED TO APPROPRIATE SIZE CONDUCTORS FOR TERMINATING ONTO EQUIPMENT AND DEVICES. SPLICES SHALL BE MADE INSIDE THE EQUIPMENT AS ALLOWED BY THE NEC OR AT THE CLOSEST JUNCTION BOX TO THE EQUIPMENT OR DEVICE. THE SPLICED CONDUCTOR SHALL BE SIZED AS THE LARGEST ACCEPTABLE CONDUCTOR BASE ON THE TERMINATION OF THE EQUIPMENT OR DEVICE.
18. CALL BEFORE YOU DIG (PA ONE CALL SYSTEM 1-800-242-1776 OR DIAL 811). ELECTRICAL CONTRACTOR TO HIRE AN INDEPENDENT UTILITY LOCATING COMPANY TO MARK-OUT CUSTOMER OWNED/PRIVATE PROPERTY FACILITIES BEFORE DIGGING AT ELECTRICAL CONTRACTOR'S EXPENSE.
19. THE CONTRACTOR SHALL DETERMINE THE EXTENT, EXACT LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND UNDERGROUND VAULTS PRIOR TO COMMENCING WORK.
20. ALL CONDUCTORS SHALL BE COLOR-CODED, SINGLE CONDUCTOR, COPPER WIRE OF THE SPECIFIED SIZE, 600V, TYPE XHHW/XHHW-2 INSULATION, #12 AWG MINIMUM, UNLESS NOTED OTHERWISE.
21. THE ELECTRICAL CONTRACTOR HAS FULL RESPONSIBILITY FOR MEETING WITH THE LOCAL ELECTRIC UTILITY AND COORDINATING WITH THE LOCAL ELECTRIC UTILITY COMPANY'S REQUIREMENTS BEFORE INSTALLATION BEGINS.

CONVENTIONS:

ELECTRICAL EQUIPMENT DESIGNATED BY SOLID HEAVY LINE WEIGHT INDICATES NEW WORK TO BE FURNISHED AND INSTALLED.

ELECTRICAL EQUIPMENT DESIGNATED BY SOLID LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN, UNLESS OTHERWISE INDICATED.

ELECTRICAL EQUIPMENT DESIGNATED BY DASHED HEAVY LINE WEIGHT REPRESENTS EXISTING EQUIPMENT TO BE REMOVED AND DISPOSED, UNLESS INDICATED TO BE REMOUNTED, RELOCATED, OR TURNED OVER TO OWNER.

ELECTRICAL LINE TYPE:

UNDERGROUND DUCTBANK AND CONDUCTOR, (FURNISH AND INSTALL)

ELECTRICAL SYMBOLS:

DUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V

DUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V WITH (GFCI) GROUND FAULT CURRENT INTERRUPTER PROTECTION

DUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V WITH (GFCI) GROUND FAULT CURRENT INTERRUPTER PROTECTION IN A WEATHER-PROOF ENCLOSURE

SIMPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V

QUADRUPLEX RECEPTACLE, NEMA 5-20R, 20A, 125V

20A, 120/277 VAC, SINGLE POLE TOGGLE SWITCH

WEATHER PROOF SWITCH

MANUAL MOTOR RATED SWITCH

NON-FUSIBLE DISCONNECT SWITCH, SIZE AS NOTED

COMBINATION MAGNETIC STARTER, SIZE AS REQUIRED BY NEC

FUSIBLE DISCONNECT SWITCH, SIZE AS NOTED

LOOP LINE INDICATES CIRCUIT CONDUCTORS AND CONDUIT CONNECTING IDENTIFIED DEVICES.

INDICATES HOMERUN CIRCUIT CONDUCTORS AND CONDUIT CONNECTING IDENTIFIED DEVICES TO PANEL

ENCLOSED CIRCUIT BREAKER BOX

JUNCTION BOX

TRANSFORMER

SURFACE MOUNTED PANELBOARD

CIRCUIT BREAKER, RATINGS AS INDICATED

PHOTO CELL

ELECTRICAL HANDHOLE 24" L x 24" W x 12" D, TIER 15 RATED PRECAST CONCRETE

FIXED CCTV SURVEILLANCE CAMERA COORDINATE FINAL SELECTION WITH REBUILD/PPR REPRESENTATIVE PRIOR TO ORDERING

LIGHT SYMBOLS:

POLE MOUNTED LIGHT FIXTURE, TYPE AS NOTED

ELECTRICAL ABBREVIATIONS:

