CITY OF PHILADELPHIA

DEPARTMENT OF PARKS AND RECREATION

MAYOR - JAMES F. KENNEY

MANAGING DIRECTOR - TUMAR ALEXANDER

COMMISSIONER OF PARKS AND RECREATION - KATHRYN OTT LOVELL

RENOVATIONS TO:

HERITAGE PARK PLAYGROUND

1511 CLEARFIELD ST, PHILADELPHIA, PA

PROJECT NO. 16-18-4176-01

LANDSCAPE ARCHITECT:

GILMORE & ASSOCIATES, INC.
DESIGN, LANDSCAPE ARCHITECTURE,
ENGINEERING & TECHNICAL CONSULTING
ONE PENN CENTER AT SUBURBAN STATION
1617 JFK BOULEVARD, SUITE 425, PHILADELPHIA, PA 19103
PHONE: (215) 687-4246
65 WEST BUTLER AVENUE, SUITE 100, NEW BRITAIN, PA 18901
PHONE: (215) 345-4330

CIVIL ENGINEER:

NTM ENGINEERING, INC.
30 NORTH 41ST STREET, SUITE #520 J
PHILADELPHIA, PA 19104
PHONE: (717) 432-4425

ELECTRICAL ENGINEER:

PSQUARED CONSULTING ENGINEERS
920 GERMANTOWN PIKE, SUITE 20
PLYMOUTH MEETING, PA 19462
P: 484-539-9459
WWW.PSQUAREDENG.COM

ABBREVIATIONS

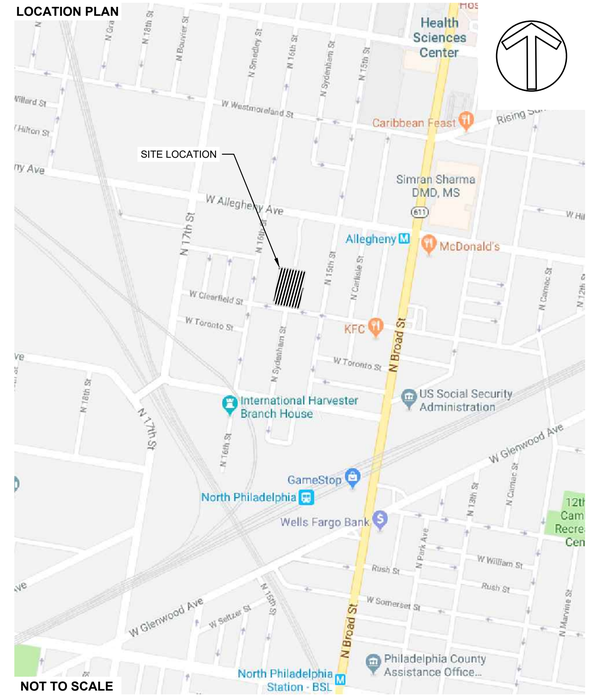
TBR	TO BE REMOVED	FBO	FURNISHED BY OTHERS	SQ	SQUARE
PT	POINT OF TANGENCY	FIXT	FIXTURE	STA	STATION
PC	POINT OF CURVE	FR	FROM RECORD	STL	STEEL
DI	DUCTILE IRON	FT	FOOT OR FEET	TC	TOP OF CURB
CI	CAST IRON	FTG	FOOTING	BC	BOTTOM OF CURB
RCP	REINFORCED CONCRETE PIPE	GA	GAUGE	TW	TOP OF WALL
PVC	POLYVINYL CHLORIDE	GALV	GALVANIZED	BW	BOTTOM OF WALL
INV.	INVERT ELEVATION	GR	GRADE	TEL	TELEPHONE
T.G.	TOP OF GRATE ELEVATION	HT	HEIGHT	W	WATER
C.O.	CLEAN OUT	CAL	CALIPER	SAN	SANITARY
FFE	FINISH FLOOR ELEVATION	GAL	GALLON	SD	STORM DRAIN
JNT	JOINT	QT	QUART	T	TREAD
EXP	EXPANSION	HDPE	HIGH DENSITY POLYETHYLENE	TS	TOP OF STEP
CJ	CONTROL JOINT	PE	POLYETHYLENE	BS	BOTTOM OF STEP
EJ	EXPANSION JOINT	HORIZ	HORIZONTAL	TYP	TYPICAL
CONST	CONSTRUCTION	VERT	VERTICAL	WWF	WELDED WIRE FABRIC
CIP	CAST-IN-PLACE	R	RADIUS OR RISER	SPD	SPREAD
CL	CENTERLINE	RAD	RADIUS		
CONC	CONCRETE	KJ	KEYED JOINT		
COND	CONDUIT	LP	LOW POINT		
CTR	CENTER	MET	METAL		
PNT	POINT	SS	STAINLESS STEEL		
CU YD	CUBIC YARD	MFR	MANUFACTURER		
DEP	DEPRESSED	MIN	MINIMUM		
DN	DOWN	MISC	MISCELLANEOUS		
DIA	DIAMETER	NIC	NOT IN CONTRACT		
DWL	DOWEL	CCL	CONTRACT LIMIT LINE		
EA	EACH	LOD	LIMIT OF DISTURBANCE		
EL	ELEVATION	LOW	LIMIT OF WORK		
ELEC	ELECTRIC	NO./#	NUMBER		
EQ	EQUAL	NTS	NOT TO SCALE		
EF	EACH FACE	OC	ON CENTER		
EW	EACH WAY	PERF	PERFORATED		
EX	EXISTING	POB	POINT OF BEGINNING		
UD	UNDERDRAIN	SCH	SCHEDULE		
FG	FINISH GRADE	SCHED	SCHEDULE		
		SF	SQUARE FOOT		

SYMBOLS

	EXISTING 1 FT CONTOURS
225.6 ×	EXISTING SPOT ELEVATION
	EXISTING UTILITY POLE
	EXISTING STORM SEWER/INLET
	EXISTING SIGN
	EXISTING LIGHT POLES
W W	EXISTING WATER MAIN
	EXISTING DRAINAGE PIPE
S S	EXISTING SANITARY SEWER
ST ST	EXISTING STORM SEWER
G G	EXISTING GAS LINE
× ×	EXISTING FENCE LINE
147	PROPOSED 1 FT CONTOUR
1.00%	DRAINAGE FLOW ARROW & SLOPE
225.6 ×	PROPOSED SPOT ELEVATION
TC149.63 x BC149.05	PROPOSED TOP/BOTTOM OF CURB SPOT ELEVATION
T.G. = 147.60	PROPOSED TOP OF GRATE ELEVATION

Sheet List Table

LOCATION PLAN



NOT TO SCALE

PROJECT APPROVED

COMMISSIONER/DEPARTMENT OF PUBLIC PROPERTY

DEPUTY COMMISSIONER/DEPARTMENT OF PUBLIC PROPERTY

PROJECT DIRECTOR/PPR-CAPITAL PROJECTS DIVISION

SEALS

PENNSYLVANIA KEVIN M. SELGER REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER 002685

KEVIN M. SELGER, RLA - PA LICENSE 002685

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NO.	16-18-4176-01
CONSULTANT PROJECT NO.	2018-07077
DATE	04/20/2022
SCALE	AS NOTED
DRAWN BY	TMM
CHECKED BY	KMS

DRAWING NO. **CS-1**

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

GENERAL NOTES

1. THESE GENERAL NOTES APPLY TO ALL PLANS, SPECIFICATIONS, AND WORK ASSOCIATED WITH THIS PROJECT.
2. EXISTING FEATURES BACKGROUND AND EXISTING CONDITIONS INFORMATION IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE CITY OF PHILADELPHIA DEPARTMENT OF PARKS AND RECREATION (DPR). ALL LOCATIONS ARE TO BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD. NO DIGGING OR EXCAVATIONS WERE DONE IN THE PREPARATION OF THE EXISTING FEATURES BACKGROUND OR EXISTING CONDITIONS INFORMATION. THEREFORE, ALL UNDERGROUND UTILITIES SHOWN OR DEPICTED SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES AND OR FACILITIES NOT SHOWN HEREON. ALL THE DESIGNERS AND CONTRACTORS UTILIZING THIS PLAN AND THE INFORMATION CONTAINED HEREIN ARE CAUTIONED TO COMPLY WITH THE REQUIREMENTS OF PENNSYLVANIA ACT 187, HOUSE BILL 2627, AMENDING THE ACT OF DECEMBER 17, 1974 (P.L.852, NO. 287) PN 1460 1996 EFFECTIVE 12/19/96.
3. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES/FACILITIES SHOWN HEREON HAVE BEEN DEVELOPED FROM RECORDS. NO EXCAVATIONS WERE PERFORMED IN THE PREPARATION OF THESE DRAWINGS. THEREFORE, ALL UTILITIES SHOWN SHOULD BE CONSIDERED APPROXIMATE IN LOCATION, DEPTH, AND SIZE. THE POTENTIAL EXISTS FOR OTHER UNDERGROUND UTILITIES/FACILITIES TO BE PRESENT WHICH ARE NOT SHOWN ON THE DRAWINGS. ONLY THE VISIBLE LOCATIONS OF UNDERGROUND UTILITIES/FACILITIES AT THE TIME OF FIELD SURVEY SHALL BE CONSIDERED TRUE AND ACCURATE. THE COMPLETENESS OR ACCURACY OF UNDERGROUND UTILITIES/FACILITIES ARE NOT GUARANTEED BY GILMORE & ASSOCIATES INC.
4. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES/FACILITIES PRIOR TO THE START OF WORK AND SHALL COMPLY WITH THE REQUIREMENTS OF P.L. 852, NO. 287 DECEMBER 10, 1974, AS LAST AMENDED ON MARCH 29, 2007, PENNSYLVANIA ACT 181. GILMORE & ASSOCIATES INC. HAS OBTAINED A PA-ONE CALL SERIAL NUMBER 20191973397 FOR DESIGN PURPOSES ONLY.
5. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL CONTACT THE PA ONE CALL SYSTEM AT 1-800-242-1776 AT LEAST 3-WORKING DAYS PRIOR TO THE COMMENCEMENT OF WORK.
6. DO NOT SCALE DRAWINGS. ALL MEASUREMENTS SHALL BE TAKEN FROM DIMENSIONS SHOWN ON THE DRAWING. WHERE DIMENSIONS BETWEEN SMALL SCALE AND DETAIL DRAWINGS DIFFER, NOTIFY THE DESIGN PROFESSIONAL FOR CLARIFICATION. FIELD VERIFY ALL DIMENSIONS AND NOTIFY THE DESIGN PROFESSIONAL OF ANY DISCREPANCIES.
7. INSTALL ALL MANUFACTURED ITEMS IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND RECOMMENDATIONS, COMPLETE WITH ALL ITEMS AND COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION.
8. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR INSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE O.S.H.A. (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS.
9. THE GENERAL CONTRACTOR AND ELECTRICAL CONTRACTOR ARE RESPONSIBLE FOR PROVIDING THE APPROPRIATE CONTRACT DOCUMENTS (PLANS, SPECIFICATIONS, AND OTHER INFORMATION) TO THE VARIOUS SUBCONTRACTORS AND TRADES IN ORDER FOR THEM TO COORDINATE AND PERFORM THE WORK.
10. THE GENERAL CONTRACTOR, ELECTRICAL CONTRACTOR, AND SUBCONTRACTORS SHALL COORDINATE AND COMPLY WITH ALL UTILITY COMPANY REGULATIONS AND REQUIREMENTS FOR UTILITIES AFFECTED BY THE PROJECT, AS WELL AS PAY ALL REQUIRED FEES AND COSTS ASSOCIATED WITH THOSE UTILITIES.
11. THE CONTRACTOR(S) SHALL OBTAIN ALL PERMITS RELATING TO THIS PROJECT PRIOR TO CONSTRUCTION.
12. IT IS THE RESPONSIBILITY OF EACH CONTRACTOR TO MEET ALL OF THE REQUIREMENTS OF FEDERAL, STATE, AND LOCAL AUTHORITIES, HEALTH DEPARTMENT, AND UTILITY COMPANIES IN ADDITION TO THE INFORMATION STATED IN THESE PLANS, THE SPECIFICATIONS, AND THE CONTRACT DOCUMENTS.
13. IN THE CASE OF CONFLICT BETWEEN ANY PART OF THESE PLANS, THE SPECIFICATIONS, OR THE CONTRACT DOCUMENTS, OR IF DISCREPANCIES ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE PHILADELPHIA DPR COORDINATOR AND DESIGN PROFESSIONAL IMMEDIATELY BY PHONE AND IN WRITING AND SHALL REQUEST A WRITTEN DETERMINATION PRIOR TO PROCEEDING WITH THE WORK INVOLVED. IF THE WORK PROCEEDS WITH THE KNOWLEDGE OF A DISCREPANCY AND WITHOUT A WRITTEN DETERMINATION, SUCH WORK WILL NOT BE CONSIDERED IN COMPLIANCE WITH THESE PLANS, THE SPECIFICATIONS, AND CONTRACT DOCUMENTS.
14. ALL WORK WITHIN A RIGHT OF WAY (R.O.W.) OR EASEMENT SHALL BE DONE IN ACCORDANCE WITH THE AGENCY OR ENTITY HAVING JURISDICTION OR OWNERSHIP OF THAT R.O.W. OR EASEMENT. CONTRACTOR SHALL OBTAIN ALL PERMITS, APPROVALS, INSPECTIONS, ETC. FROM THE AGENCY OF ENTITY HAVING JURISDICTION FOR THIS WORK.
15. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO PROTECT EXISTING STRUCTURES AND FACILITIES, INCLUDING UTILITIES, NOT DESIGNATED FOR DEMOLITION OR REPLACEMENT/UPGRADE SUCH AS BUILDINGS, PIPES, INLETS/MANHOLES, CABLES/WIRES, CONDUITS, APRONS, PAVEMENTS, BRIDGES, UTILITIES, TREES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN UNDERCUT AREAS. THE CONTRACTOR(S) SHALL REPLACE OR REPAIR, AS DIRECTED BY THE PHILADELPHIA DPR COORDINATOR/INSPECTOR OR DESIGN PROFESSIONAL, ANY STRUCTURES OR FACILITIES DAMAGED DURING CONSTRUCTION/THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
16. THE CONTRACTOR(S) SHALL PROVIDE POSITIVE PROTECTION (MAT/SHEET COVERINGS) FOR ALL EXPOSED EXCAVATIONS TO PROTECT FROM INSTABILITY AND DETERIORATION DUE TO RAIN, WIND OR SNOW/ICE.
17. THE CONTRACTOR SHALL PROVIDE SURFACE DRAINAGE CHANNELS OR DIVISION DIKES, SUMPS AND SUMP PUMPS AND/OR OTHER DEWATERING MEASURES AS REQUIRED TO PROTECT ALL EXCAVATIONS FROM FLOODING. FLOODING OF ANY EXCAVATION OF THE SUBGRADE WILL BE CAUSE FOR COMPLETE REPREPARATION AND REAPPROVAL OF THE SUBGRADE.
18. THE CONTRACTOR SHALL PROTECT POURED-IN-PLACE RUBBER SAFETY SURFACES DURING INSTALLATION AND AFTER THEY ARE INSTALLED. CONTRACTOR SHALL PREVENT SOIL OR OTHER DEBRIS FROM BEING DEPOSITED ON THESE SURFACES. IF THESE SURFACES ARE DAMAGED, HAVE HAD DEBRIS PLACED ON THEM, OR HAVE OTHER FOREIGN RESIDUES DEPOSITED ON THEM THE SURFACES SHALL BE CLEANED OR REPLACED TO THE SATISFACTION OF THE PHILADELPHIA DPR OR THE DESIGN PROFESSIONAL, AT THE GENERAL CONTRACTOR'S EXPENSE.
19. ALL ORGANIC, WET, SOFT AND/OR OTHER UNSUITABLE MATERIALS SHALL BE REMOVED FROM PAVEMENT SUBGRADE AND BACKFILLED WITH SUITABLE GRANULAR, FREE DRAINING MATERIAL. NO PAVEMENTS OR SLABS SHALL BE PLACED ONTO THE SUBGRADE CONTAINING FREE WATER, FROST OR ICE. SHOULD WATER OR FROST ENTER AN EXPOSED EXCAVATION AFTER THE SUBGRADE APPROVAL, THE SUBGRADE SHALL BE REINSPECTED BY THE INDEPENDENT TESTING AND INSPECTION AGENCY AFTER REMOVAL OF WATER OR FROST.
20. THE CONTRACTOR(S) SHALL MAINTAIN ALL EROSION CONTROLS DURING CONSTRUCTION.
21. THE CONTRACTOR(S) SHALL ERECT PROTECTIVE DEVICES, SUCH AS TEMPORARY CHAIN-LINK FENCING, TO PROTECT THE SITE FROM UNAUTHORIZED PERSONS FROM ENTERING THE WORK SITE. LOCATION OF FENCING AND SITE ACCESS SHALL BE APPROVED BY THE OWNER.
22. THE CONTRACTOR(S) ARE RESPONSIBLE FOR THE PROTECTION OF EXISTING TREES TO REMAIN. NO EQUIPMENT, MATERIALS, SOIL, OR OTHER DEBRIS SHALL BE STORED UNDER THE DRIP LINE OF THE TREE. IF TREES ARE DAMAGED, ITEMS ARE STORED, OR AREA UNDER THE DRIP IS DISTURBED, OTHER THAN DISTURBANCE CALLED FOR ON THE PLANS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CORRECT THE DAMAGE TO THE SATISFACTION OF THE PHILADELPHIA DPR COORDINATOR OR THE DESIGN PROFESSIONAL.
23. IF IT BECOMES NECESSARY TO CLOSE A PORTION OF THE ADJACENT STREET OR SIDEWALK DURING CONSTRUCTION, THE CONTRACTOR(S) SHALL NOTIFY THE LOCAL AUTHORITY HAVING JURISDICTION. THE CONTRACTOR(S) SHALL OBTAIN ALL PERMITS REQUIRED FOR THIS WORK OR CLOSURE.
24. THE CONTRACTOR(S) SHALL KEEP ALL PUBLIC AREAS CLEAN OF DEBRIS ON A DAILY BASIS. THE CITY OF PHILADELPHIA MAINTAINS THE RIGHT TO CLEAN THE PROJECT SITE FOR CONTRACTOR NON-COMPLIANCE AT CONTRACTOR'S EXPENSE.
25. ALL MATERIAL REMOVED FROM THE PROJECT SITE SHALL BE DISPOSED OF IN A LAWFUL MANNER ACCORDING TO APPLICABLE LOCAL, STATE, AND/OR FEDERAL REGULATIONS.