A, AMP	AMPERES
AC	ALTERNATING CURRENT
AFCI	ARC FAULT CIRCUIT INTERRUPTER
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLING UNIT
AIC	AMP INTERRUPTING CAPACITY
AT	AMP TRIP
AF	AMP FRAME
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C, CND	CONDUIT
C.B.	CIRCUIT BREAKER
CKT	CIRCUIT
COMM	COMMUNICATION
CU	COPPER
DC	DIRECT CURRENT
DWG	DRAWING
(E)	EXISTING WORK/EQUIPMENT TO REMAIN
(ER)	EXISTING WORK/EQUIPMENT TO BE REMOVED AND RELOCATED
EC	ELECTRICAL CONTRACTOR
ELEC	ELECTRICAL
EQUIP	EQUIPMENT
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
FT	FOOT (FEET)
G, GND	GROUND
GFCI, GFI	GROUND FAULT CIRCUIT INTERRUPTER
HZ	HERTZ
HOA	HAND OFF AUTO SWITCH
JB	JUNCTION BOX
KA	KILO AMPERES
KAIC	KILO AMPERES INTERRUPTING CURRENT
KVA	KILO VOLTS AMPERES
KW	KILOWATTS
LFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MCA	MAXIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MISC	MISCELLANEOUS
MLO	MAIN LUG ONLY
MOCP	MAXIMUM OVER CURRENT PROTECTION
MOCD	MAXIMUM OVER CURRENT PROTECTIVE DEVICE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
P	POLE
PH, Ø	PHASE
PNL	PANEL
PWR	POWER
(R)	EXISTING EQUIPMENT TO BE DISCONNECTED AND REMOVED
(RE)	RELOCATED EXISTING WORK
RCPT	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
RMC	RIGID METAL CONDUIT
RM	ROOM
RNC	RIGID NON-METALLIC CONDUIT
SCCR	SHORT CIRCUIT CURRENT RATING
SER	SERVICE ENTRANCE RATED
SPECS	SPECIFICATIONS
TYP.	TYPICAL
UE	UNDERGROUND ELECTRIC
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VIF	VERIFY IN FIELD
WP	WEATHER PROOF
XFMR	TRANSFORMER

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1	08.18.2022	PRE-BID REVISIONS

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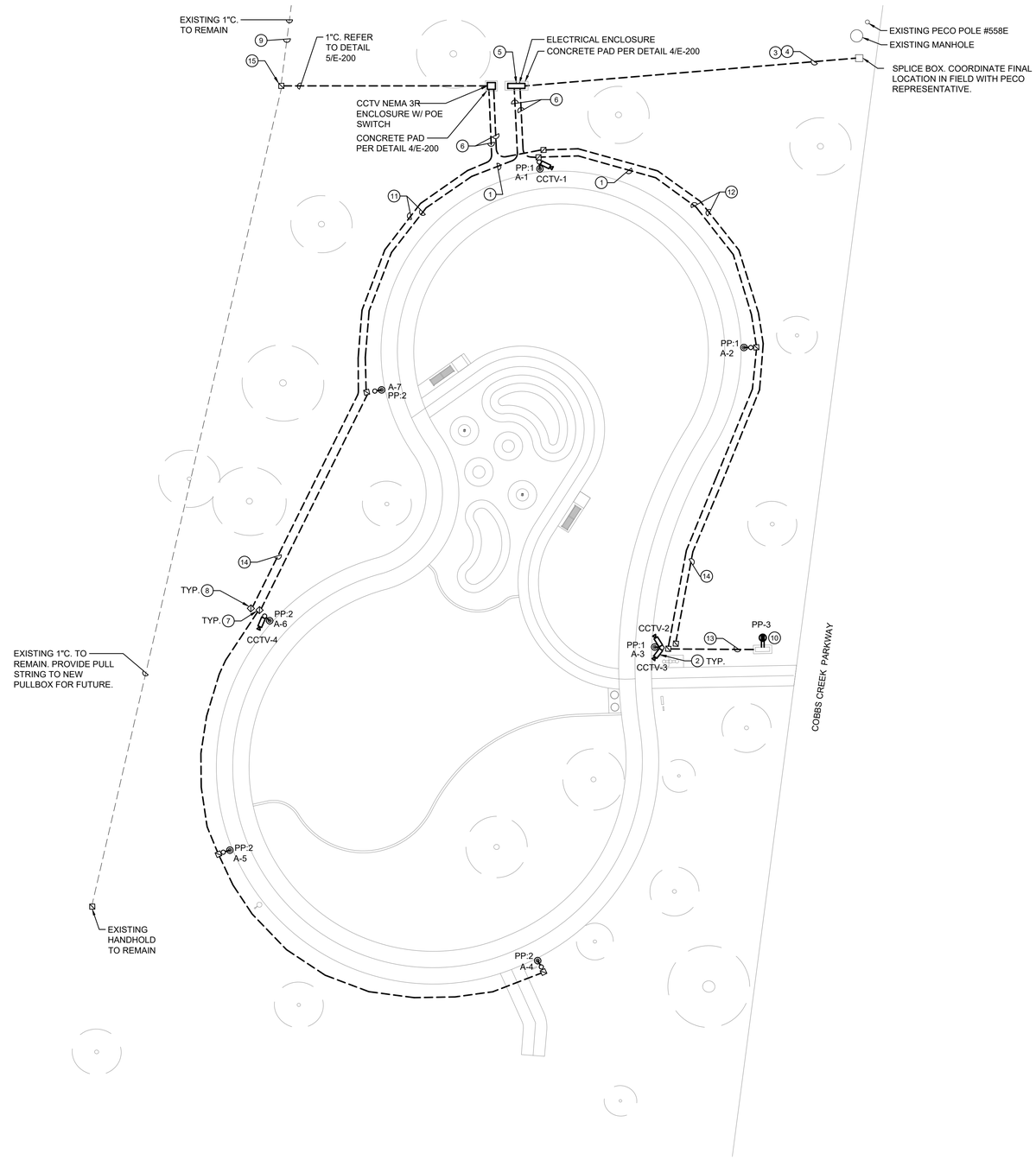
STAMP:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
HIEP V. LE
ENGINEER
PE088892