DEMOLITION NOTES

1. THE CONTRACTOR(S) SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION. NOTIFY THE OWNER, OWNER'S REPRESENTATIVE AND DESIGN PROFESSIONAL OF ANY DISCREPANCIES. COMMENCEMENT OF ANY WORK MEANS THE CONTRACTOR HAS ACCEPTED EXISTING AND FIELD CONDITIONS.
2. IN ACCORDANCE WITH PENNSYLVANIA STATE LAW, NOTIFY ALL UTILITY COMPANIES (1-800-242-1776 PENNSYLVANIA ONE CALL SYSTEM) AT LEAST (3) THREE BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION.
3. THE CONTRACTOR(S) SHALL OBTAIN ALL REQUIRED/PERTINENT PERMITS FOR THIS WORK AND COMPLY AND ADHERE TO ALL APPLICABLE REGULATIONS SET FORTH.
4. PERFORM THE DEMOLITION WORK IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND/OR FEDERAL REGULATIONS AND ORDINANCES AS WELL AS WITH NATIONAL STANDARD SAFETY REQUIREMENTS FOR DEMOLITION.
5. DO NOT INTERFERE WITH THE USE OF ADJACENT BUILDINGS OR SITE AREAS.
6. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO PROTECT EXISTING STRUCTURES AND FACILITIES, INCLUDING UTILITIES, NOT DESIGNATED FOR DEMOLITION OR REPLACEMENT/UPGRADE SUCH AS BUILDINGS, PIPES, INLETS/MANHOLES, CABLES/WIRES, CONDUITS, APRONS, PAVEMENTS, BRIDGES, UTILITIES, TREES, ETC. FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE TAKEN IN UNDERCUT AREAS. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE DESIGNER, ANY STRUCTURES OR FACILITIES DAMAGED DURING CONSTRUCTION/THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.
7. PREVENT MOVEMENT, SETTLEMENT, OR DAMAGE TO ADJACENT WALKWAYS, PAVEMENT, STRUCTURES, OR OTHER SITE ELEMENTS TO REMAIN. ANY MOVEMENT, DAMAGE, OR SETTLEMENT THAT OCCURS SHALL BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
8. PROTECT ALL EXISTING PLANT MATERIALS FROM DAMAGE UNLESS THEY ARE INDICATED TO BE REMOVED". DO NOT PARK OR STORE CONSTRUCTION VEHICLES, EQUIPMENT, AND/OR MATERIALS UNDER THE CANOPY (WITHIN THE DRIP LINE) OF ANY TREE TO REMAIN. ANY DAMAGE SHALL BE REPAIRED OR THE PLANT MATERIAL REPLACED WITH PLANTS OF THE SAME SIZE BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER. ANY REPLACEMENT PLANT MATERIAL SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT.
9. PROVIDE, ERECT AND MAINTAIN A BARRICADE AND LIGHTING AS REQUIRED BY APPLICABLE REGULATION TO PROTECT OCCUPANTS OF THE BUILDING/FACILITY AND WORKERS.
10. DEMOLISH AND REMOVE WORK IN A MANNER WHICH ALLOWS FOR INTRODUCTION OF NEW ADJACENT WORK WITH-OUT DAMAGING EDGE CONDITIONS TO THE EXISTING WORK.
11. DEMOLITION OF EXISTING UTILITIES INCLUDES THE REMOVAL OF PIPE, UTILITY STRUCTURES, DRAINS, MANHOLES, ENCASEMENT, FITTINGS, VALVES, ETC.
12. DISPOSE OF ALL UNUSABLE MATERIAL AND DEBRIS RESULTING FROM THE WORK OFF OF THE SITE AND ENSURE THE WORK AREA IS CLEAN AND READY FOR NEW WORK.
13. MAINTAIN UTILITY SERVICES TO ACTIVE EXISTING BUILDINGS AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PERIOD. COORDINATE WITH THE OWNER AND UTILITY PROVIDERS FOR ALL SHUTDOWNS FOR UTILITY CONNECTION AND RELOCATION WORK.
14. ALL UTILITIES NOT SCHEDULED/INDICATED FOR DEMOLITION WITHIN THE LIMIT OF DEMOLITION/WORK AREA SHALL BE PROTECTED AND MAINTAINED DURING CONSTRUCTION.
15. SEE EROSION AND SEDIMENTATION CONTROL PLANS, NOTES AND DETAILS FOR EROSION CONTROL MEASURES AND CONSTRUCTION SEQUENCE.
16. ALL MATERIALS DEMOLISHED, UNLESS IDENTIFIED TO BE SAVED OR SALVAGED (CONCRETE, PAVING, ROOT MAT, FENCING AND ALL OTHER DEBRIS) SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PER FEDERAL, STATE, AND LOCAL REGULATIONS. ALL COSTS OF HAULING, DISPOSAL, AND TIPPING FEES ARE THE RESPONSIBILITY OF THE CONTRACTOR AS PART OF THE BASE BID.
17. ALL MATERIALS IDENTIFIED TO BE SALVAGED SHALL BE REMOVED WITH CARE TO PREVENT AND MINIMIZE DAMAGE AND SHALL BE STORED ON-SITE FOR REUSE OR FOR RETRIEVAL BY OWNER OR THE OWNER'S REPRESENTATIVE.
18. ALL QUANTITIES OF DEMOLITION SHALL BE DETERMINED BY THE CONTRACTOR AND COVERED IN THE BASE BID. THE CONTRACTOR SHALL MAKE NECESSARY SITE INSPECTIONS PRIOR TO BID TO VERIFY ALL QUANTITIES AND CONDITIONS TO HIS/HER SATISFACTION.
19. SAWCUT AND TRIM ALL EXISTING CONCRETE AND ASPHALT PAVEMENT EDGES PRIOR TO INSTALLING NEW PAVING. THE ENDS OF DAILY NEW ASPHALT PAVEMENT INSTALLATIONS SHALL BE SAWCUT AND TRIMMED NEATLY TO RECEIVE AND INTERSECT THE NEXT AREA OF NEW ASPHALT PAVEMENT.
20. ALL EXCAVATED MATERIALS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN A LAWFUL MANNER AND IN ACCORDANCE WITH PA DEP CLEAN FILL REGULATION OR WASTE DISPOSAL REQUIREMENTS.
21. THE CONTRACTOR SHALL TEMPORARILY STABILIZE EXCAVATED SLOPES AND BANKS DURING CONSTRUCTION.

SITE LAYOUT NOTES

1. VERIFY ALL DIMENSIONS AND ACCEPT SITE CONDITIONS PRIOR TO COMMENCING WORK. COMMENCING WORK MEANS THE CONTRACTOR(S) HAVE ACCEPTED THE SITE CONDITIONS.
2. ALL DIMENSIONS ARE FROM FACE OF BUILDING/CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED. WALKWAYS ABUTTING CURBS OR WALLS SHALL BE MEASURED FROM THE BACK OF THE CURB/WALL.
3. ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED.
4. ALL RADII AND DIMENSIONS ARE TO THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL UNLESS OTHERWISE NOTED WITH (B-B), WHICH INDICATES BACK OF CURB, WALL, ETC.
5. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR THE LAYOUT AS DETAILED IN THESE CONSTRUCTION DOCUMENTS FOR THIS PROJECT.
6. THE NEW PAVING SHALL PROVIDE A SMOOTH TRANSITION TO THE EXISTING PAVING WITHOUT AN ABRUPT CHANGE IN GRADE.
7. MAINTAIN POSITIVE DRAINAGE AND ELIMINATE LOW SPOTS.

PLAYGROUND NOTES

1. PLAYGROUND EQUIPMENT, SAFETY ZONES, AND CRITICAL FALL HEIGHTS LISTED ARE PER DRAWINGS AND INFORMATION PROVIDED BY LANDSCAPE STRUCTURES, 6017 7TH STREET SOUTH, DELANO, MINNESOTA 55328 PHONE: 1-888-438-6574.
2. SPRAYGROUND EQUIPMENT, SPLASH ZONES AND CONSTRUCTION DETAILS ARE PER DRAWINGS AND INFORMATION PROVIDED BY AQUATIX BY LANDSCAPE STRUCTURES, 6500 CARLSON DRIVE, EDEN PRAIRIE, MINNESOTA 55346 PHONE: 1-888-438-6574.
3. SAFETY ZONES SHALL MEET THE REQUIREMENTS OF THE PUBLIC PLAYGROUND SAFETY HANDBOOK PUBLISHED BY THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION.
4. PLAYGROUND EQUIPMENT SHALL MEET THE REQUIREMENTS OF THE PUBLIC PLAYGROUND SAFETY HANDBOOK PUBLISHED BY THE UNITED STATES CONSUMER PRODUCT SAFETY COMMISSION AND THE REQUIREMENTS OF ASTM-F1487.
5. SAFETY SURFACE DEPTHS SHALL MEET OR EXCEED THE FALL HEIGHT REQUIREMENTS FOR THE VARIOUS PLAYGROUND EQUIPMENT PIECES/UNITS SPECIFIED PER ASTM-F1487.
6. GRADES WITHIN PLAYGROUND SAFETY SURFACING AND SPRAYGROUND SHALL NOT EXCEED 2% IN ANY DIRECTION. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF THIS STANDARD CAN NOT BE MET. REFER TO GRADING AND DRAINAGE NOTES FOR ADDITIONAL INFORMATION.

GRADING AND DRAINAGE NOTES

1. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
2. UNLESS OTHERWISE NOTED, THE MINIMUM SLOPE SHALL BE ¼ INCH PER FOOT OR 2% AND A MAXIMUM SLOPE SHALL NOT EXCEED 3:1 (H:V) OR 33% FOR NON-PAVED SURFACES.
3. GRADES ON DESIGNATED HANDICAPPED ACCESSIBLE AREAS/ROUTES SHALL COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT.
4. GRADE EARTHEN, NON-PAVED, SURFACES TO A SMOOTH FINISH. SLOPE LAWN AREAS IN SWALES TO A GENTLE CROWN ALONG THE CENTERLINE UNLESS OTHERWISE SHOWN.
5. GRADE ALL SEEDED FINE LAWN AREAS FLUSH WITH FINISH GRADE. ADJUST THE FINISHED GRADE TO THE PROPER DEPTH WHERE SOD ABUTS PAVED AREAS.
6. GRADE ALL TREE/SHRUB/GROUNDCOVER PLANTING BEDS TO 3 INCHES BELOW THE TOP OF ABUTTING CURBS, PAVING, OR LAWN AREAS TO ALLOW FOR MULCHING.
7. REFER TO THE PLANTING PLAN FOR ADDITIONAL NOTES.
8. ADJUST EXISTING AND NEW MANHOLE, CATCH BASINS, AND DRAINS RIM/GRATE ELEVATIONS TO NEW GRADE ELEVATIONS (PAVEMENT OR SOIL).
9. ELIMINATE ROUGH AND LOW AREAS TO ENSURE POSITIVE DRAINAGE.
10. PIPE SLOPES ARE APPROXIMATE; THE CONTRACTOR SHALL USE INVERTS TO INSTALL GRAVITY LINES.
11. FINISHED SURFACES SHALL BE GRADED SMOOTH AND EVEN WITH NO ABRUPT OR AWKWARD CHANGES IN GRADE. SURFACE FINISHES NOT MEETING THIS STANDARD OR NOT DEEMED ACCEPTABLE BY THE DESIGNER OR OWNER SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
12. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF SLOPE REQUIREMENTS CANNOT BE MET. AT NO TIME WILL SLOPES IN EXCESS OF THOSE ABOVE THE MAXIMUM ALLOWED WILL BE ACCEPTED, UNLESS PRIOR APPROVAL IS RECEIVED IN WRITING BY THE DESIGNER.
13. PLANS INDICATE ALL FINISH GRADE ELEVATIONS. PROVIDE SUBGRADE ELEVATIONS AS REQUIRED BY PLANS, DETAILS, OR SPECIFICATIONS. PROVIDE PROPERLY COMPACTED SUBGRADES OF NATIVE SOIL OR APPROVED FILL. SUBGRADES SHALL BE INSPECTED BY A QUALIFIED INSPECTOR TO ENSURE COMPACTION REQUIREMENTS ARE MET. NATIVE SOILS, FILL, OR SUBGRADES DEEMED INSUFFICIENT SHALL BE REMOVED AND REPLACED WITH APPROPRIATE MATERIAL.
14. COORDINATE GRADING WORK WITH WORK OF OTHER TRADES OR WORK BY OTHERS AS REQUIRED TO COMPLETE THE PROJECT.
15. THE CONTRACTOR SHALL VERIFY FINISH GRADES MEET THE DESIGN PLAN AND/OR NOTED CRITERIA PRIOR TO PLACING PAVEMENTS OR OTHER FINISHED SURFACES. NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY IF NON COMPLIANT.
16. THE NEW PAVING SHALL PROVIDE A SMOOTH TRANSITION TO EXISTING PAVING WITHOUT AN ABRUPT CHANGE IN GRADE.
17. MAINTAIN POSITIVE DRAINAGE AND ELIMINATE LOW SPOTS.

SPRAY GROUND NOTES:

1. CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS OF THE SPRAY GROUND SYSTEM, INCLUDING BUT NOT LIMITED TO: SPRAY COMPONENTS, WATER SUPPLY PIPING, ELECTRICAL CONDUIT AND WIRING, CONTROLLER, POWER SUPPLY, VALVES, MANIFOLDS, BACKFLOW PREVENTORS, ETC. FOR PROPER FUNCTION OF THE SPRAY GROUND SYSTEM.
2. ALL WATER PIPING, SPRAY COMPONENTS, VALVES, MANIFOLDS, ETC. SHALL BE INSTALLED BY A LICENSED/ CERTIFIED PLUMBER.
3. PIPING INDICATED ON THIS PLAN IS SCHEMATIC AND SHALL BE MEASURED AND VERIFIED ON SITE.
4. WATER SUPPLY LINES FROM SPRAY COMPONENTS SHALL HAVE POSITIVE DRAINAGE TOWARD SYSTEM, LOW-POINT, 1.00% MINIMUM FOR DRAINAGE AND WINTERIZING. CONTRACTOR TO PROVIDE DRAINAGE VALVE(S) SO ALL SUPPLY LINES CAN BE DRAINED COMPLETELY FOR WINTER. CONTRACTOR SHALL VERIFY LOW-POINT DEPTH FOR POSITIVE DRAINAGE.
5. CONTRACTOR SHALL INSTALL WATER METER IN BELOW GRADE VAULT/PIT AS APPROVED BY THE PHILADELPHIA WATER DEPARTMENT.
6. CONTRACTOR SHALL INSTALL REDUCED PRESSURE ZONE BACKFLOW PREVENTION DEVICE IN ABOVE GRADE METAL, HEATED, AND LOCKABLE ENCLOSURE AS APPROVED BY THE PHILADELPHIA WATER DEPARTMENT (PWD) AND THE PWD CROSS CONNECTION CONTROL STANDARDS.
7. CONTRACTOR SHALL MEET PHILADELPHIA WATER DEPARTMENT AND PHILADELPHIA PUMBING CODE REQUIREMENTS FOR SPRAY GROUND WATER SERVICE CONNECTION TO CITY WATER SERVICE.
8. CONTRACTOR SHALL COORDINATE AND OBTAIN APPROVAL FOR ANY SERVICE SHUT-DOWNS OR DISRUPTIONS WITH RECREATION CENTER AND CITY OF PHILADELPHIA PROJECT COORDINATORS. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE PRIOR TO SHUT-DOWN OR DISRUPTION.
9. GPM PROVIDED IN THE SPRAY COMPONENT VALVE TABLE IS FOR LOW FLOW NOZZLES .
10. CONTRACTOR SHALL BOND ALL SPRAY COMPONENTS TOGETHER WITH BONDING WIRE AND BASE PLATE TO NEAREST GROUNDED LIGHT POLE.
11. CONTRACTOR SHALL VERIFY SITE WATER PRESSURE PRIOR TO COMMENCING WORK. PREVIOUS MEASUREMENTS INDICATE SITE PRESSURE IS AT APPROXIMATELY 30 TO 40 PSI. NOTIFY PPR PROJECT COORDINATOR AND DESIGN PROFESSIONAL IF DEVIATIONS EXCEED PLUS OR MINUS 5 PSI.
12. INSTALL FLOW BALANCING THROTTLING BALL VALVES AS INDICATED ON PLAN, TO PROVIDE EQUALIZED FLOWS AT SPRAY FEATURES IF NOT INCLUDED AS PART OF SPRAY MANIFOLD.
13. VERIFY ELEVATIONS OF COMPONENTS AND FINAL FINISH GRADES OF CONCRETE PAVING PRIOR TO INSTALLING COMPONENTS.
14. DIMENSIONS PROVIDED ARE APPROXIMATE AND SHALL BE VERIFIED IN FIELD.
15. CONTRACTOR SHALL COORDINATE AND OBTAIN APPROVAL FOR ANY SERVICE SHUT-DOWNS OR DISRUPTIONS WITH RECREATION CENTER AND CITY OF PHILADELPHIA PROJECT COORDINATORS. CONTRACTOR SHALL PROVIDE A MINIMUM OF 10 WORKING DAYS NOTICE PRIOR TO SHUT-DOWN OR DISRUPTION.
16. ALL WATER PIPING SHALL BE PRESSURE TESTED (125PSI FOR 4 HOURS) AFTER TRENCHES ARE BACKFILLED SUFFICIENTLY TO HOLD PIPING FIRMLY IN POSITION WITH NO FITTINGS BACKFILLED. ANY LEAKAGE DISCOVERED SHALL BE CORRECTED AND PIPING SHALL BE RETESTED UNTIL STISFACTORY RESULTS ARE OBTAINED.

REVISIONS

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PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:
COMMONWEALTH OF PENNSYLVANIA · KEVIN M. SELGER · REGISTERED LANDSCAPE ARCHITECT · REGISTRATION NUMBER LA002685

KEVIN M. SELGER, RLA - PA LICENSE 002685

PRIMARY CONSULTANT:
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DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
GENERAL NOTES

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04/20/2022
SCALE:	AS NOTED
DESIGNED BY:	TMM
CHECKED BY:	KMS

DRAWING NO.: **G-1.0**

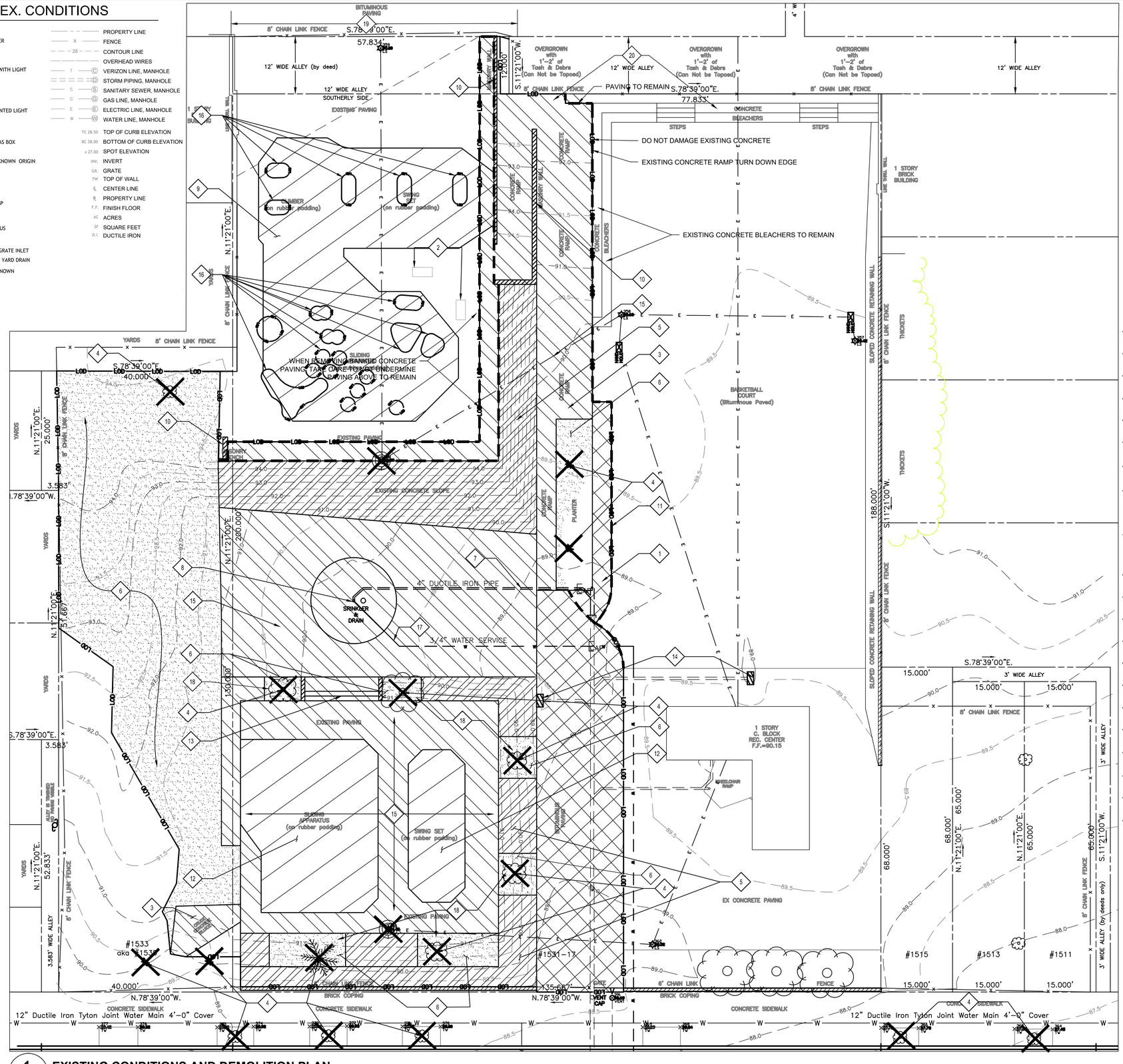
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

M:\Projects\2018\1807077 – heritage park playground\07 engineering data\CAD\Production Drawings\G-1.0– NOTES.dwg Layout: GENERAL NOTES Plotted By: mswercewski, on Thu May 05, 2022 at 12:21pm

LEGEND: EX. CONDITIONS

- BENCHMARK
- ELECTRIC METER
- BOLLARD
- UTILITY POLE
- UTILITY POLE WITH LIGHT
- FIRE HYDRANT
- LAMP POST
- LIGHT POLE
- BUILDING MOUNTED LIGHT
- SIGN
- BIKE RACK
- GAS VALVE, GAS BOX
- WATER VALVE
- CURB BOX UNKNOWN ORIGIN
- SEWER VENT
- CLEANOUT
- WATER METER
- HANDICAP RAMP
- SHRUB
- TREE DECIDUOUS
- CITY INLET
- OPEN MOUTH GRATE INLET
- GRATE INLET / YARD DRAIN
- MANHOLE UNKNOWN

- PROPERTY LINE
- FENCE
- CONTOUR LINE
- OVERHEAD WIRES
- VERIZON LINE, MANHOLE
- STORM PIPING, MANHOLE
- SANITARY SEWER, MANHOLE
- GAS LINE, MANHOLE
- ELECTRIC LINE, MANHOLE
- WATER LINE, MANHOLE
- TOP OF CURB ELEVATION
- BOTTOM OF CURB ELEVATION
- SPOT ELEVATION
- INVERT
- GRATE
- TOP OF WALL
- CENTER LINE
- PROPERTY LINE
- FINISH FLOOR
- ACRES
- SQUARE FEET
- D.I. DUCTILE IRON



1 L-1.0 **EXISTING CONDITIONS AND DEMOLITION PLAN**

1"=10'-0"

LEGEND: DEMOLITION

- LOD — LOD — LIMIT OF DISTURBANCE
- SAW CUT LINE
- EXISTING TREE TO BE REMOVED
- XX ITEMS TO BE DEMOLISHED TAG
- UTILITY CAP
- BANKED CONCRETE PAVEMENT TO BE REMOVED (1,975 SF ±)
- CONCRETE PAVEMENT TO BE REMOVED (6,800 SF ±)
- SAFETY SURFACE TO BE REMOVED (3,600 SF ±)
- ASPHALT PAVING TO BE REMOVED (1,450 SF±)
- LAWN/LANDSCAPE AREA TO BE REMOVED (4,750 SF ±)
- LIGHT POLE AND FOOTING TO BE REMOVED