JOB NO: 2131
DATE: 07/22/2022
DRAWN: TM
CHECKED: HL
DRAWING TITLE:
GENERAL NOTES, SYMBOLS AND ABBREVIATIONS

DRAWING NO:
E-000



1 / E-100 ELECTRICAL SITE PLAN
Scale: 1/16" = 1'-0"

GENERAL NOTES:

1. REFER TO DRAWING E-000 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. COORDINATE ALL NEW WORK WITH REBUILD/PPR REPRESENTATIVE PRIOR TO START OF WORK.
3. REFER TO DRAWING E-200 FOR DETAILS AND E-300 FOR PANEL SCHEDULE.
4. ALL CONDUCTORS SHALL BE COLOR-CODED, SINGLE CONDUCTOR, COPPER WIRE OF THE SPECIFIED SIZE, 600V, TYPE XHHW/XHHW-2 INSULATION, UNLESS NOTED OTHERWISE.
5. ALL SERVICE RELATED WORK TO BE DONE IN STRICT ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
6. ALL SERVICE EQUIPMENT SHALL BE LISTED FOR SERVICE ENTRANCE USE.
7. COORDINATE ALL SERVICE CHANGES WITH PECO.
8. EC SHALL COORDINATE WITH LIGHTING FIXTURE MANUFACTURER FOR CONNECTION REQUIREMENTS OF LIGHTING FIXTURES (IE. QUICK DISCONNECT) AND SHALL MAKE ALL WIRING CONNECTIONS AS REQUIRED.
9. COORDINATE FINAL UNDERGROUND CONDUIT ROUTING AND WIRING INSTALLATION FROM ENVIRONMENT CENTER BUILDING TO SECURITY CAMERAS MOUNTED ON LIGHT POLES WITH SECURITY SYSTEM REPRESENTATIVE PRIOR TO COMMENCING WORK.
10. INSTALL ALL WIRING IN SCHEDULE 80 PVC CONDUIT. ALL UNDERGROUND INSTALLATION SHALL COMPLY WITH NEC 300.5.
11. CALL BEFORE YOU DIG (PA ONE CALL SYSTEM 1-800-242-1776 OR DIAL 811). ELECTRICAL CONTRACTOR TO HIRE AN INDEPENDENT UTILITY LOCATING COMPANY TO MARK-OUT CUSTOMER OWNED/PRIVATE PROPERTY FACILITIES BEFORE DIGGING AT ELECTRICAL CONTRACTOR'S EXPENSE.