DEMOLITION PLAN KEY

1. SAWCUT AND REMOVE EXISTING ASPHALT PAVING AND ASSOCIATED SUBBASE TO SUBGRADE
2. REMOVE EXISTING BENCH, POSTS AND ASSOCIATED FOOTINGS
3. SAWCUT AND REMOVE EXISTING CONCRETE PAVING AND ASSOCIATED SUBBASE TO SUBGRADE
4. REMOVE EXISTING TREE AND GRATE (IF PRESENT). GRIND OUT AND REMOVE STUMP
5. REMOVE EXISTING BANKED CONCRETE PAVING AND ASSOCIATED SUBBASE
6. REMOVE EXISTING LAWN/LANDSCAPE. STOCKPILE TOPSOIL FOR REUSE
7. CUT AND REMOVE EXISTING STORM PIPE. LEAVE OPEN FOR NEW CONNECTION. PROTECT AND TEMPORARILY CAP EXISTING PIPE UNTIL NEW PIPE IS INSTALLED
8. REMOVE EXISTING SPRAYGROUND EQUIPMENT, PIPING, ASSOCIATED CONCRETE PAVING AND CONNECTED WATER LINE
9. REMOVE EXISTING PLAYGROUND SAFETY SURFACING TO EXISTING PAVEMENT. REMOVE EXISTING PLAYGROUND EQUIPMENT. EQUIPMENT POSTS MAY BE CUT FLUSH WITH PAVEMENT AND GROUTED SOLID WITH NON-SHRINK GROUT. IF EXISTING POST OR FOOTING INTERFERES WITH NEW WORK, CUT PAVEMENT, REMOVE POST AND FOOTING, BACKFILL AND COMPACT WITH 2A CRUSHED AGGREGATE, AND PATCH WITH NEW CONCRETE PAVING
10. REMOVE EXISTING MASONRY WALL AND ASSOCIATED FOOTINGS
11. SAWCUT EXISTING ASPHALT
12. REMOVE EXISTING PLAYGROUND SURFACING, PLAY EQUIPMENT, ASSOCIATED FOOTINGS, AND EXISTING PAVING BELOW RUBBER SURFACING
13. REMOVE EXISTING CONCRETE STEPS, ASSOCIATED WALLS, FOOTINGS AND SUBBASE
14. EXISTING INLET TO REMAIN
15. REMOVE EXISTING CONCRETE PAVING AND ASSOCIATED SUBBASE
16. CUT HOLES IN EXISTING CONCRETE PAVING AND EXCAVATE FOR NEW PLAYGROUND EQUIPMENT POSTS
17. CUT AND CAP EXISTING SPRAYGROUND WATERLINE
18. REMOVE EXISTING "GRASSCRETE" CONRETE PAVING BLOCKS
19. REMOVE EXISTING CHAIN-LINK FENCE FABRIC. POSTS AND BRACING TO REMAIN
20. TRIM AND REMOVE VEGETATION BACK TO FENCE LINE SO THAT IT IS NOT OVERHANGING FENCE
21. SAWCUT AND REMOVE EXISTING PAVING AND GRAVEL

NOTE:

1. PRUNE ALL EXISTING TREES TO CLEAN OUT DEAD LIMBS 1" DIAMETER AND GREATER. PERFORM SELECTIVE THINNING AND LATERAL REDUCTION TO ENCOURAGE A STRONG BRANCHING STRUCTURE. LOW LIMBS SHOULD BE ELEVATED TO A HEIGHT OF 15'(MIN) TO ALLOW CLEARANCE FOR PLAY STRUCTURES. PRUNING SHOULD BE DONE UNDER SUPERVISION OF A ISA BOARD CERTIFIED MASTER ARBORIST.
2. REFER TO G - 1.0 FOR GENERAL AND DEMOLITION NOTES
3. **TOTAL AREA OF DISTURBANCE = 14,860 SF/.34 AC**

0 5 10 20 ONE INCH

REVISIONS

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PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:

COMMONWEALTH OF PENNSYLVANIA KEVIN M. SELGER REGISTRATION NUMBER 002685 REGISTERED LANDSCAPE ARCHITECT

KEVIN M. SELGER, RLA - PA LICENSE 002685

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1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
EXISTING CONDITIONS & DEMO PLAN

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04/20/2022
SCALE:	1"=10'
DESIGNED BY:	TMM
CHECKED BY:	KMS

DRAWING NO.: **L-1.0**

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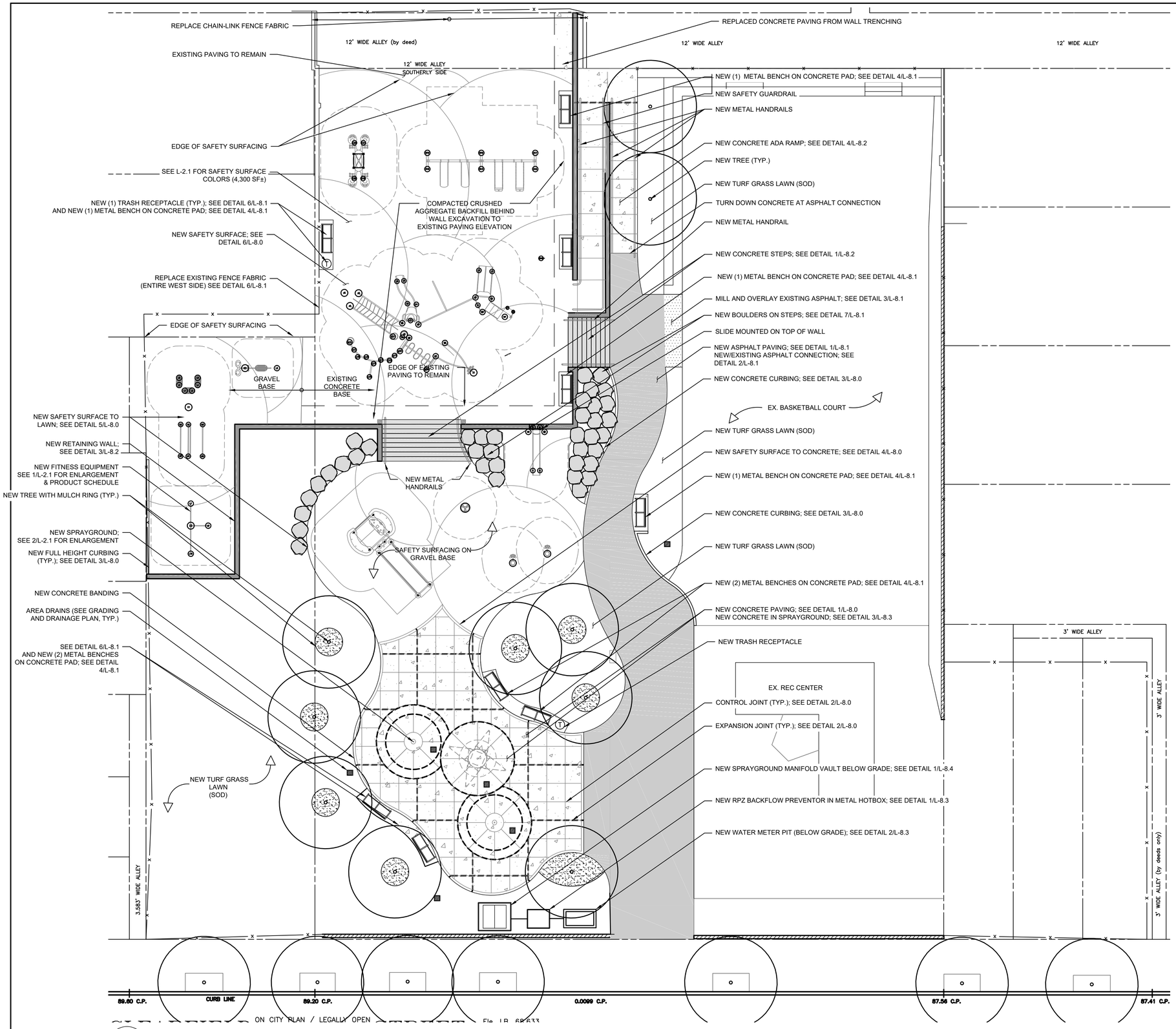

1 L-2.0 **MATERIALS PLAN - OVERALL**

1" = 10'-0"

LEGEND: MATERIALS

- EXISTING CHAIN LINK FENCE
- NEW EXPANSION JOINT
- NEW CONTROL JOINT
- NEW METAL BENCH
- NEW TRASH RECEPTACLE
- NEW GROUND JET FOR SPRAYGROUND
- NEW CONCRETE PAVEMENT (2,400 SF±)
- NEW FULL DEPTH ASPHALT PAVING (2,310 SF±)
- NEW MULCHED PLANTING BED (275 SF±)
- NEW CONCRETE WALL

SITE FURNISHINGS TABLE

BENCHES	8
TRASH RECEPTACLES	2

NOTE: SEE L-2.1 FOR SPECIFIC PLAY EQUIPMENT, PRODUCT NUMBERS AND SAFETY SURFACE COLOR MIXTURES.

0 5 10 20 ONE INCH

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20191973397

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NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:
COMMONWEALTH OF PENNSYLVANIA · KEVIN M. SELGER · REGISTRATION NUMBER 002685 · REGISTERED LANDSCAPE ARCHITECT
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PPR PROJECT NUMBER: 16-16-4955-99

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IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
MATERIALS PLAN - OVERALL

PPR PROJECT NO.: 16-18-4176-01
CONSULTANT PROJECT NO.: 2018-07077
DATE: 04/20/2022
SCALE: 1"=10'
DESIGNED BY: TMM
CHECKED BY: KMS
DRAWING NO.: **L-2.0**

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

PLAY EQUIPMENT SCHEDULE				
KEY	DESCRIPTION	ITEM #	MANUFACTURER	FALL HEIGHT
A	BLOCK CLIMBER	117966	LANDSCAPE STRUCTURES	25"
B	CURVA SPINNER	249553	LANDSCAPE STRUCTURES	25"
C	SPRING RIDER (SINGLE)	164074	LANDSCAPE STRUCTURES	25"
D	WE-SAW	186490	LANDSCAPE STRUCTURES	54"
E	ARCH SWING 2-5 YRS 2-BAY	3404	LANDSCAPE STRUCTURES	96"
F	CUSTOM PLAYBOOSTER	OTHER	LANDSCAPE STRUCTURES	96"
G	BANK SLIDE	CUSTOM	LANDSCAPE STRUCTURES	48"
H	SWAY FUN	138871	LANDSCAPE STRUCTURES	25"

FITNESS EQUIPMENT SCHEDULE			
KEY	QUANTITY	DESCRIPTION	MANUFACTURER
AC	1	AB CRUNCH/LEG LIFT	HEALTHBEAT by LANDSCAPE STRUCTURES
AR	1	ASSISTED ROW/PUSH UP	HEALTHBEAT by LANDSCAPE STRUCTURES
PB	1	PARALLEL BARS	HEALTHBEAT by LANDSCAPE STRUCTURES
PM	1	PLYOMETRICS	HEALTHBEAT by LANDSCAPE STRUCTURES

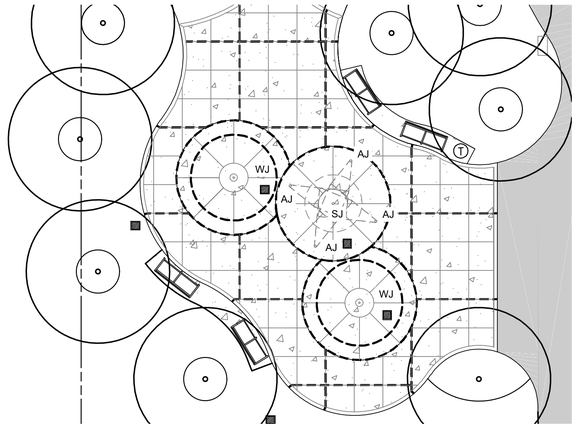
SPRAY EQUIPMENT SCHEDULE			
KEY	QUANTITY	DESCRIPTION	MANUFACTURER
AJ	4	ARCH JET	AQUATIX by LANDSCAPE STRUCTURES
WJ	2	WATER JEWEL	AQUATIX by LANDSCAPE STRUCTURES
SJ	1	STREAM JET	AQUATIX by LANDSCAPE STRUCTURES

SAFETY SURFACE SCHEDULE			
SYMBOL	NO.	COLOR NAME	PERCENT BY WEIGHT
GREEN TPV RUBBER SURFACING			
	RH-10	STANDARD GREEN	25%
	RH-11	BRIGHT GREEN	25%
	RH-30	BEIGE	25%
	RH-70	BLACK	25%
BLUE TPV RUBBER SURFACING			
	RH-20	STANDARD BLUE	25%
	RH-22	LIGHT BLUE	25%
	RH-30	BEIGE	25%
	RH-70	BLACK	25%
RED TPV RUBBER SURFACING			
	RH-01	RED	33%
	RH-30	BEIGE	33%
	RH-70	BLACK	33%

NOTE: SAFETY SURFACING IS A PRODUCT OF SAFETY TURF INC.

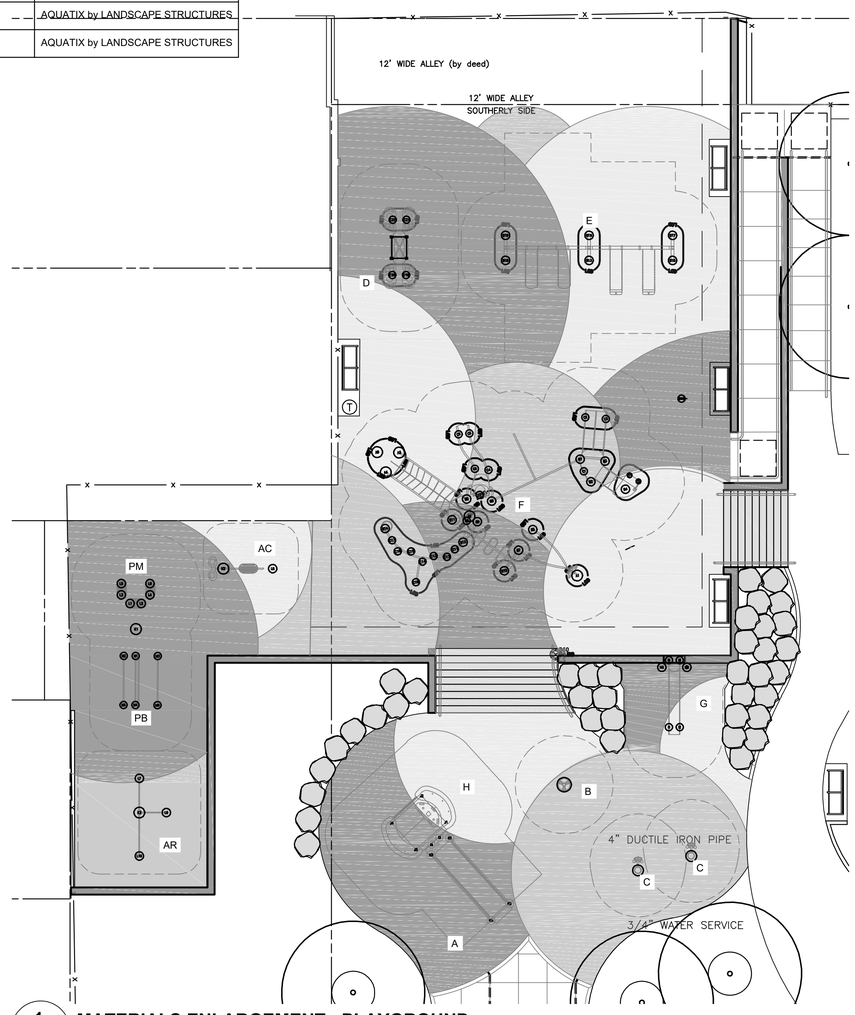
LEGEND: MATERIALS

- NEW BACKED BENCH
- NEW TRASH RECEPTACLE
- NEW GROUND JET FOR SPRAYGROUND
- NEW SAFETY SURFACE - COLOR GREEN (2,460 SF±)
- NEW SAFETY SURFACE - COLOR PURPLE (1,848 SF±)
- NEW SAFETY SURFACE - COLOR ORANGE (2,950 SF±)



2 L-2.1 **MATERIALS ENLARGEMENT - SPRAYGROUND**

1"=10' - 0"



1 L-2.1 **MATERIALS ENLARGEMENT - PLAYGROUND**

1"=10' - 0"

0 5 10 20 ONE INCH

N

REVISIONS		
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LAND. ARCH. SEAL:

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REGISTERED LANDSCAPE ARCHITECT
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1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

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IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
MATERIALS PLAN - ENLARGEMENTS

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04/20/2022
SCALE:	AS NOTED
DESIGNED BY:	TMM
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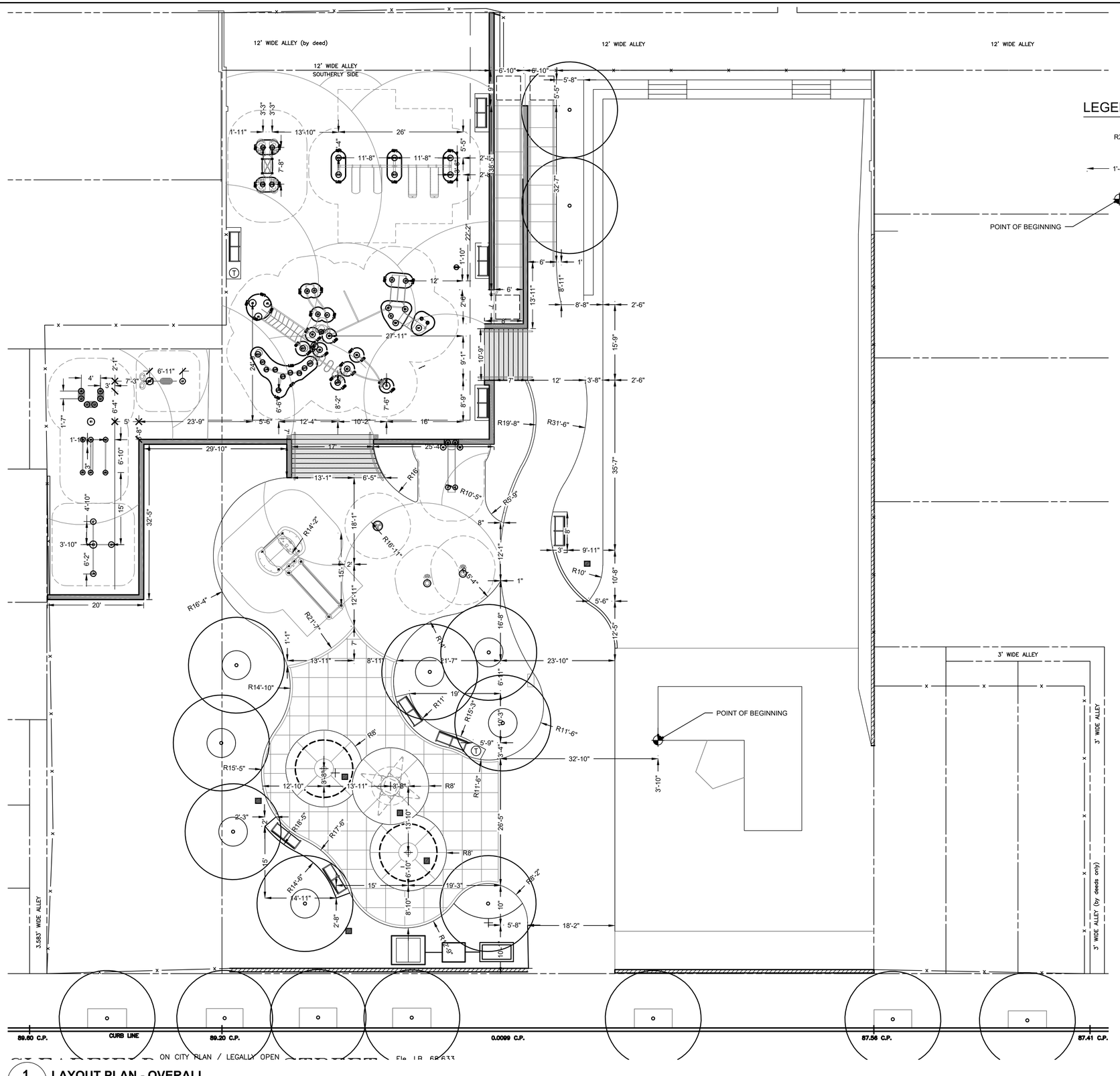

LEGEND: LAYOUT

RX'	RADIAL DIMENSION
1'-4"	LINEAR DIMENSION
	POINT OF BEGINNING

NOTE: SEE 3/L-8.2 FOR WALL LAYOUT DIMENSIONS

1 L-3.0 **LAYOUT PLAN - OVERALL**

1"=10'

0 5 10 20 ONE INCH

N

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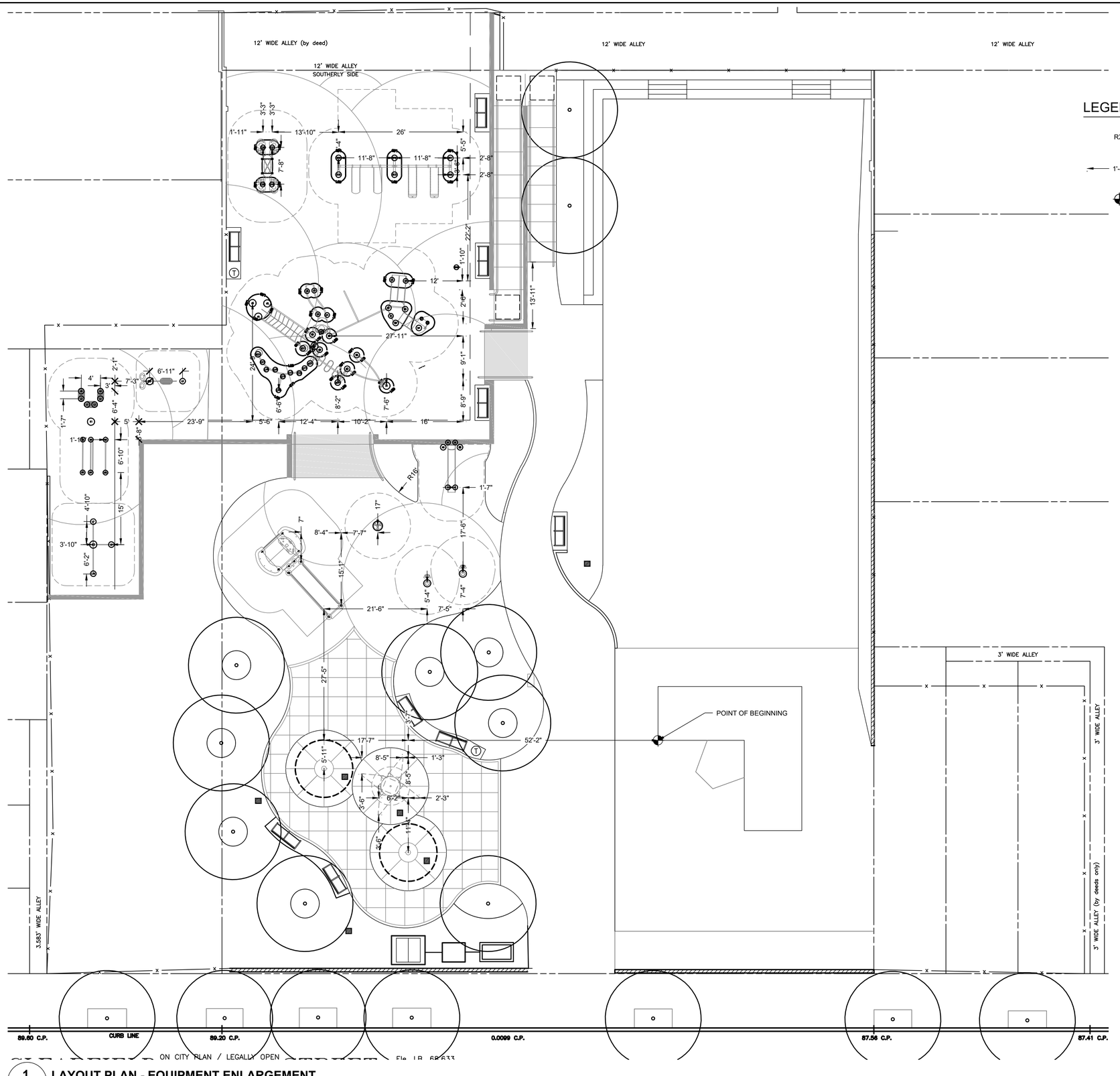

LEGEND: LAYOUT

RX'	RADIAL DIMENSION
1'-4"	LINEAR DIMENSION
	POINT OF BEGINNING

POINT OF BEGINNING

ON CITY PLAN / LEGALLY OPEN File LR 68633

1 L-3.1 **LAYOUT PLAN - EQUIPMENT ENLARGEMENT**

1"=10'

0 5 10 20 ONE INCH

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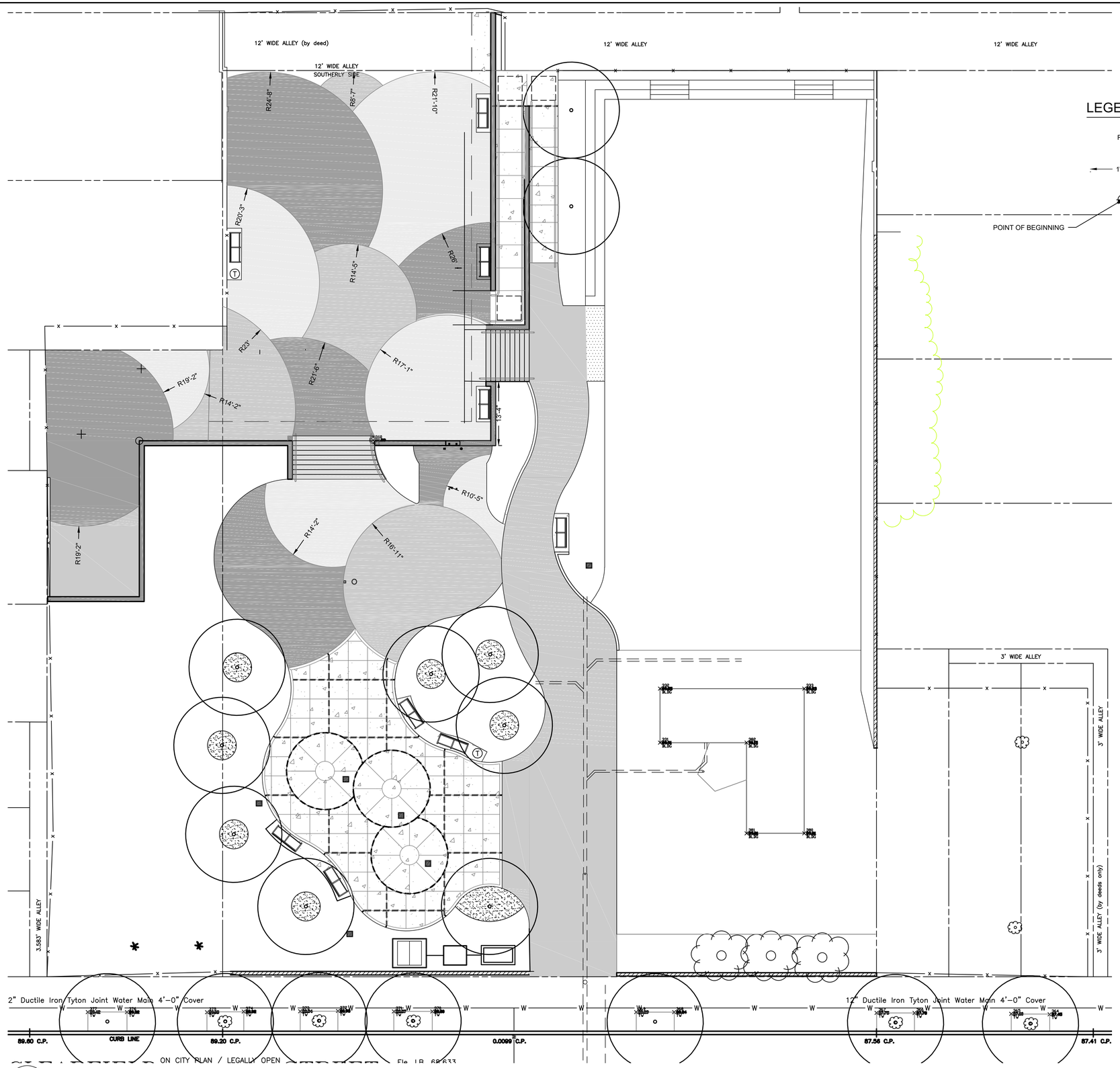
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
LAYOUT PLAN - EQUIPMENT ENLARGEMENT

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: **L-3.1**
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04/20/2022	
SCALE: AS NOTED	
DESIGNED BY: TMM	
CHECKED BY: KMS	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



LEGEND: LAYOUT

RX'	RADIAL DIMENSION
1'-4"	LINEAR DIMENSION
	POINT OF BEGINNING

1 L-3.1 **LAYOUT PLAN - SAFETY SURFACE**

1"=10'

0 5 10 20 ONE INCH

REVISIONS

ISSUE	DATE	REVISIONS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076

811

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY):
20191973397

PPR PROJECT COORDINATOR:
NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:

KEVIN M. SELGER, RLA - PA LICENSE 002685

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

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CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
LAYOUT PLAN - SAFETY SURFACE

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: L-3.2
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04/20/2022	
SCALE: AS NOTED	
DESIGNED BY: TMM	
CHECKED BY: XX	

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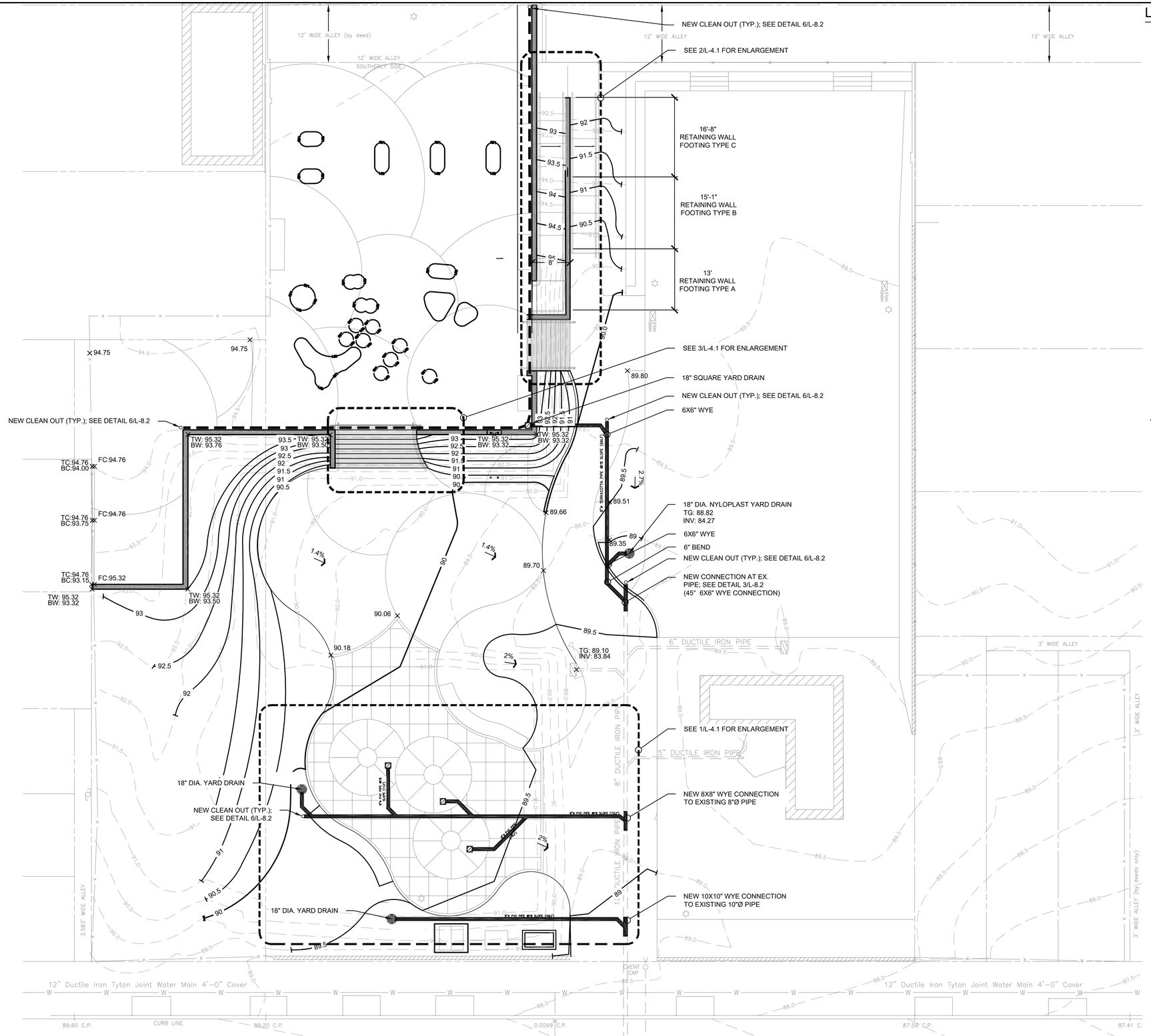

1 L-4.0 **GRADING PLAN - OVERALL**
TYPICAL

1"=10'-0"

LEGEND: GRADING AND DRAINAGE

- 21 — EXISTING CONTOUR
- 21.5 — EXISTING INTERMEDIATE CONTOUR
- 20 — PROPOSED GRADING, 5 FT CONTOUR
- 21 — PROPOSED GRADING, 1 FT CONTOUR
- 21.5 — PROPOSED GRADING, .5 FT CONTOUR
- x% — DRAINAGE ARROW
- 33.22(EX) — NEW SPOT ELEVATION
- NEW PERFORATED UNDER DRAIN PIPE
- NEW SOLID DRAIN PIPE
- NEW CLEAN OUT
- NEW 18" SQUARE DRAIN
- NEW 18" DIA. YARD DRAIN

GENERAL NOTES:

1. SEE G001 FOR GENERAL NOTES.
2. ROUND BREAKS IN GRADE WITH 5 FEET MINIMUM ROUNDING.
3. MEET ELEVATIONS OF EXISTING SURFACES FLUSH.
4. SLOPE GRADES TO DIRECT AWAY FROM LOW POINTS ON HARD SURFACES AND TO PREVENT PONDING, EXCEPT WHERE INDICATED OTHERWISE ON DRAWINGS.
5. PROPOSED GRADES SHALL NOT EXCEED 3:1.
6. BENCH PADS CROSS PITCH AND GRADE TO MATCH ADJACENT WALKWAY.
7. SEE DETAILS 2/L-4.1 & 3/L-4.1 FOR SPOT ELEVATIONS SPECIFIC TO STEPS.

0 5 10 20
ONE INCH

N

REVISIONS

ISSUE	DATE	REVISIONS

PHILADELPHIA MANETO

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REGISTRATION NUMBER 002685
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1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
OVERALL GRADING AND DRAINAGE PLAN

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04/20/2022
SCALE:	1"=10'
DESIGNED BY:	TMM
CHECKED BY:	KMS

DRAWING NO.: **L-4.0**

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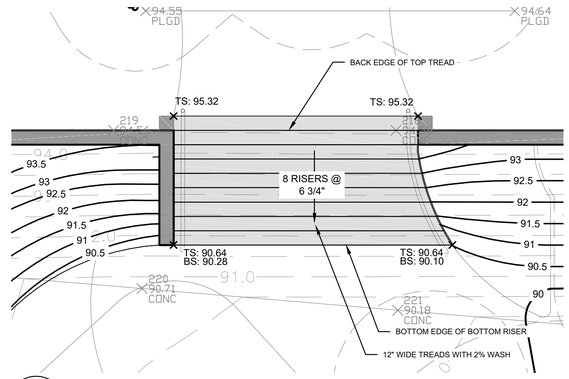
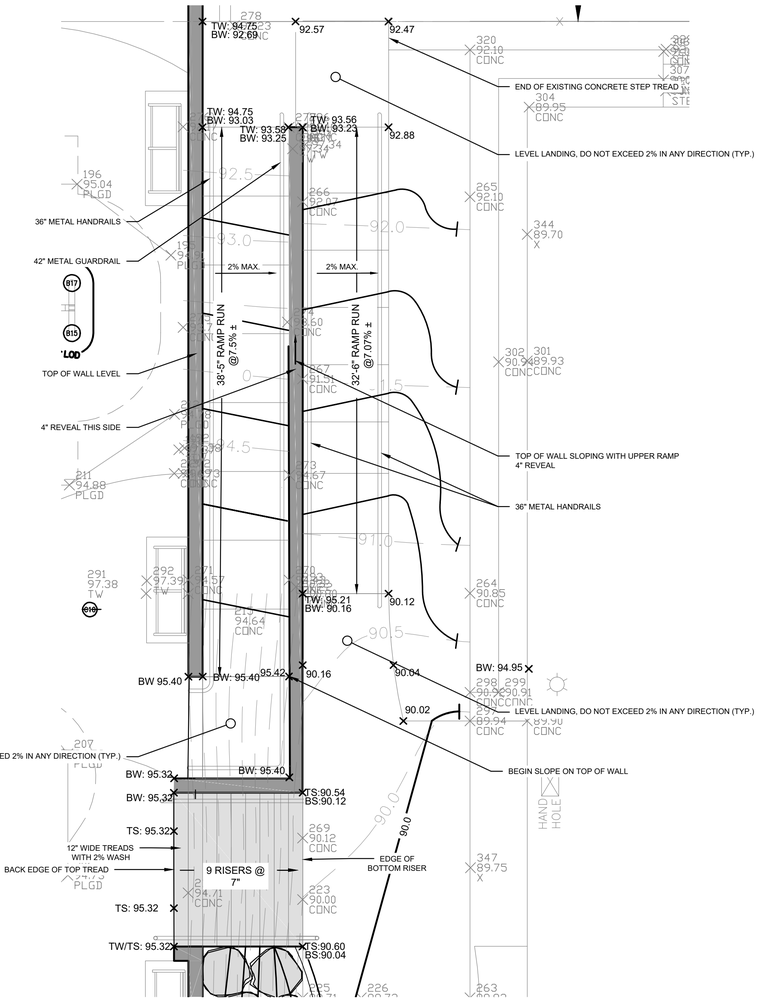


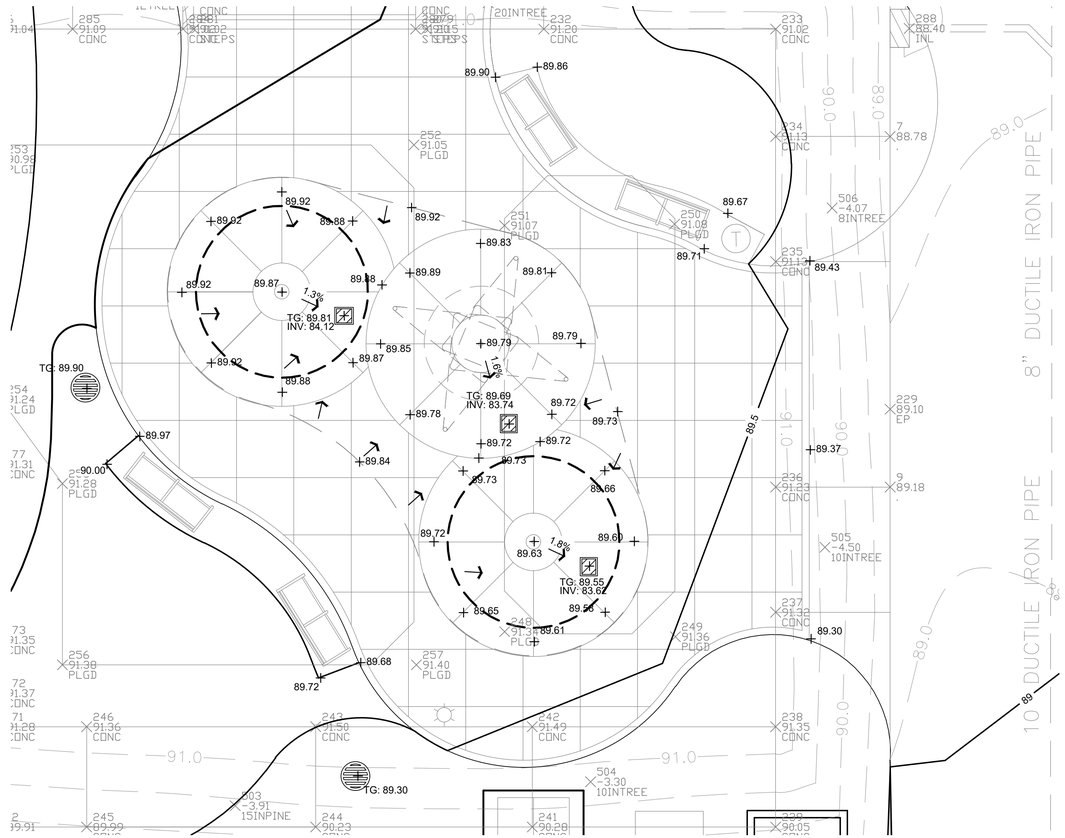
3 GRADING ENLARGEMENT - PLAYGROUND STAIRS

L-4.1 TYPICAL — 1"=5'-0"



2 GRADING ENLARGEMENT - ADA RAMP AND STAIRS

L-4.1 TYPICAL — 1"=5'-0"



1 GRADING ENLARGEMENT - SPRAYGROUND

L-4.1 TYPICAL — 1"=5'-0"

GENERAL NOTES:

1. SEE G-001 FOR GENERAL NOTES.
2. ROUND BREAKS IN GRADE WITH 5 FEET MINIMUM ROUNDING.
3. MEET ELEVATIONS OF EXISTING SURFACES FLUSH.
4. SLOPE GRADES TO DIRECT AWAY FROM LOW POINTS ON HARD SURFACES AND TO PREVENT PONDING, EXCEPT WHERE INDICATED OTHERWISE ON DRAWINGS.
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- 20 — PROPOSED GRADING, 5 FT CONTOUR
- 21 — PROPOSED GRADING, 1 FT CONTOUR
- 21.5 — PROPOSED GRADING, .5 FT CONTOUR
- DRAINAGE ARROW
- +33.22(EX) — EX. SPOT ELEVATION
- PERFORATED UNDER DRAIN PIPE
- NEW STORM PIPE
- NEW CLEAN OUT
- NEW DRAIN