KEYED NOTES:

1. FURNISH AND INSTALL 2#10 AND 1#10G IN 1" PVC CONDUIT.
2. MOUNT SECURITY CAMERA TO POLE 12' AFG. COORDINATE EXACT PLACEMENT AND ORIENTATION WITH SECURITY SYSTEM REPRESENTATIVE PRIOR TO COMMENCING WORK.
3. FURNISH AND INSTALL 3#4/0 IN 2 1/2" PVC CONDUIT. ALL WIRE AND CONDUIT SHALL ROUTE THROUGH UNDERGROUND IN DUCT BANK. REFER TO DETAIL 5/E-200 FOR TYPICAL DUCT BANK DETAIL.
4. CONTRACTOR TO COORDINATE FINAL SERVICE REQUIREMENTS WITH PECO. REFER TO DETAIL 1/E-200 FOR MORE INFORMATION.
5. FURNISH AND INSTALL STAINLESS STEEL ENCLOSURE. COORDINATE FINAL LOCATION IN FIELD WITH PECO AND REBUILD/PPR REPRESENTATIVE. REFER TO DETAIL 1/E-200 FOR ENCLOSURE, ELECTRICAL EQUIPMENT AND POWER CONNECTIONS.
6. REFER TO DETAIL 6/E-200 FOR TYPICAL DUCT BANK.
7. FURNISH AND INSTALL 16"L X 16"W X 12"D TIER 15 HANDHOLE AT THE LIGHT FIXTURE POLE. PROVIDE TERMINAL BLOCK INSIDE HANDHOLE TO TERMINATE WIRE SIZE FOR LIGHT FIXTURE. MAKE FINAL CONNECTION TO LIGHT FIXTURE. REFER TO DETAIL 3/E-200 FOR MORE INFORMATION.
8. FURNISH AND INSTALL 16"L X 16"W X 12"D TIER 15 HANDHOLE AT THE LIGHT FIXTURE POLE. MAKE FINAL CONNECTION TO CAMERAS.
9. EXTEND SPARE FIBER FROM EXISTING HANDHOLE ADJACENT TO EXISTING LIGHT POLE WITH CCTV CAMERAS (LOCATED ALONG THE ROAD TO THE ENVIRONMENTAL CENTER BUILDING) TO POE SWITCH LOCATED IN CCTV ENCLOSURE VIA NEW HANDHOLE. NEW HANDHOLE TO BE INSTALLED APPROXIMATELY 170' AWAY FROM EXISTING HANDHOLE LOCATED AT EXISTING LIGHT POLE. VERIFY EXISTING CONDITIONS IN FIELD.
10. PROVIDE GFCI RECEPTACLE WITH WEATHERPROOF ENCLOSURE FOR SELF-REGULATING HEATING CABLE. REFER TO MANUFACTURER INSTALLATION MANUAL FOR RECOMMENDED RECEPTACLE LOCATION. PROVIDE 2 #10 & 1 #10GRD. IN 1" CONDUIT.
11. REFER TO DETAIL 7/E-200 FOR TYPICAL ELEC/COMM DUCT BANK.
12. REFER TO DETAIL 8/E-200 FOR TYPICAL ELEC/COMM DUCT BANK.
13. REFER TO DETAIL 5/E-200 FOR TYPICAL ELEC/COMM DUCT BANK.
14. FURNISH AND INSTALL CAT 6 CABLE IN 1" PVC CONDUIT FROM POE SWITCH LOCATED IN CCTV ENCLOSURE TO CAMERAS MOUNTED TO POLE LIGHTS.
15. INTERCEPT EXISTING UNDERGROUND 1" PVC CONDUIT WITH NEW 16"L X 16"W X 12"D TIER 15 HANDHOLE. VERFIY IN FIELD EXACT LOCATION OF UNDERGROUND 1" PVC CONDUIT.

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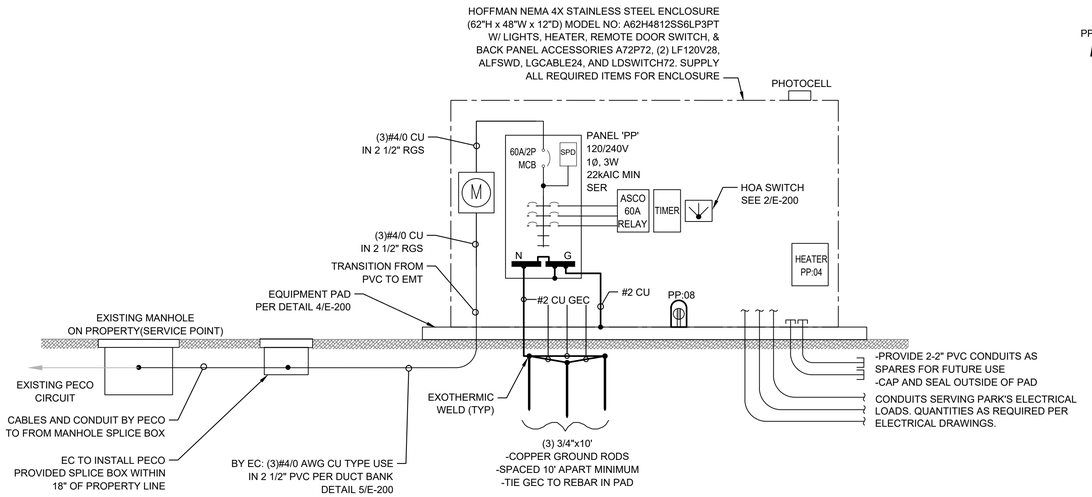
HIEP V. LE
ENGINEER
PE068892