0 2.5 5 10 ONE INCH

REVISIONS		
ISSUE	DATE	REVISIONS

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LAND. ARCH. SEAL:
PENNSYLVANIA KEVIN M. SELGER REGISTRATION NUMBER 002685 REGISTERED LANDSCAPE ARCHITECT
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11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

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IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
GRADING PLAN - ENLARGEMENTS

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04/20/2022
SCALE:	1"=5'
DESIGNED BY:	TMM
CHECKED BY:	KMS

DRAWING NO.: **L-4.1**

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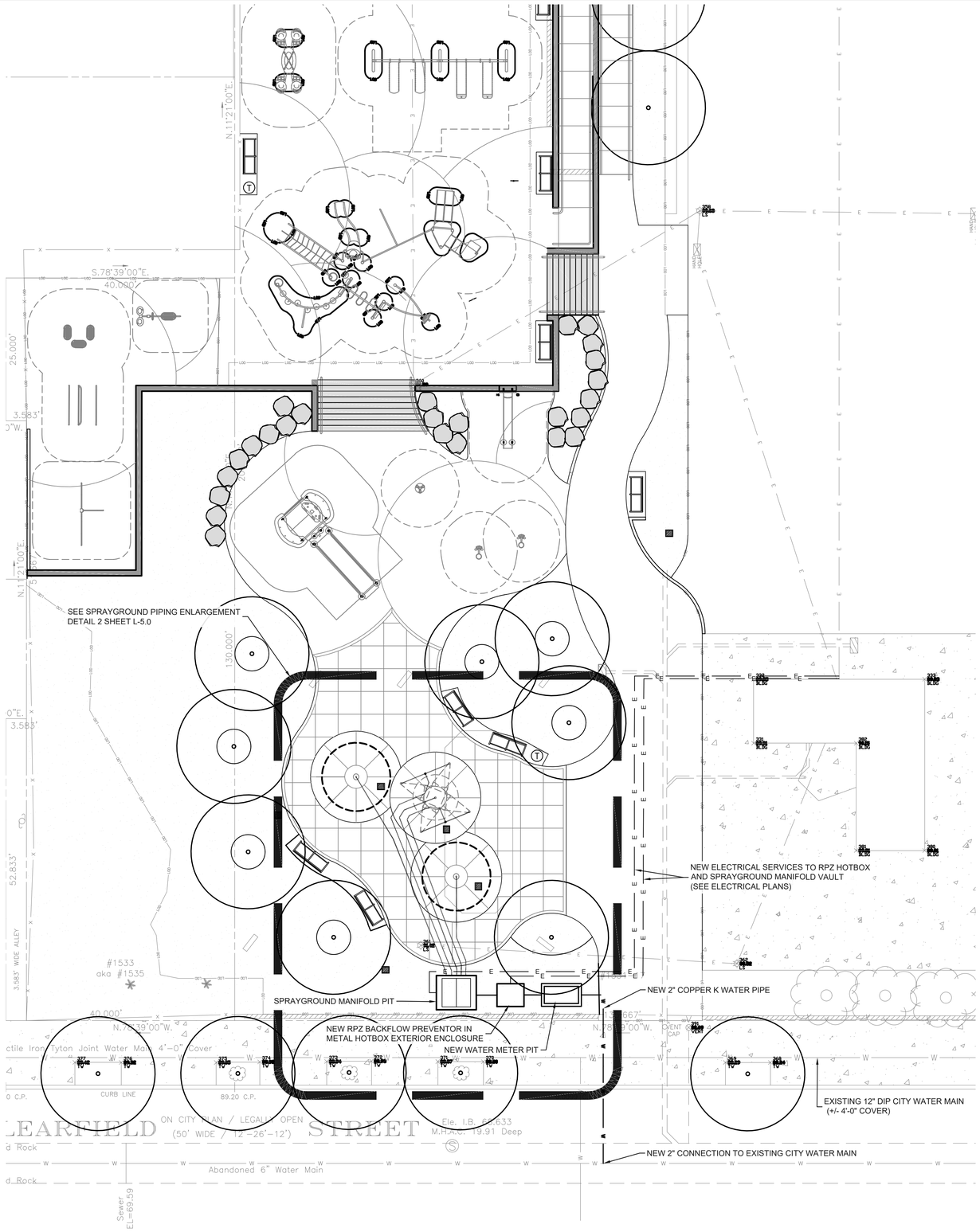
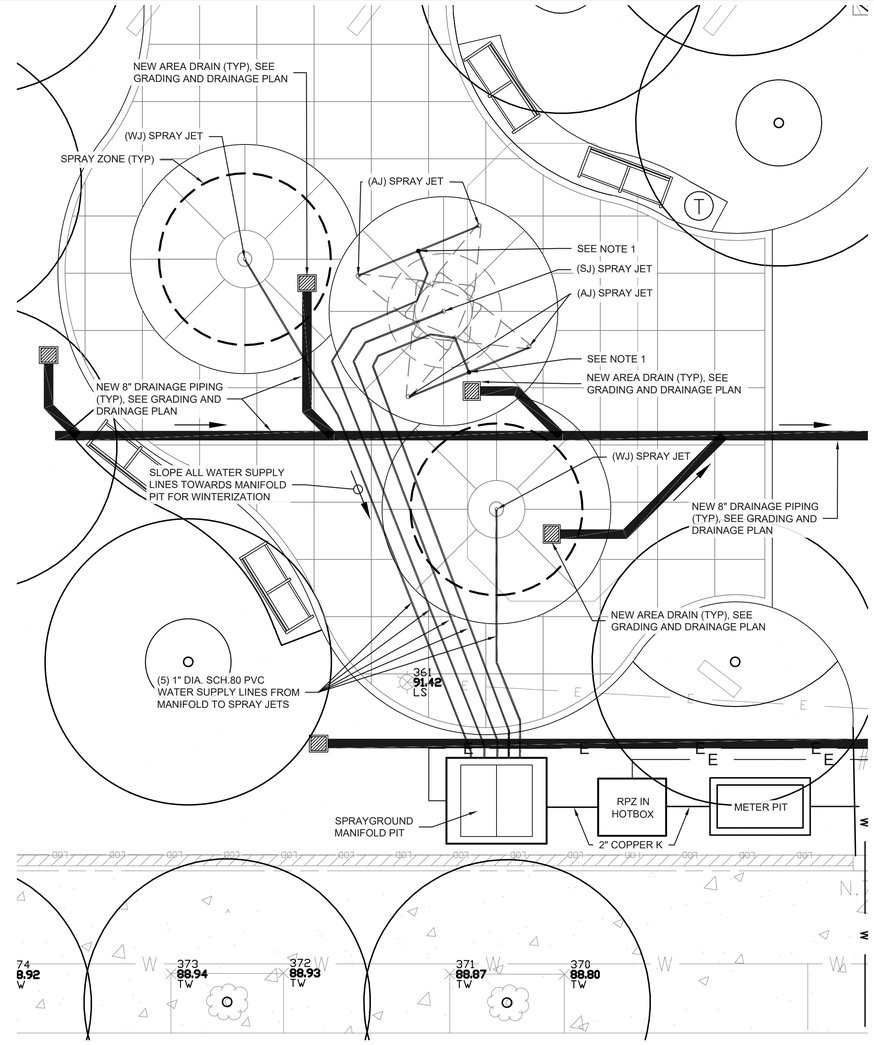


1 UTILITY PLAN

L-5.0 TYPICAL

1" = 10'-0"



SPRAY GROUND NOTES

1. CENTER TEE CONNECTION BETWEEN SPRAY JETS FOR EVEN WATER DISTRIBUTION

SPRAY EQUIPMENT SCHEDULE

KEY	QUANTITY	DESCRIPTION	MANUFACTURER
AJ	4	ARCH JET	AQUATIX by LANDSCAPE STRUCTURES
WJ	2	WATER JEWEL	AQUATIX by LANDSCAPE STRUCTURES
SJ	1	STREAM JET	AQUATIX by LANDSCAPE STRUCTURES

2 SPRAY GROUND PIPING ENLARGEMENT

L-5.0 TYPICAL

1" = 5'-0"

REVISIONS

ISSUE	DATE	REVISIONS

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LAND. ARCH. SEAL:

PENNSYLVANIA
KEVIN M. SELGER
REGISTERED LANDSCAPE ARCHITECT
REGISTRATION NUMBER LA002685

KEVIN M. SELGER, RLA - PA LICENSE 002685

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PROJECT TITLE:
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1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
UTILITY PLAN AND SPRAY GROUND PIPING PLAN

PPR PROJECT NO.: 16-18-4176-01
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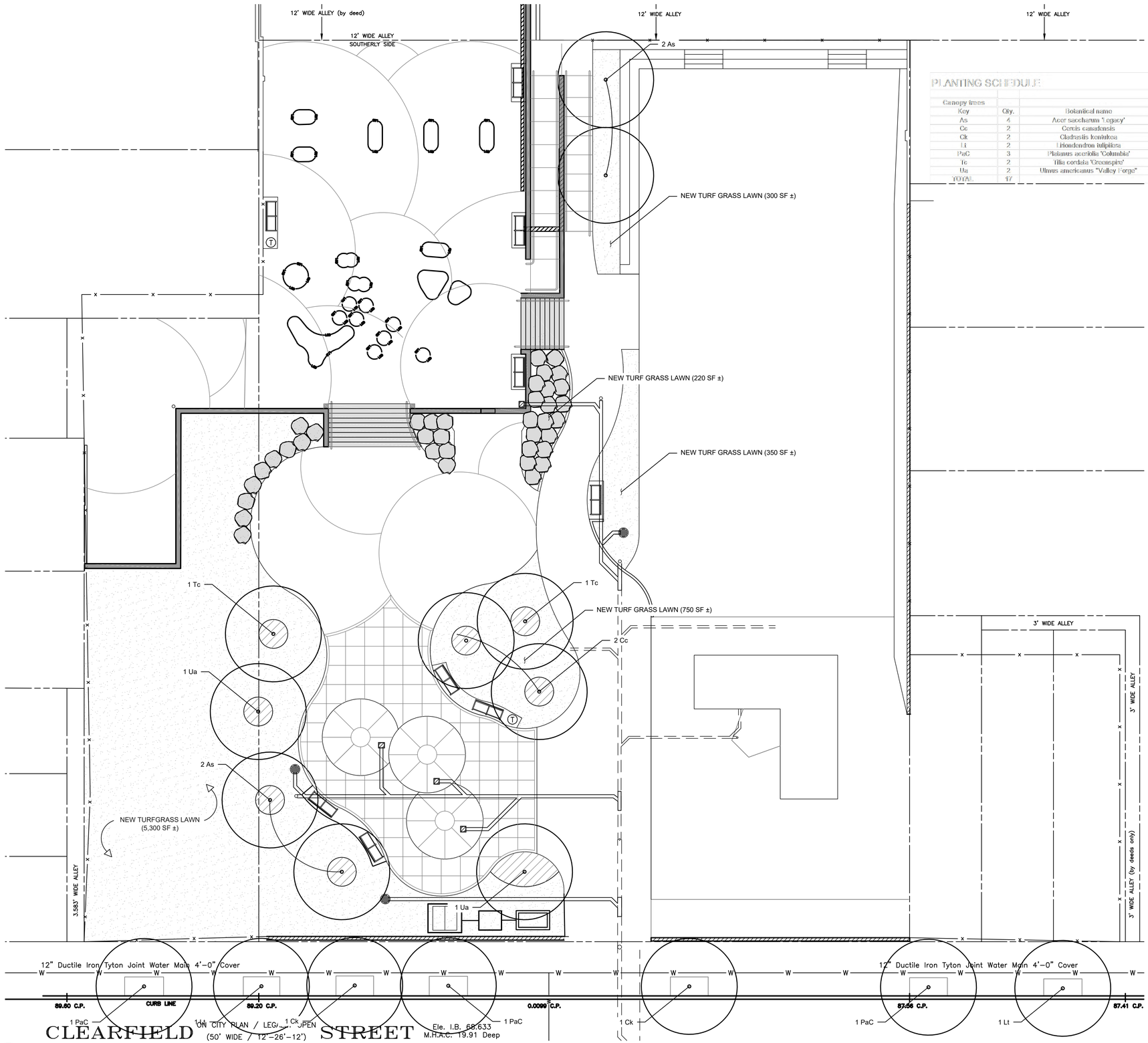

PLANTING SCHEDULE

Canopy trees							
Key	Qty.	Botanical name	Common name	Size	Root	Spacing	Notes/Comments
As	4	Acer saccharum 'Legacy'	Legacy' Sugar Maple	2.5" Cal min.	B&B	See Plan	
Cc	2	Cercis canadensis	Eastern Redbud	2.5" Cal min.	B&B	See Plan	
Ck	2	Cladrastis kentukea	American Yellowwood	2.5" Cal min.	B&B	See Plan	
Lt	2	Liriondendron tulipifera	Tulip Poplar	2.5" Cal min.	B&B	See Plan	
PaC	3	Platanus acerifolia 'Columbia'	Columbia' Planetree	2.5" Cal min.	B&B	See Plan	
Tc	2	Tilia cordata 'Greenspire'	Greenspire' Linden	2.5" Cal min.	B&B	See Plan	
Ua	2	Ulmus americanus "Valley Forge"	Valley Forge Elm	2.5" Cal min.	B&B	See Plan	
TOTAL	17						

LEGEND: PLANTING

- NEW CANOPY TREE
- NEW TURFGRASS LAWN SOD (6,350± SF)
- NEW MULCHED PLANTING BED (275± SF)

NOTE: FOR ALL PLANTING NOTES AND PLANTING DETAILS, REFER TO SHEET L-7.1

0 5 10 20 ONE INCH

1 L-7.0 **PLANTING PLAN** TYPICAL

1"=10'-0"

REVISIONS

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PENNSYLVANIA KEVIN M. SELGER REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER LA002685

KEVIN M. SELGER, RLA - PA LICENSE 002685

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PLANTING PLAN

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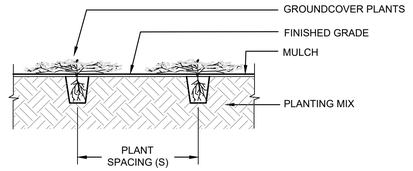
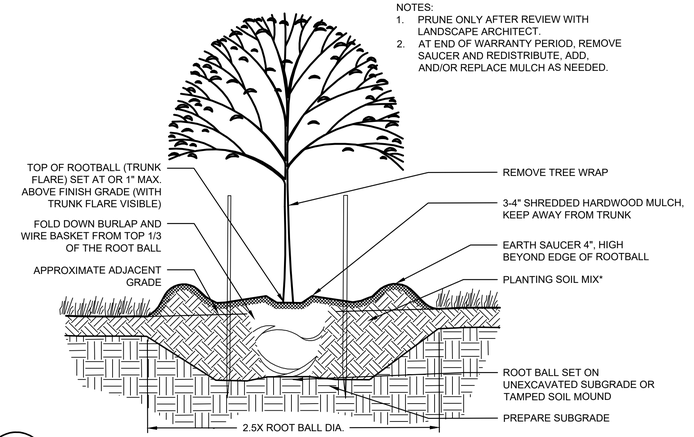
LANDSCAPING NOTES:

1. SEE G001 FOR GENERAL NOTES.
2. PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS EQUIPMENT, INCIDENTALS AND CLEAN UP.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT.
4. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, BE DENSELY FOLIATED, HAVE VIGOROUS ROOT SYSTEMS AND BE FREE OF DEFECTS AND INJURIES.
5. ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE OF THE PLANT MATERIAL, SHALL BE REPORTED TO THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION OF PLANT MATERIAL.
6. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION.
7. PROVISIONS SHALL BE MADE FOR A GUARANTEE OF AT LEAST ONE (1) YEAR FOR TREES AND SHRUBS. REPLACEMENT SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE. INSOFAR AS IT IS PRACTICABLE,
8. PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
9. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1-2004) AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION (ANLA) APPROVED MAY 12, 2004, OR LATEST EDITION.
10. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, LITTER, ETC., SHALL BE USED FOR PLANTING.
11. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE.
12. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH A LEVEL THAT AFTER SETTLEMENT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PLANTING PIT.
13. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF THE PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
14. LANDSCAPE CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLACEMENT OF LANDSCAPE MATERIAL. CONTRACTOR SHALL NOT PLACE LANDSCAPING MATERIAL ON TOP OF UTILITY PIPING. IF CONFLICT WITH UTILITY ARISES, CONTACT PROJECT LANDSCAPE ARCHITECT FOR NEW PLACEMENT/LOCATION.
15. PLANTING PLAN SHALL BE USED FOR PLANT AND LANDSCAPE INSTALLATION ONLY.



NOTE(S):
1. REMOVE PLANTS FROM POTS/CONTAINERS AND PLANT FLUSH WITH GRADE AS SHOWN.
2. SPACE PLANTS AS INDICATED ON PLANT SPACING DETAIL.

2 VEGETATIVE BED/PERENNIAL PLANTING DETAIL
L-7.1 TYPICAL NTS



NOTES:
1. PRUNE ONLY AFTER REVIEW WITH LANDSCAPE ARCHITECT.
2. AT END OF WARRANTY PERIOD, REMOVE SAUCER AND REDISTRIBUTE, ADD, AND/OR REPLACE MULCH AS NEEDED.

1 DECIDUOUS TREE PLANTING DETAIL
L-7.1 TYPICAL NTS

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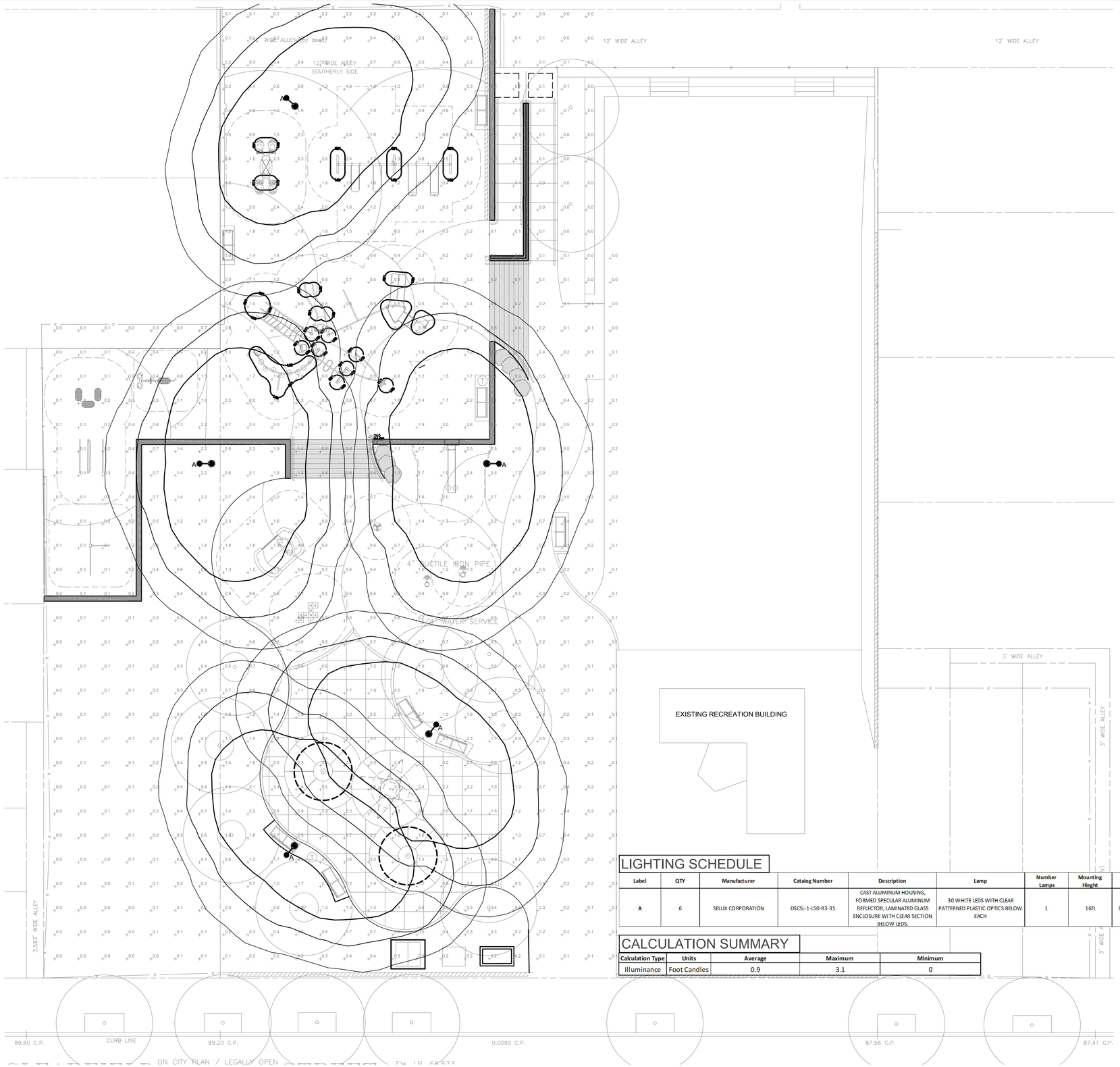

LEGEND: LIGHTING

NEW LIGHT POLE

0.1 FOOT CANDLE

LIGHTING SCHEDULE

Label	QTY	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Mounting Hieght	Filename	Lumens per Lamp	Lumen Multiplier	Wattage	Efficiency
A	6	SELUX CORPORATION	DSCSL-1-L50-R3-35	CAST ALUMINUM HOUSING, FORMED SPECULAR ALUMINUM REFLECTOR, LAMINATED GLASS ENCLOSURE WITH CLEAR SECTION BELOW LEDS.	30 WHITE LEDS WITH CLEAR PATTERNED PLASTIC OPTICS BELOW EACH	1	16ft	DSCSL-1-L50-R3-35.ies	3531	1	49.8	100%

CALCULATION SUMMARY

Calculation Type	Units	Average	Maximum	Minimum
Illuminance	Foot Candles	0.9	3.1	0

1 L-2.0 **MATERIALS PLAN - OVERALL**

1" = 10'-0"

0 5 10 20 ONE INCH

REVISIONS

ISSUE	DATE	REVISIONS

PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY):
20191973397

PPR PROJECT COORDINATOR:
NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:
COMMONWEALTH OF PENNSYLVANIA
KEVIN M. SELGER
REGISTRATION NUMBER 002685
REGISTERED LANDSCAPE ARCHITECT
KEVIN M. SELGER, RLA - PA LICENSE 002685

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

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CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER 16-16-4955-99

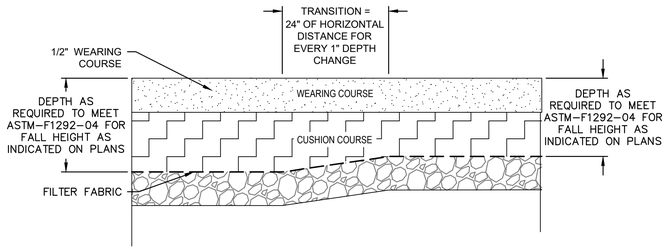
PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
LIGHTING PLAN

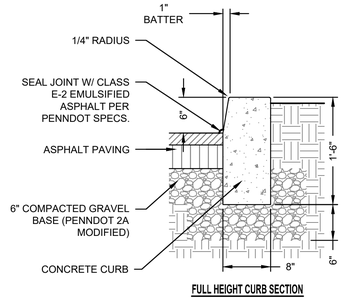
PPR PROJECT NO.: 16-18-4176-01
CONSULTANT PROJECT NO.: 2018-07077
DATE: 04/20/2022
SCALE: AS NOTED
DESIGNED BY: TMM
CHECKED BY: KMS

DRAWING NO.: **L-6.0**

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

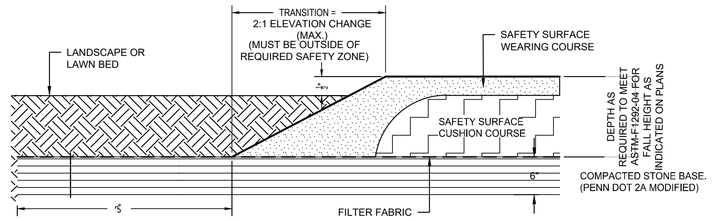


6 L-8.0 **SAFETY SURFACE AND DEPTH TRANSITION DETAIL** NTS



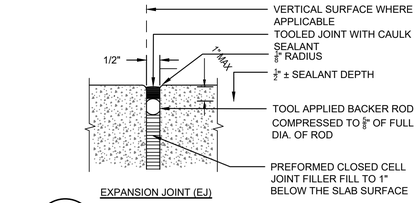
FULL HEIGHT CURB SECTION

3 L-8.0 **CONCRETE CURB DETAILS** TYPICAL NTS



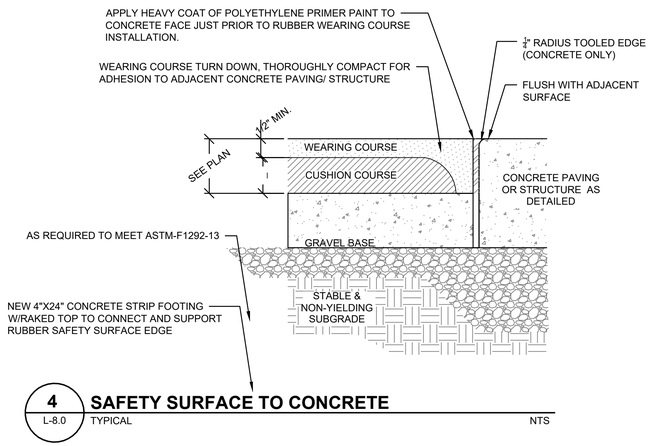
NOTE(S):
1. POURED-IN-PLACE TPV SURFACING SHALL MEET THE REQUIREMENTS OF ASTM F-1292 AND THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT PROVISIONS FOR ACCESSABLE PLAYGROUNDS AND RECREATION AREAS

5 L-8.0 **POURED-IN-PLACE SAFETY SURFACE** TURNDOWN AT LANDSCAPE/ LAWN BED DETAIL NTS

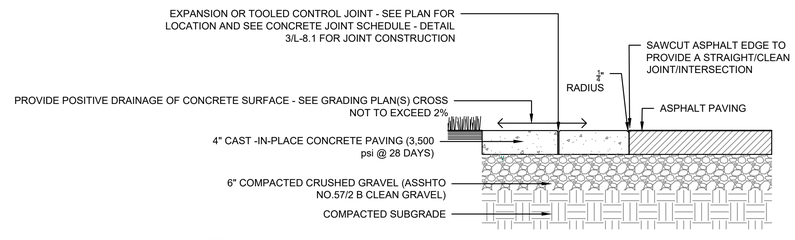


NOTES:
1. TOOL CONTROL JOINTS FIRST THEN BROOM FINISH SECOND FOR A NON-WONDOW PANE LOOK.

2 L-8.0 **CONCRETE PAVING JOINT SCHEDULE** NTS



4 L-8.0 **SAFETY SURFACE TO CONCRETE** TYPICAL NTS



1 L-8.0 **4" THICK CONCRETE PAVING DETAIL** NTS

REVISIONS

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COMMONWEALTH OF PENNSYLVANIA · KEVIN M. SELGER · REGISTRATION NUMBER 002685 · REGISTERED LANDSCAPE ARCHITECT
KEVIN M. SELGER, RLA - PA LICENSE 002685

PROGRESS PLAN

NOT FOR CONSTRUCTION

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PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

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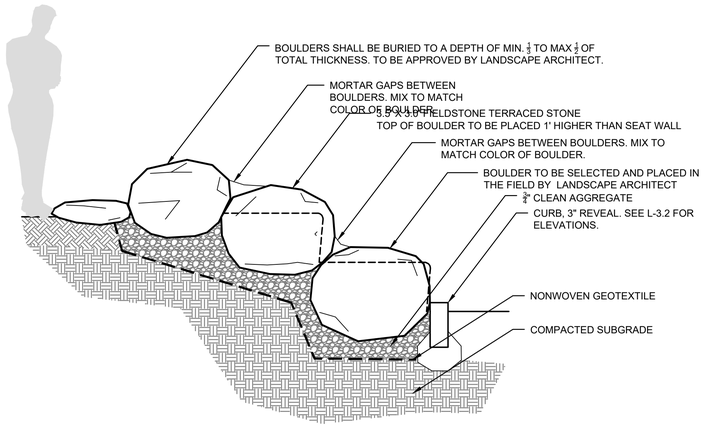
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
SITE DETAILS

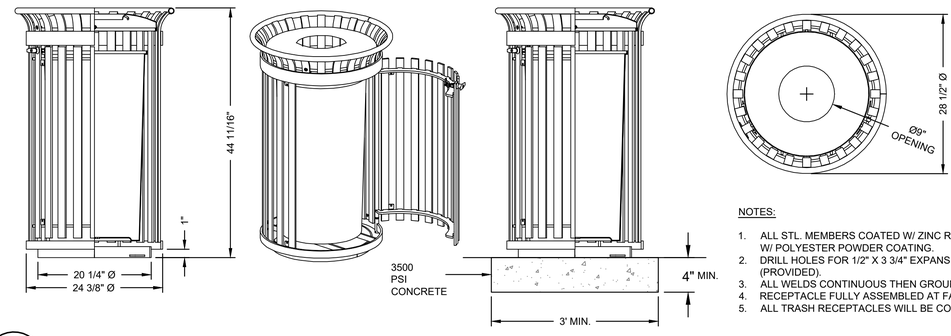
PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: **L-8.0**
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04/20/2022	
SCALE: AS NOTED	
DESIGNED BY: TMM	
CHECKED BY: KMS	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



7 BOULDER ON CONCRETE STEPS

L-8.1 TYPICAL — NTS

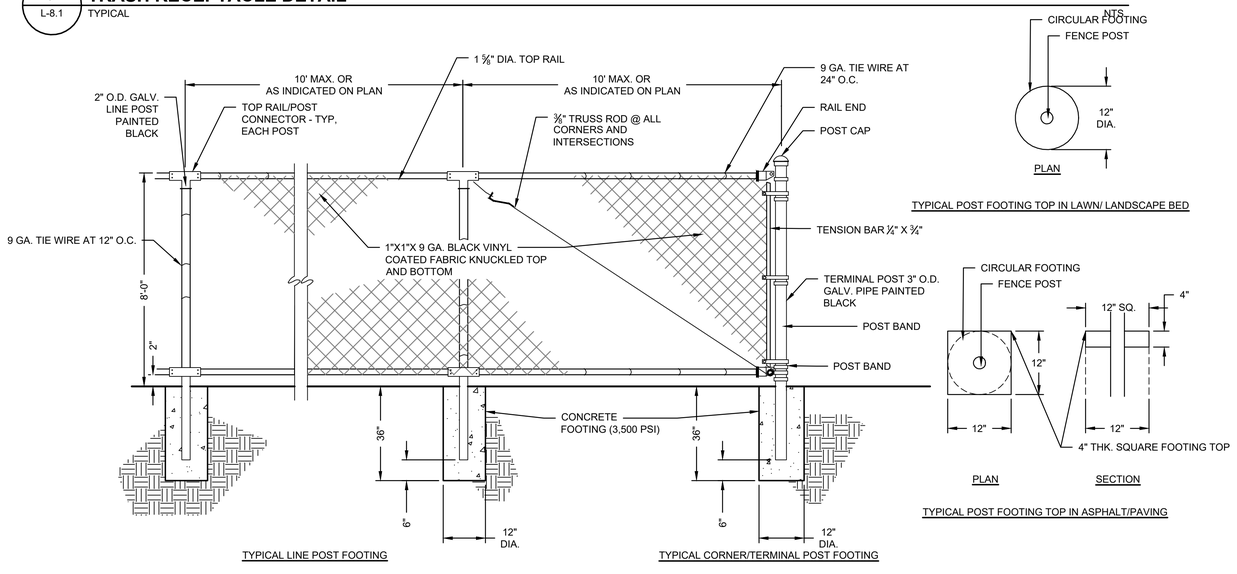


NOTES:

1. ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
2. DRILL HOLES FOR 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS (PROVIDED).
3. ALL WELDS CONTINUOUS THEN GROUND SMOOTH.
4. RECEPTACLE FULLY ASSEMBLED AT FACTORY.
5. ALL TRASH RECEPTACLES WILL BE COLOR BLACK.

6 TRASH RECEPTACLE DETAIL

L-8.1 TYPICAL

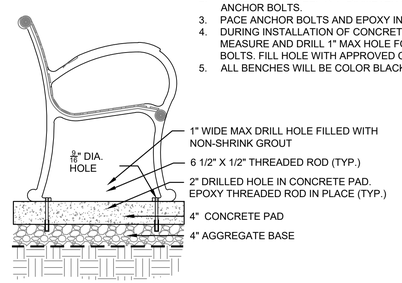


5 96" HEIGHT CHAIN LINK FENCE DETAIL

L-8.1 — NTS

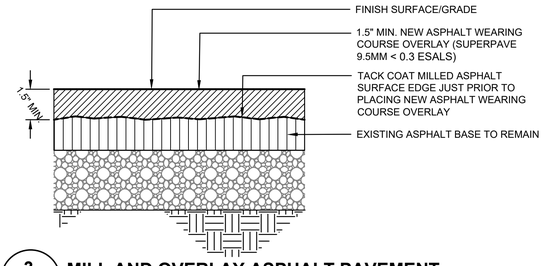
NOTES:

1. PRIOR TO INSTALLATION OF CONCRETE PAVERS, PLACE BENCHES IN THEIR PROPER LOCATIONS.
2. CORE DRILL 2" DEEP X 1" DIAMETER HOLE FOR ANCHOR BOLTS.
3. PACE ANCHOR BOLTS AND EPOXY IN PLACE.
4. DURING INSTALLATION OF CONCRETE PAVERS, MEASURE AND DRILL 1" MAX HOLE FOR ANCHOR BOLTS. FILL HOLE WITH APPROVED CAULK.
5. ALL BENCHES WILL BE COLOR BLACK.



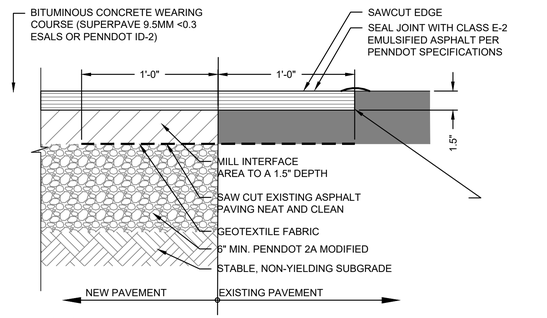
4 BENCH ON CONCRETE PAD

L-8.1 TYPICAL — NTS



3 MILL AND OVERLAY ASPHALT PAVEMENT

L-8.1 — NTS

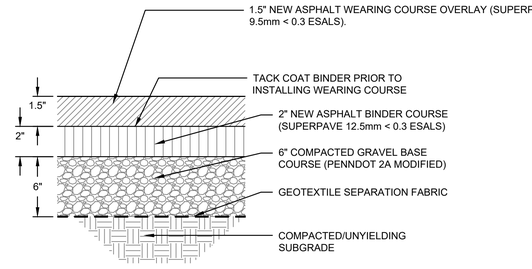


NOTES:

1. COAT ALL JOINING SURFACES WITH PENNDOT CLASS E-6 TACK COAT, 0.04 GAL./S.Y.
2. SAWCUT ALL EXISTING ASPHALT EDGE NEAT AND CLEAN AND READY TO RECEIVE TACK COAT AND NEW PAVEMENT.

2 NEW/EXISTING ASPHALT PAVING CONNECTION

L-8.1 TYPICAL — NTS



1 ASPHALT PAVING PATH DETAIL

L-8.1 TYPICAL — NTS

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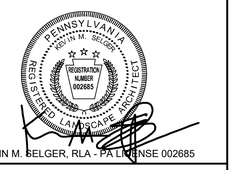
LAND. ARCH. SEAL:



KEVIN M. SELGER, RLA - PA LICENSE 002685

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1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
SITE DETAILS

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: L-8.1
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04/20/2022	
SCALE: AS NOTED	
DESIGNED BY: TMM	
CHECKED BY: KMS	

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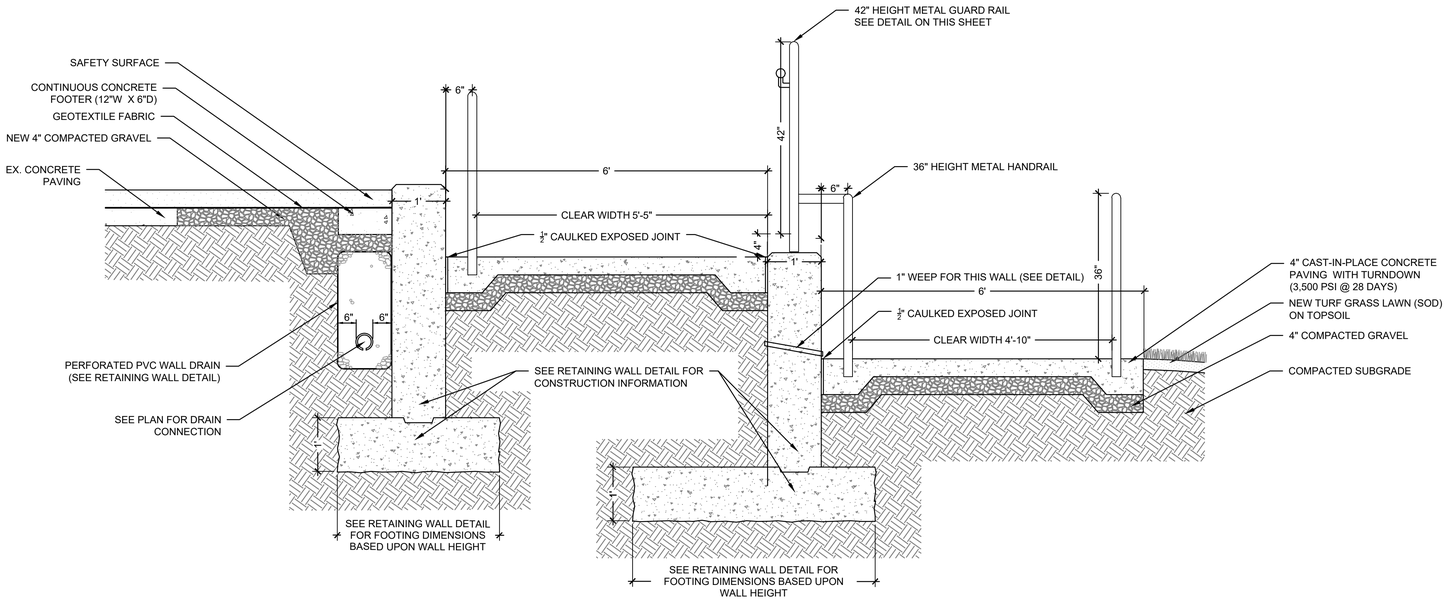
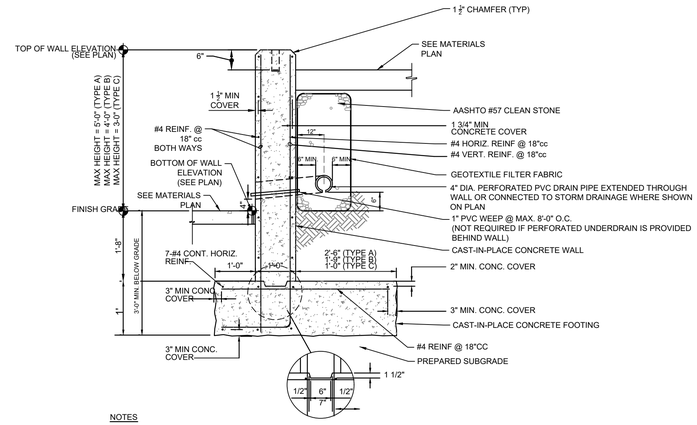


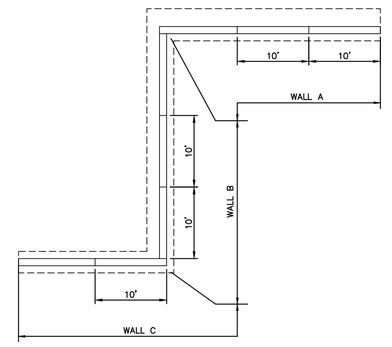
4 ADA RAMP DETAIL — L-8.2 — NTS

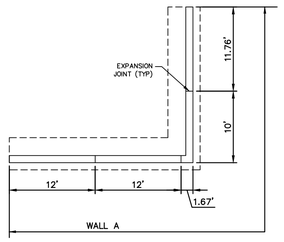


NOTES

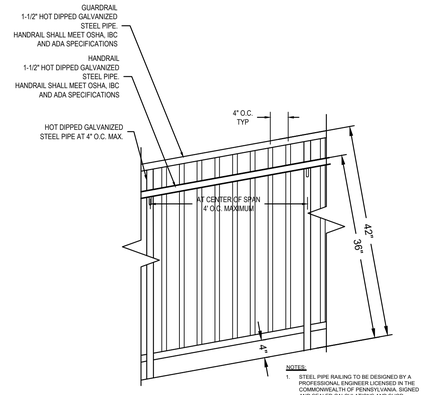
1. PROVIDE EXPANSION JOINTS WHERE SHOWN ON PLAN. (12' MAX)
2. EXPOSED SURFACES OF CONCRETE WALL TO RECEIVE HAND RUBBED FINISH.