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	TM
CHECKED:	HL

DRAWING TITLE:
ELECTRICAL SITE PLAN

DRAWING NO:
E-100

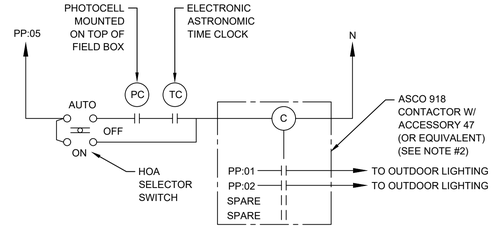


1 / E-200 FIELD BOX ENCLOSURE & SINGLE LINE DIAGRAM

Scale: NTS

NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE NEC.
2. SERVICE EQUIPMENT TO BE LOCATED AS CLOSE AS POSSIBLE TO SERVICE CONDUCTORS ENTERING THE BUILDING. GROUP EQUIPMENT TOGETHER AS REQUIRED.
3. ALL SERVICE RELATED WORK TO BE DONE IN STRICT ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
4. VERIFY SHORT CIRCUIT REQUIREMENTS WITH UTILITY COMPANY AND MAKE ADJUSTMENTS AS REQUIRED.
5. ALL SERVICE EQUIPMENT SHALL BE LISTED FOR SERVICE ENTRANCE USE.
6. COORDINATE ALL SERVICE CHANGES WITH PECO. EC SHALL BE RESPONSIBLE FOR SUBMITTING S&M AS REQUIRED.
7. THE EC HAS THE FULL RESPONSIBILITY FOR MEETING WITH THE LOCAL ELECTRIC UTILITY AND COORDINATING WITH THE LOCAL ELECTRIC UTILITY COMPANY'S REQUIREMENTS BEFORE INSTALLATION BEGINS.
8. THE EC IS RESPONSIBLE FOR THE PHYSICAL LAYOUT OF THE SERVICE EQUIPMENT AND ALL DISTRIBUTION EQUIPMENT MEETING WORKING CLEARANCES AND ALL OTHER REQUIREMENTS OF THE NEC BASED ON ACTUAL FIELD CONDITIONS. THE LOCATION OF THE SERVICE DISCONNECTING MEANS SHALL MEET THE REQUIREMENTS OF NEC ARTICLE 230, AND SHOULD BE REVIEWED WITH THE INSTALLER'S UNDERWRITER BEFORE INSTALLATION.
9. SEE PANEL SCHEDULE FOR MORE INFORMATION.
10. DUE TO VANDALISM CONCERNS, THE PECO METER IS SHOWN WITHIN THE FIELD BOX ENCLOSURE, WHICH MAY CONFLICT WITH PECO REQUIREMENTS. EC SHALL COORDINATE WITH PECO PRIOR TO INSTALLATION. IF PECO WILL NOT ALLOW THE METER TO BE INSTALLED WITHIN THE ENCLOSURE, EC SHALL INSTALL OUTSIDE PER PECO BLUE BOOK AND ADD PROTECTION FOR THE METER TO HELP WITH VANDALISM PROBLEMS.
11. ALL CONDUCTORS INCREASED IN SIZE FOR VOLTAGE DROP CONSIDERATION SHALL BE SPLICED TO APPROPRIATE SIZE CONDUCTORS FOR TERMINATING ONTO EQUIPMENT AND DEVICES. SPLICES SHALL BE MADE INSIDE THE EQUIPMENT AS ALLOWED BY THE NEC OR AT THE CLOSEST JUNCTION BOX TO THE EQUIPMENT OR DEVICE. THE SPLICED CONDUCTOR SHALL BE SIZED AS THE LARGEST ACCEPTABLE CONDUCTOR BASE ON THE TERMINATION OF THE EQUIPMENT OR DEVICE.

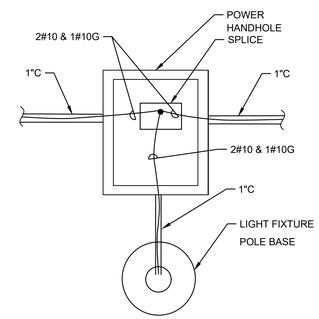


2 / E-200 DETAIL - LIGHTING CONTROL

Scale: NTS

NOTES:

1. EC TO COORDINATE WITH OWNER FOR EXACT PROGRAMMING AND OPERATIONAL REQUIREMENTS.

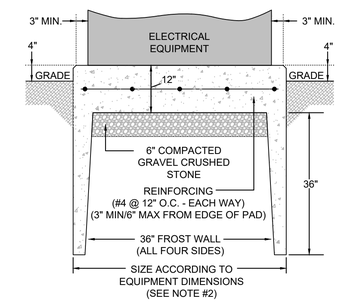


3 / E-200 HANDHOLE DETAIL

Scale: NTS

GENERAL NOTES:

1. REFER TO DRAWING E-000 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. COORDINATE ALL NEW WORK WITH REBUILD/PPR REPRESENTATIVE PRIOR TO START OF WORK.
3. ALL CONDUCTORS INCREASED IN SIZE FOR VOLTAGE DROP CONSIDERATION SHALL BE SPLICED TO APPROPRIATE SIZE CONDUCTORS FOR TERMINATING ONTO EQUIPMENT AND DEVICES. SPLICES SHALL BE MADE INSIDE THE EQUIPMENT AS ALLOWED BY THE NEC OR AT THE CLOSEST JUNCTION BOX TO THE EQUIPMENT OR DEVICE. THE SPLICED CONDUCTOR SHALL BE SIZED AS THE LARGEST ACCEPTABLE CONDUCTOR BASE ON THE TERMINATION OF THE EQUIPMENT OR DEVICE.

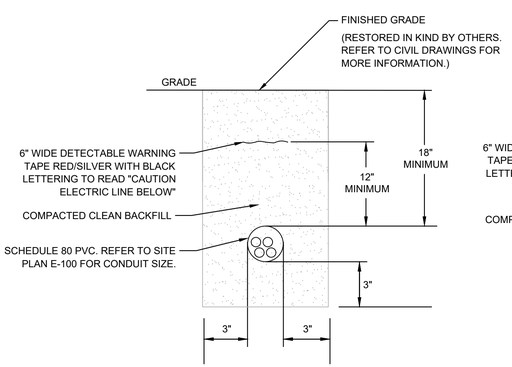


4 / E-200 DETAIL - FIELD SERVICE PAD

Scale: NTS

NOTES:

1. CONCRETE TO HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI & HAVE AN AIR ENTRAINING ADMIXTURE. AIR CONTENT TO BE 6% + OR - 1%.
2. PAD SHALL BE SIZED SO THAT PAD EXTENDS AT LEAST 3" BEYOND SPECIFIED EQUIPMENT IN ALL DIRECTIONS.
3. EC SHALL VERIFY THAT PAD DESIGN IS STRUCTURALLY SUFFICIENT FOR INSTALLED EQUIPMENT.

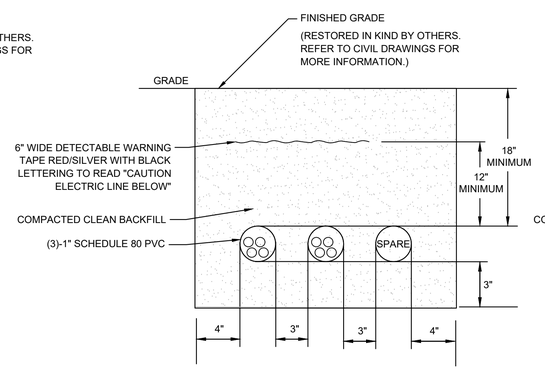


5 / E-200 TYPICAL DUCT BANK DETAIL

Scale: NTS

DUCT BANK NOTES:

1. EC SHALL TAKE EXTREME CARE IN EXCAVATING AREA. HAND-DIG IF NECESSARY. MODIFY/RE-ROUTE DUCT BANK AS REQUIRED TO MINIMIZE CONFLICT WITH EXISTING UTILITIES.
2. COORDINATE ALL CONDUIT ROUTING WITH EXISTING CONDITIONS AND ROADWAY CUTTING AND TRENCHING.
3. ADJUST TRENCH DETAIL FOR MULTIPLE CONDUITS WHEN REQUIRED. OBTAIN ENGINEER'S APPROVAL.
4. COORDINATE WITH PECO BLUE BOOK REQUIREMENTS.
5. REMOVE ALL SHARP STONES AND OBJECTS FROM COMPACTED BEDDING, SIDE SUPPORTS, AND FILL.