2 RETAINING WALL DETAIL — L-8.2 — NTS





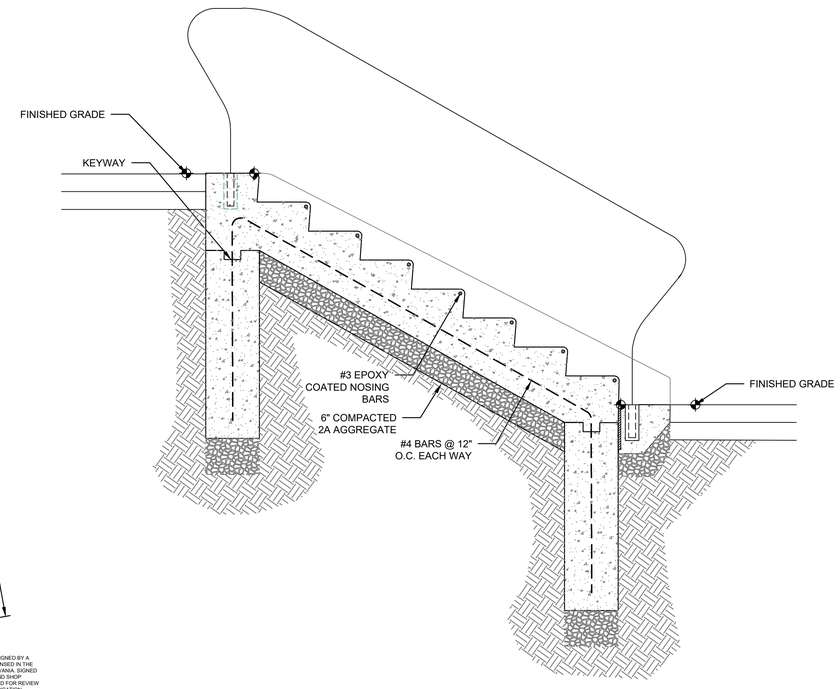
3 CONCRETE WALL LAYOUT — L-8.2 — NTS



NOTES:

1. STEEL PIPE RAILING TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF PENNSYLVANIA. SIGNED AND SEALED CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

7 HANDRAILING — L-2.1



1 CONCRETE STAIR DETAIL — L-8.2 — NTS

REVISIONS

ISSUE	DATE	REVISIONS

PHILADELPHIA MANETO

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CHECKED BY:	KMS

DRAWING NO.: **L-8.2**

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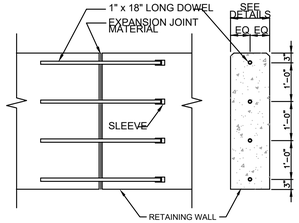
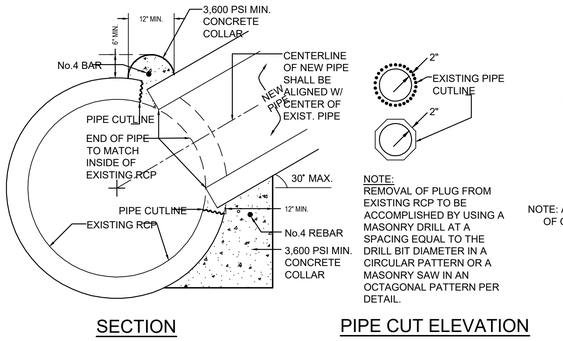


3 EXPANSION JOINT DETAIL
L-8.3

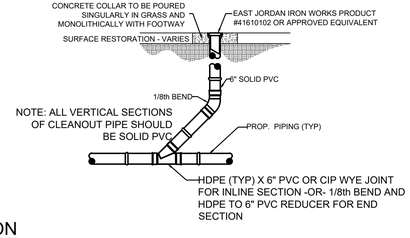
NTS



SECTION

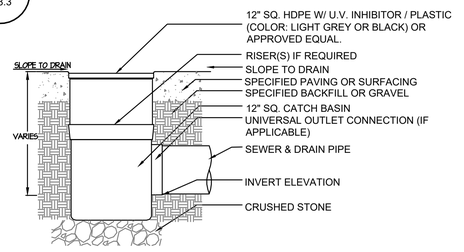
PIPE CUT ELEVATION

NOTE:
REMOVAL OF PLUG FROM EXISTING RCP TO BE ACCOMPLISHED BY USING A MASONRY DRILL AT A SPACING EQUAL TO THE DRILL BIT DIAMETER IN A CIRCULAR PATTERN OR A MASONRY SAW IN AN OCTAGONAL PATTERN PER DETAIL.



3 STORM DRAIN PIPE CONNCETION TO EXISTING RCP AND RAIN CLEANOUT DETAIL
L-8.3

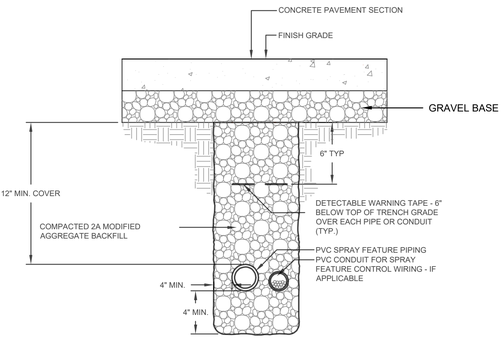
NTS



NOTES:
1. AREA DRAINS SHALL BE SQUARE CATCH BASIN LINE MANUFACTURED BY NDS DRAINAGE, INC. (www.NDSPRO.com) ; OR DRAIN-TECH CATCH BASIN LINE MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS, INC. (www.ads-pipe.com; OR APPROVED EQUAL.
2. PROVIDE RISERS AS REQUIRED TO MEET INVERT ELEVATIONS INDICATED ON THE PLAN.
3. GRATES SHALL BE SECURED TO CATCH BASIN BODY UTILIZING MANUFACTURER'S APPROVED STAINLESS STEEL SCREWS.
4. IF CONNECTIONS IN OR OUT ARE TO CAST/DUCTILE IRON PIPE, PROVIDE APPROPRIATE COUPLING BETWEEN AREA DRAIN AND PIPING.
5. CONTRACTOR SHALL INCLUDE ALL ACCESSORIES REQUIRED TO MAKE CONNECTIONS BETWEEN PIPING AND AREA DRAIN/CATCH BASIN BOXES.

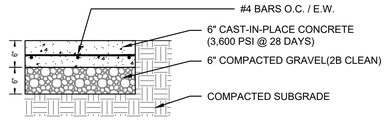
5 12" HDPE AREA DRAIN DETAIL
L-8.3

NTS



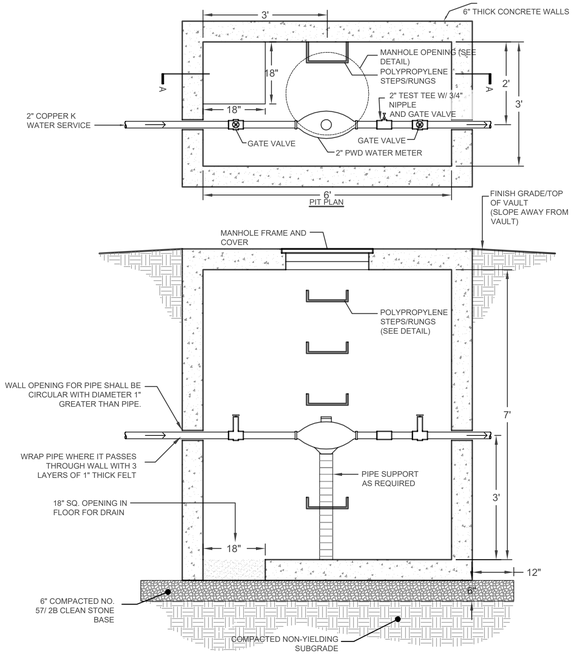
4 SPRAY FEATURE PIPING & CONDUIT TRENCHING DETAIL
L-8.3

NTS



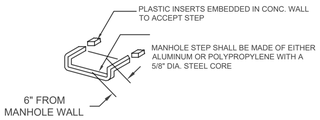
3 CONCRETE IN SPRAYGROUND DETAIL
L-8.3

NTS



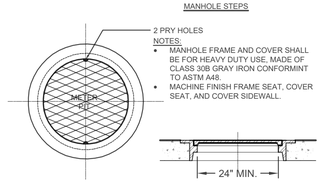
SECTION A-A

NOTES/SPECIFICATIONS:
1. THE METER PIT SHALL BE PRECAST CONCRETE BOX STRUCTURE. CONCRETE SHALL OBTAIN A STRENGTH OF 4000 PSI IN 28 DAYS. REINFORCING STEEL HAS A YIELD STRENGTH OF 60,000 PSI. THE PRECAST STRUCTURE SHALL MEET ASTM C-913, "PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES."
2. ALL PIPE OR CONDUIT PENETRATIONS SHALL BE GROUTED SOLID WITH NON-SHRINK GROUT. UNLESS OTHERWISE NOTED.
3. ALL CONNECTIONS, JOINTS, ETC. SHALL MEET THE REQUIREMENTS OF THE PHILADELPHIA WATER DEPARTMENT AND PHILADELPHIA PLUMBING CODE.
4. PROVIDE SUPPORT OF ELEVATED PIPING AS REQUIRED.
5. CONTRACTOR SHALL VERIFY ELEVATION AND DEPTHS OF THE PIT AND LINES WILL PROVIDE POSITIVE DRAINAGE TO PIT.
6. CONTRACTOR SHALL KEEP DRAINAGE GRAVEL BELOW PIT FROM BEING CONTAMINATED WITH FINE MATERIALS AND SOIL.
7. CONTRACTOR SHALL MEET PHILADELPHIA WATER DEPARTMENT REQUIREMENTS FOR ALL WATER SERVICE CONNECTION(S) TO EXISTING CITY WATER SERVICE TO RECREATION CENTER.
8. DIMENSIONS PROVIDED ARE APPROXIMATE AND SHALL BE VERIFIED IN FIELD.



NOTES:
- ALUMINUM SHALL CONFORM TO ASTM B-221 ALLOY 6061 T-6
- MANHOLE STEPS SHALL SATISFY ALL REQUIREMENTS OF OSHA.
- PLASTIC INSERTS SHALL CONFORM TO STEP EMBEDMENT DEPTH AS REQUIRED BY ASTM C-478, C-479.
- POLYPROPYLENE SHALL CONFORM TO ASTM 2146 WITH STEEL CORE CONFORMING TO ASTM A-615, GRADE 60.

MANHOLE STEPS

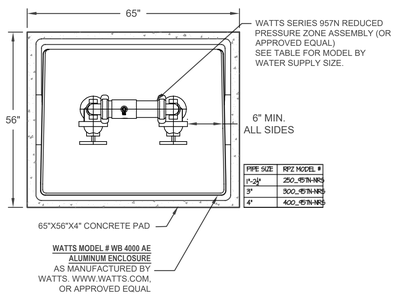


MANHOLE COVER AND FRAME

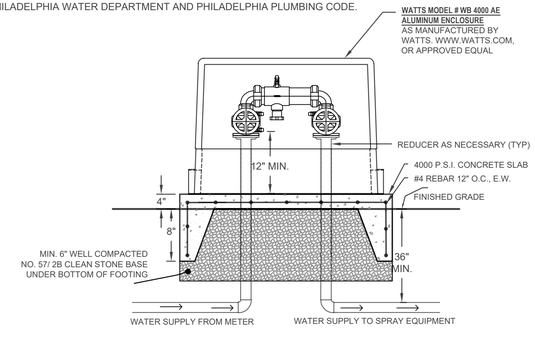
2 2" WATER METER PIT DETAIL
L-8.3

NTS

NOTES:
- REFER TO ELECTRICAL PLANS
- ALL INSTALLATIONS SHALL FOLLOW MANUFACTURER'S SPECIFICATIONS.
- HEAT IS PROVIDED BY A 1000 WATT, 120V SINGLE PHASE HEATER.
- HEATER SHALL BE SIZED TO MAINTAIN EQUIPMENT AT +40°F, IN ACCORDANCE WITH N.F.P.A. 3-3.1.8 & 3-6.1.3.2
- HEAT SOURCE SHALL BE MOUNTED A MINIMUM OF 7" ABOVE THE SLAB UNLESS IT IS UL OR ETL CERTIFIED AND NEC APPROVED FOR SUBMERSION.
- POWER SOURCE SHALL BE INSTALLED INSIDE THE ENCLOSURE BY OTHERS, PROTECTED WITH A GROUND FAULT INTERRUPTING RECEPTACLE (GFI) OR GFI CIRCUIT.
- FOUR INTERNAL BRACKETS AND CONCRETE ANCHORS ARE SUPPLIED WITH THE ENCLOSURE.
- ENCLOSURE SHALL BE PROVIDED IN ALUMINUM.
- ALL CONNECTIONS, JOINTS, ETC. SHALL MEET THE REQUIREMENTS OF THE PHILADELPHIA WATER DEPARTMENT AND PHILADELPHIA PLUMBING CODE.
- PROVIDE SUPPORT OF ELEVATED PIPING AS REQUIRED.



PLAN VIEW



ELEVATION VIEW

1 REDUCED PRESSURE ZONE ASEMBLY IN HOT BOX DETAIL
L-8.3

NTS

REVISIONS

ISSUE	DATE	REVISIONS

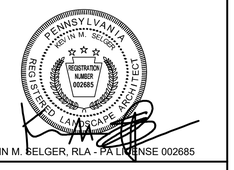
PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY):
20191973397

PPR PROJECT COORDINATOR:
NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:



KEVIN M. SELGER, RLA - PA LICENSE 002685

PROGRESS PLAN

NOT FOR CONSTRUCTION

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

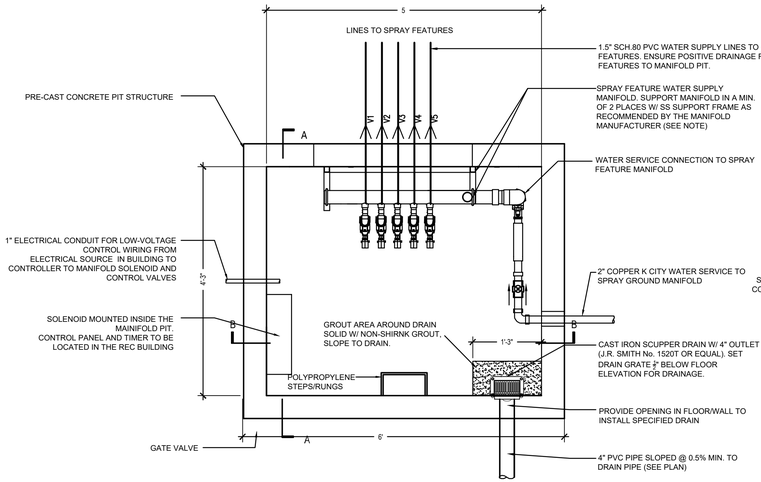
PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

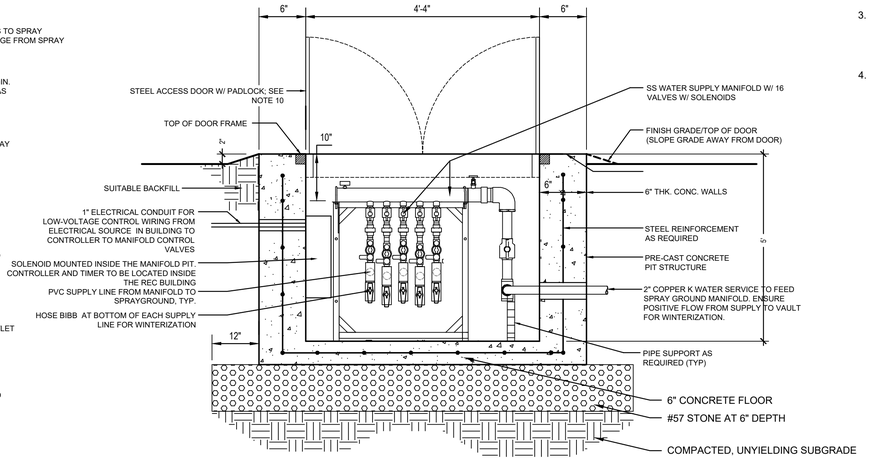
DRAWING TITLE:
SITE DETAILS

PPR PROJECT NO.: 16-18-4176-01
CONSULTANT PROJECT NO.: 2018-07077
DATE: 04/20/2022
SCALE: AS NOTED
DESIGNED BY: MDS
CHECKED BY: KMS
DRAWING NO.: **L-8.3**

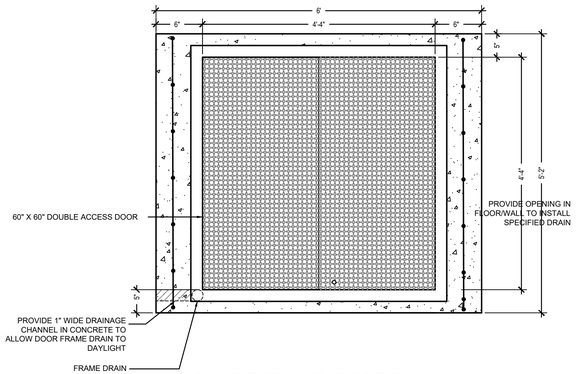
NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



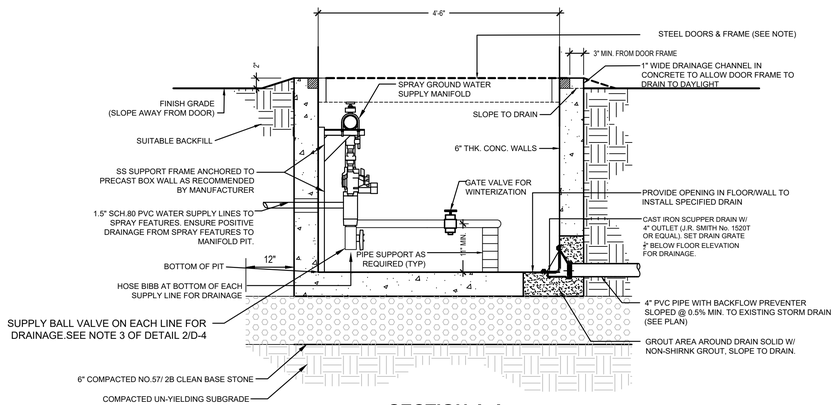
PIT PLAN



SECTION B-B



SLAB TOP AND DOOR PLAN



SECTION A-A

ACCESS DOOR AND PAINTING SPECIFICATIONS:

1. ACCESS DOORS BE BILCO MODEL NO. JD-4H20 - 60" X 60" DOUBLE LEAF STEEL ACCESS DOOR W/ A MINIMUM H-20 LOADING OR APPROVED EQUAL. ACCESS DOORS SHALL BE FINISHED WITH MANUFACTURER'S RED OXIDE PRIMER. SEE BELOW FOR FOR ADDITIONAL FIELD PAINTING INFORMATION.
2. DOUBLE LEAF ACCESS DOOR TO BE LOCKABLE WITH A LATCH AND PAD LOCK CONFIGURATION. CONTRACTOR TO PROVIDE PAD LOCK MEETING RECREATION DEPARTMENT REQUIREMENTS - COORDINATE W/ PPR COORDINATOR.
3. EXTERIOR PORTIONS OF THE ACCESS DOORS AND FRAME SHALL BE FIELD PRIMED AND THEN PAINTED WITH EITHER OPTION 1 OR OPTION 2 AS DESCRIBED BELOW. WITH EITHER OPTION THE CONTRACTOR SHALL FOLLOW SPECIFICATION SECTION 09900 AND THE MANUFACTURER'S INSTRUCTIONS FOR THE INSTALLATION OF PRIMER AND PAINT COATINGS. CONTRACTOR SHALL INSTALL A MINIMUM OF (1) ONE COAT OF PRIMER AND A MINIMUM OF (3) COATS OF PAINT. PRIMER AND PAINT COLOR SHALL BE WHITE.
4. PRIMING AND PAINTING OPTIONS:

4.1. OPTION 1 - PRIME AND PAINT USING RUST-OLEUM (OR APPROVED EQUAL) AS SPECIFIED IN SECTION 09900 WITH A CERAMIC INSULATING PAINT ADDITIVE MIXED WITH THE PRIMER AND PAINT. CERAMIC INSULATING PRIMER/PAINT ADDITIVE SHALL BE MIXED FOLLOWING MANUFACTURER'S INSTRUCTIONS.

4.1.1. CERAMIC INSULATING PAINT ADDITIVE:

THERMACELS - INSULTATING CERAMIC ADDITIVE FOR PAINT AS MANUFACTURED BY:

HY-TECH THERMAL SOLUTIONS
159 PARKHILL BLVD.
MELBOURNE, FL 32904
www.hytechsales.com
PHONE: (866) 649-8324
OR APPROVED EQUAL.

4.2. OPTION 2 - PRIME AND PAINT USING PRE-MIXED CERAMIC INSULATED PRIMER AND PAINT. CERAMIC INSULATING PRIMER/PAINT ADDITIVE SHALL BE MIXED FOLLOWING MANUFACTURER'S INSTRUCTIONS.

4.2.1. PRE-MIXED CERAMIC INSULATED PRIMER:

HY-TECH No. 1267 METAL SHIELD OR HY-TECH No. 15 AQUA PRIME BY:

HY-TECH THERMAL SOLUTIONS
159 PARKHILL BLVD.
MELBOURNE, FL 32904
www.hytechsales.com
PHONE: (866) 649-8324
OR APPROVED EQUAL.

4.2.2. PRE-MIXED CERAMIC INSULATED PAINT:

HY-TECH RC No. 233 INDUSTRAIL INSULTING COATING BY:

HY-TECH THERMAL SOLUTIONS
159 PARKHILL BLVD.
MELBOURNE, FL 32904
www.hytechsales.com
PHONE: (866) 649-8324
OR APPROVED EQUAL.