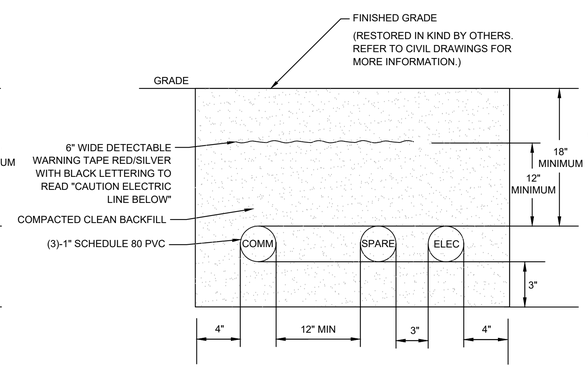


6 / E-200 TYPICAL 3-WAY DUCT BANK DETAIL

Scale: NTS

DUCT BANK NOTES:

1. EC SHALL TAKE EXTREME CARE IN EXCAVATING AREA. HAND-DIG IF NECESSARY. MODIFY/RE-ROUTE DUCT BANK AS REQUIRED TO MINIMIZE CONFLICT WITH EXISTING UTILITIES.
2. COORDINATE ALL CONDUIT ROUTING WITH EXISTING CONDITIONS AND ROADWAY CUTTING AND TRENCHING.
3. ADJUST TRENCH DETAIL FOR MULTIPLE CONDUITS WHEN REQUIRED. OBTAIN ENGINEER'S APPROVAL.
4. COORDINATE WITH PECO BLUE BOOK REQUIREMENTS.
5. REMOVE ALL SHARP STONES AND OBJECTS FROM COMPACTED BEDDING, SIDE SUPPORTS, AND FILL.

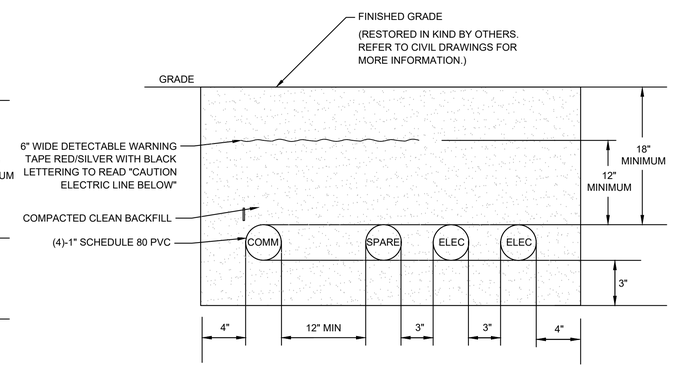


7 / E-200 TYPICAL 3-WAY ELEC/COMM DUCT BANK DETAIL

Scale: NTS

DUCT BANK NOTES:

1. EC SHALL TAKE EXTREME CARE IN EXCAVATING AREA. HAND-DIG IF NECESSARY. MODIFY/RE-ROUTE DUCT BANK AS REQUIRED TO MINIMIZE CONFLICT WITH EXISTING UTILITIES.
2. COORDINATE ALL CONDUIT ROUTING WITH EXISTING CONDITIONS AND ROADWAY CUTTING AND TRENCHING.
3. ADJUST TRENCH DETAIL FOR MULTIPLE CONDUITS WHEN REQUIRED. OBTAIN ENGINEER'S APPROVAL.
4. COORDINATE WITH PECO BLUE BOOK REQUIREMENTS.
5. REMOVE ALL SHARP STONES AND OBJECTS FROM COMPACTED BEDDING, SIDE SUPPORTS, AND FILL.



8 / E-200 TYPICAL 4-WAY ELEC/COMM DUCT BANK DETAIL

Scale: NTS

DUCT BANK NOTES:

1. EC SHALL TAKE EXTREME CARE IN EXCAVATING AREA. HAND-DIG IF NECESSARY. MODIFY/RE-ROUTE DUCT BANK AS REQUIRED TO MINIMIZE CONFLICT WITH EXISTING UTILITIES.
2. COORDINATE ALL CONDUIT ROUTING WITH EXISTING CONDITIONS AND ROADWAY CUTTING AND TRENCHING.
3. ADJUST TRENCH DETAIL FOR MULTIPLE CONDUITS WHEN REQUIRED. OBTAIN ENGINEER'S APPROVAL.
4. COORDINATE WITH PECO BLUE BOOK REQUIREMENTS.
5. REMOVE ALL SHARP STONES AND OBJECTS FROM COMPACTED BEDDING, SIDE SUPPORTS, AND FILL.

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ENGINEER
PE068892

JOB NO:	2131
DATE:	07/22/2022
DRAWN:	TM
CHECKED:	HL
DRAWING TITLE:	DETAILS
DRAWING NO:	E-200

GENERAL NOTES:

1. REFER TO DRAWING E-000 FOR GENERAL NOTES, SYMBOLS AND ABBREVIATIONS.
2. COORDINATE ALL NEW WORK WITH REBUILD/PPR REPRESENTATIVE PRIOR TO START OF WORK.
3. ALL CONDUCTORS INCREASED IN SIZE FOR VOLTAGE DROP CONSIDERATION SHALL BE SPLICED TO APPROPRIATE SIZE CONDUCTORS FOR TERMINATING ONTO EQUIPMENT AND DEVICES. SPLICES SHALL BE MADE INSIDE THE EQUIPMENT AS ALLOWED BY THE NEC OR AT THE CLOSEST JUNCTION BOX TO THE EQUIPMENT OR DEVICE. THE SPLICED CONDUCTOR SHALL BE SIZED AS THE LARGEST ACCEPTABLE CONDUCTOR BASE ON THE TERMINATION OF THE EQUIPMENT OR DEVICE.

PANEL SCHEDULE 'PP'

PANEL: PP | INTERRUPTING RATING: 42 KAIC | MOUNTING: SURFACE

VOLTAGE: 240/120V | PHASE: 1 | WIRE: 3 | BUS AMPS: 100A | MAIN: 60A MCB

NEMA 3R | NEUTRAL: 100% | LOCATION: ELEC ENCLOSURE

CIRCUIT	DESCRIPTION	WIRE	POLES	BKR SIZE	VA	VA / PHASE A	VA / PHASE B	VA	BKR SIZE	POLES	WIRE	DESCRIPTION	CIRCUIT
1	POLE LTG 1,2,3	#10	1	20	99	231		132	20	1	#10	POLE LTG 4,5,6,7	2
3	BACKFLOW PREVENTER HOTBOX	#10	1	20	1200		2925	1725	20	1	#12	FIELD BOX HEATER	4
5	ASTRONOMIC TIMER CONTROL	#12	1	20	100	200		100	20	1	#12	FIELD BOX LIGHT	6
7	CCTV ENCLOSURE (SEE NOTE 1)	#12	1	20	180		360	180	20	1	#12	FIELD BOX RECEPTACLE	8
9	SPARE	-	1	20	0	0		0	20	1	-	SPARE	10
11	SPARE	-	1	20	0		0	0	20	1	-	SPARE	12
13	SPARE	-	1	20	0	0		0	20	1	-	SPARE	14
15	SPACE	-	-	-	0		0	0	-	-	-	SPACE	16
17	SPACE	-	-	-	0	0		0	-	-	-	SPACE	18
						TOTALS							
						431	3285						
						3716 VA		15.48 AMPS					

NOTES:
1. PROVIDE GFCI DUPLEX RECEPTACLE IN WEATHERPROOF BOX INSIDE CCTV ENCLOSURE FOR POWER TO POE SWITCH.

LUMINAIRE SCHEDULE

SYMBOL	TYPE	DESCRIPTION	MOUNTING	MANUFACTURER	CATALOG NO.	LAMP INFORMATION TYPE	WATTS	VOLTS	LUMENS	REMARKS
⊙	A	LED LIGHT POLE. CONTROL VIA PHOTOCELL AND ASCO RELAY PANEL	POLE	SELUX CORPORTATION	DSC4LX-DG-XX-MP350-30-XX-XX	LED	33	120	3398	MOUNT LUMINAIRE TO POLE 14' AFG.

NOTE:
1. COORDINATE FINAL SELECTIONS, FINISHES, AND COLOR TEMPERATURE WITH REBUILD/PPR REPRESENTATIVE.

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DRAWING TITLE:
SCHEDULES

DRAWING NO:
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