NOTES/SPECIFICATIONS:

1. THE MANIFOLD PIT SHALL BE PRECAST CONCRETE BOX STRUCTURE. CONCRETE SHALL OBTAIN A STRENGTH OF 4000 PSI IN 28 DAYS. REINFORCING STEEL HAS A YIELD STRENGTH OF 60,000 PSI. THE PRECAST STRUCTURE SHALL MEET ASTM C-913, "PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES."
2. PRECAST CONCRETE BOX SHALL BE CAST TO ACCOMMODATE SPECIFIED DOUBLE DOOR.
3. ALL PIPE OR CONDUIT PENETRATIONS SHALL BE GROUTED SOLID WITH NON-SHRINK GROUT.
4. BACKFLOW PREVENTOR SHALL BE 2-INCH WATTS REGULATOR COMPANY - MODEL NO. LF007M1QT-S W/ STRAINER OR APPROVED EQUAL.
5. ALL CONNECTIONS, JOINTS, ETC. SHALL MEET THE REQUIREMENTS OF THE PHILADELPHIA WATER DEPARTMENT AND PHILADELPHIA PLUMBING CODE.
6. MANIFOLD SHALL BE 5-VALVE STAINLESS STEEL MODEL BY AQUATIX OR APPROVED EQUAL.
7. PROVIDE SUPPORT OF ELEVATED PIPING AS REQUIRED.
8. WATER SUPPLY PIPING AND FITTINGS TO SPRAY FEATURES SHALL BE SCH.80 PVC.
9. CONTRACTOR SHALL PROVIDE A MANIFOLD AND VALVE/HOSE BIBB W/ VACUUM BREAKER TO ALLOW FOR DRAINAGE OF SPRAY FEATURES AND WATER SUPPLY PIPING FOR WINTERIZATION.
10. CONTRACTOR SHALL VERIFY ELEVATION AND DEPTHS OF THE PIT AND LINES WILL PROVIDE POSITIVE DRAINAGE TO PIT.
11. CONTRACTOR SHALL KEEP DRAINAGE GRAVEL BELOW PIT FROM BEING CONTAMINATED WITH FINE MATERIALS AND SOIL.
12. GENERAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL COMPONENTS OF THE SPRAY GROUND SYSTEM, INCLUDING BUT NOT LIMITED TO: SPRAY COMPONENTS, WATER SUPPLY PIPING, ELECTRICAL CONDUIT AND WIRING, CONTROLLER, POWER SUPPLY, VALVES, MANIFOLDS, BACKFLOW PREVENTORS, WATER METER, ETC. FOR PROPER FUNCTION OF THE SPRAY GROUND SYSTEM.
13. WATER SUPPLY LINES FROM SPRAY COMPONENTS SHALL HAS POSITIVE DRAINAGE TOWARD MANIFOLD VAULT, 1.00% MINIMUM FOR DRAINAGE AND WINTERIZING. CONTRACTOR TO PROVIDE DRAINAGE VALVE(S) IN MANIFOLD VAULT SO ALL SUPPLY LINES CAN BE DRAINED COMPLETELY FOR WINTER. CONTRACTOR SHALL VERIFY VAULT DEPTH FOR POSITIVE DRAINAGE.
14. WATER SERVICE FROM CITY WATER SHALL HAVE POSITIVE DRAINAGE, MINIMUM OF 1.00%, TOWARDS MANIFOLD VAULT FOR DRAINAGE AND WINTERIZING.
15. CONTRACTOR SHALL MEET PHILADELPHIA WATER DEPARTMENT REQUIREMENTS FOR SPRAY GROUND WATER SERVICE CONNECTION TO EXISTING CITY WATER SERVICE TO RECREATION CENTER.
16. CONTRACTOR SHALL VERIFY SITE WATER PRESSURE PRIOR TO COMMENCING WORK. PREVIOUS MEASUREMENTS INDICATE SITE PRESSURE IS AT APPROXIMATELY 80-100 PSI. NOTIFY PROJECT COORDINATOR AND DESIGN PROFESSIONAL IF DEVIATIONS EXCEED PLUS OR MINUS 5 PSI.
17. WATER SUPPLY PRESSURE REQUIRED AT THE MANIFOLD IS 40 PSI (MIN.) TO 50 PSI (MAX.) FOR PROPER FUNCTIONING OF THE SYSTEM. CONTRACTOR SHALL PROVIDE AND INSTALL A PRESSURE REGULATING DEVICE UPSTREAM OF THE MANIFOLD TO PROVIDE THE REQUIRED PRESSURE.
18. DIMENSIONS PROVIDED ARE APPROXIMATE AND SHALL BE VERIFIED IN FIELD.

1 L-8.4 **SPRAYGROUND MAINFOLD AND WALL SECTION**

NTS

REVISIONS

ISSUE	DATE	REVISIONS

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076
811
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY):
20191973397

PPR PROJECT COORDINATOR:
NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:
COMMONWEALTH OF PENNSYLVANIA KEVIN M. SELGER REGISTRATION NUMBER 002685 REGISTERED LANDSCAPE ARCHITECT
KEVIN M. SELGER, RLA - PA LICENSE 002685

PROGRESS PLAN

NOT FOR CONSTRUCTION

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

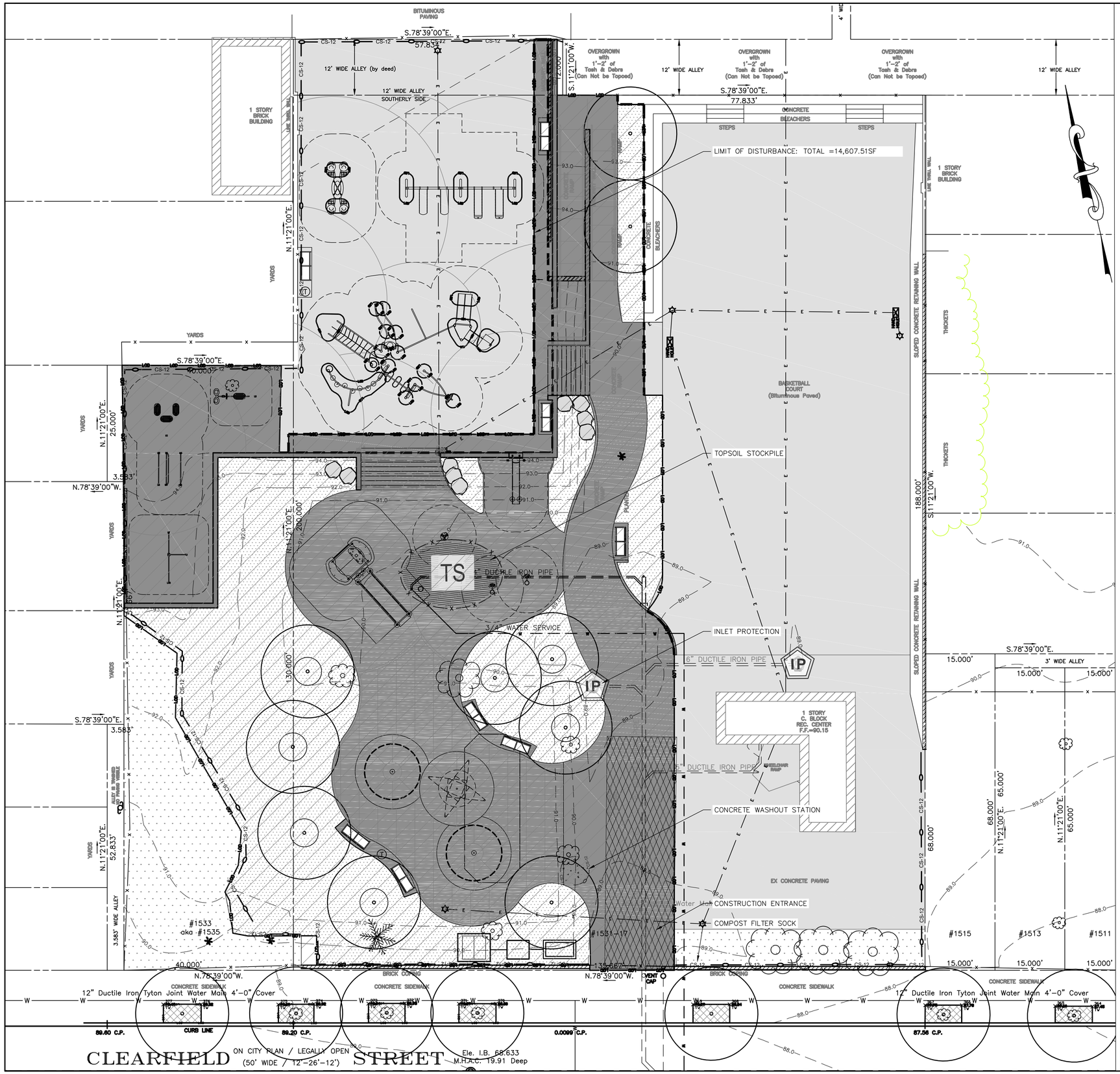
PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
SITE DETAILS

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: **L-8.4**
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04/20/2022	
SCALE: AS NOTED	
DESIGNED BY: MDS	
CHECKED BY: KMS	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



WATERSHED MAP

DELAWARE DIRECT (SOUTH) WATERSHED

LIMIT OF ON-SITE DISTURBED AREA: 14,607.51 SF

LIMIT OF EXEMPTED OFF-SITE DISTURBED AREA: 253 SF

LIMIT EXEMPTED AND REGULATED EARTH DISTURBANCE: 14,860.05 SF

GENERAL LEGEND

- CONSTRUCTION ENTRANCE
- ONSITE DISTURBED AREA
- EXEMPT OFF-SITE DISTURBED AREA
- LIMIT OF DISTURBANCE — LOD —
- 12" COMPOST SOCK — CS-12 —
- CONCRETE WASHOUT STATION — CWS —
- INLET PROTECTION — IP —
- TOPSOIL STOCKPILE — TS —
- MAJOR CONTOUR LINE — 190 —
- MINOR CONTOUR LINE — 189 —
- OVERHEAD UTILITY LINE — OHU — OHU —
- UNDERGROUND UTILITY LINE — UGU — UGU —
- WATER LINE — W — W —
- SANITARY SEWER LINE — SAN — SAN —
- UNDERGROUND GAS LINE — G — G —
- UNDERGROUND UNDERGROUND LINE — E — E —
- STORM SEWER LINE
- PROPERTY LINE
- CURB
- EXISTING FENCE — X — X — X — X — X —
- TREE LINE
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- SIGN
- EXISTING TREES
- FIRE HYDRANT
- PROPOSED IMPERVIOUS
- EXISTING IMPERVIOUS
- BUILDING
- PROPOSED PERVIOUS
- EXISTING PERVIOUS

0 10 20 40 Feet

1" = 1'-0"

Locations of existing underground utilities/facilities shown hereon have been developed from records, field markouts by utility owners, and/or above-ground observation of the site. No excavations were performed in the preparation of these drawings; therefore all utilities shown should be considered approximate in location, depth, and size. The potential exists for other underground utilities/facilities to be present which are not shown on the drawings. Only the visible locations of underground utilities/facilities at the time of field survey shall be considered true and accurate. Completeness or accuracy of underground utilities/facilities are not guaranteed by Gilmore & Associates Inc.

All contractors working on this project shall verify location and depth of all underground utilities/facilities prior to start of work and shall comply with the requirements of P.L. 852, No. 287 December 10, 1974 as last amended on October 9, 2008, Pennsylvania Act 121. Gilmore & Associateslinc. has obtained a pa-one call serial number as noted hereon for design purposes only.

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

PWD TRACKING NUMBER: FY-19-HERI-56718-01

REVISIONS

ISSUE	DATE	REVISIONS
1	02/24/2020	UTILITY PLAN
2	03/02/2020	REVISION PER PWD
3	06/25/2020	REVISION PER PWD
4	02/02/2022	REVISION PER PWD
5	02/25/2022	REVISION PER PWD
6	03/1/2022	REVISION PER PWD

PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
920 Irwin Run Road
West Mifflin, Pennsylvania
15122 – 1018

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PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:

PENNSYLVANIA KEVIN M. SELGER REGISTERED LANDSCAPE ARCHITECT REGISTRATION NUMBER 002685

KEVIN M. SELGER, RLA - PA LICENSE 002685

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1515 ARCH STREET
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PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
EROSION & SEDIMENT CONTROL PLAN

PPR PROJECT NO.: 16-18-4176-01
CONSULTANT PROJECT NO.: 2018-07077
DATE: 08/08/2019
SCALE: AS NOTED
DESIGNED BY: MDS
CHECKED BY: KMS

DRAWING NO.: **C-3.0**

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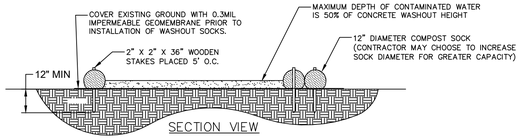
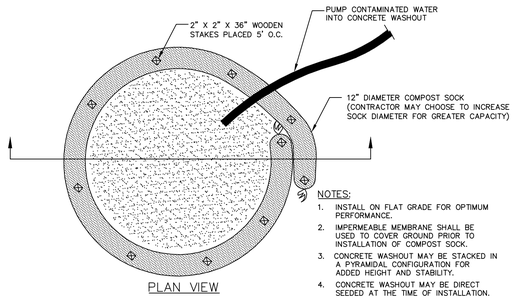
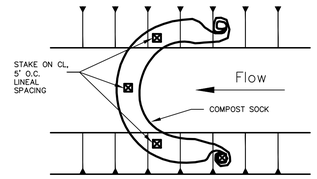


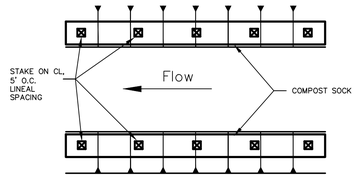


NOTES:
1. INSTALL ON FLAT GRADE FOR OPTIMUM PERFORMANCE.
2. IMPERMEABLE MEMBRANE SHALL BE USED TO COVER GROUND PRIOR TO INSTALLATION OF COMPOST SOCK.
3. CONCRETE WASHOUT MAY BE STACKED IN A PYRAMIDAL CONFIGURATION FOR ADDED HEIGHT AND STABILITY.
4. CONCRETE WASHOUT MAY BE DIRECT SEEDED AT THE TIME OF INSTALLATION.

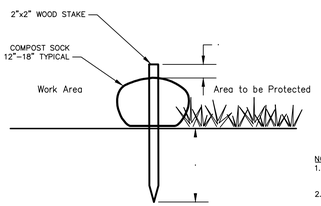
7 COMPOST SOCK CONCRETE WASHOUT DETAIL
C-3.1 TYPICAL NTS



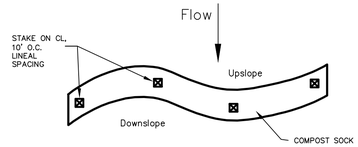
PLAN VIEW: CHECK DAM INSTALLATION



PLAN VIEW: SWALE EDGE PROTECTION



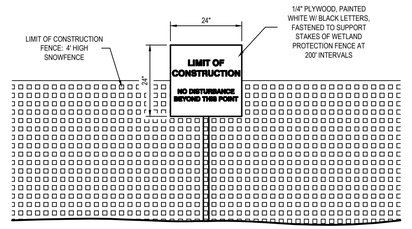
SECTION VIEW: COMPOST SOCK INSTALLATION



PLAN VIEW: SLOPE PROTECTION

NOTES:
1. COMPOST SOCK SHALL BE "SILTSOXX" AS MANUFACTURED BY FILTREXX INTERNATIONAL (www.filtrexx.com) OR EQUAL PRODUCT BY OTHER MANUFACTURER.
2. INFILL MATERIAL SHALL BE WEED FREE COMPOST DERIVED FROM WELL-DECOMPOSED ORGANIC MATTER. COMPOST SHALL BE PRODUCED USING AEROBIC COMPOSTING PROCESS MEETING CFR 503 REGULATIONS.
3. UPON COMPLETION OF THE PROJECT, COMPOST MATERIAL SHALL BE MIXED WITH ONSITE SOIL/TOPSOIL AND SPREAD ON THE SITE AS DETAILED IN SEEDING AND MULCHING SCHEDULE.

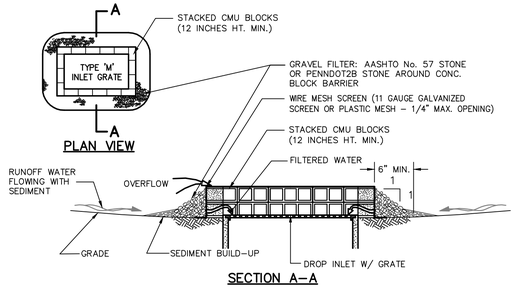
4 COMPOST SOCK
C-3.1 TYPICAL NTS



LIMIT OF CONSTRUCTION-ORANGE SAFETY FENCE DETAIL

NOT TO SCALE

2 CONSTRUCTION FENCE- ORANGE SAFETY FENCE DETAIL
C-3.1 TYPICAL NTS

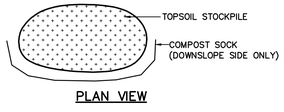


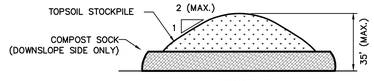
SECTION A–A

CONSTRUCTION & MAINTENANCE NOTES:

1. MAXIMUM DRAINAGE AREA = 1 ACRE
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT LOCATED AT A LOW POINT.
3. TOP OF BLOCK SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WOULD POSE A SAFETY HAZARD.
4. SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE HEIGHT OF THE STONE. DAMAGED OR CLOGGED INSTALLATIONS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.
5. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4", 8", AND 12" WIDE BLOCKS. THE BARRIER OF BLOCKS SHALL BE AT LEAST 12" HIGH AND NO GREATER THAN 24" HIGH.
6. WIRE SCREEN SHALL BE PLACED OVER THE OUTSIDE VERTICAL FACE OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. HARDWARE CLOTH OR COMPARABLE WIRE SCREEN WITH 1/4 INCH OPENINGS SHALL BE USED.
7. STONE SHALL BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER AS SHOWN. 2B STONE OR AASHTO No. 57 STONE SHALL BE USED.
8. CATCH BASINS MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS TO EACH ARE STABILIZED.
9. FOR SYSTEMS DISCHARGING TO HQ OR EV SURFACE WATER, A 6" THICK COMPOST LAYER SHALL BE SECURELY ANCHORED ON OUTSIDE AND OVER TOP OF STONE. COMPOST SHALL MEET THE STANDARDS IN TABLE 4.2 (E&S MANUAL 2012).

6 STONE & CONCRETE BLOCK INLET PROTECTION
C-3.1 TYPICAL NTS



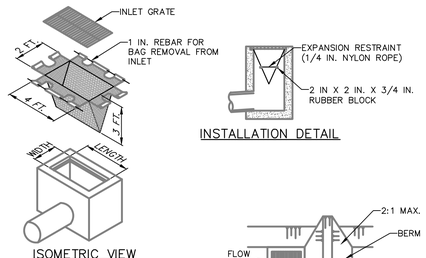


SEDIMENT BARRIER MUST BE PLACED AROUND THE PERIMETER OF ALL STOCKPILES. IMMEDIATELY APPLY TEMPORARY SEEDING & MULCH TO ALL STOCKPILES.

TOPSOIL STOCKPILE AREA DETAIL

NOT TO SCALE

5 TOPSOIL STOCKPILE AREA DETAIL
C-3.1 TYPICAL 1"=1'-0"



NOTES:

MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.

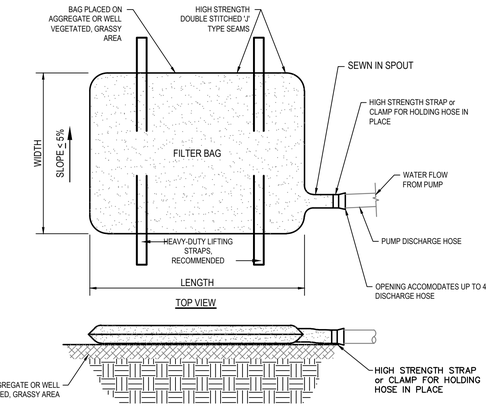
ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS., A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

3 FILTER BAG INLET PROTECTION-TYPE M INLET
C-3.1 TYPICAL NTS



FILTER BAG TO BE USED WHEN/IF WATER PONDS IN EXCAVATIONS.

1. LOW VOLUME FILTER BAGS SHALL BE MADE OF NON-WOVEN GEOTEXTILE WHICH RETAINS ALL SEDIMENT PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES MEETING THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

2. PLACE FILTER BAGS ON STABLE OR WELL-VEGETATED AREAS WHICH ARE FLATTER THAN 5% SLOPE AND SHALL DISCHARGE ONTO STABLE, EROSION RESISTANT GROUND. WHERE THIS IS NOT POSSIBLE, GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED.
3. PUMP DISCHARGE HOSE SHALL BE INSERTED INTO BAG IN MANNER SPECIFIED BY MANUFACTURER AND SECURELY CLAMPED INTO FILTER BAG. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
4. LIMIT PUMPING TO 750 GPM OR 1/2 THE MANUFACTURER'S MAXIMUM PUMPING RATE, WHICHEVER IS LESS. PUMP INTAKE SHALL BE FLOATING AND SCREENED.
5. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL PROBLEM IS CORRECTED.
6. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY IS REQUIRED FOR DISPOSAL PURPOSES. WHEN SEDIMENT FILLS 1/2 THE VOLUME OF A FILTER BAG, IMMEDIATELY REMOVE THAT BAG FROM SERVICE AND REPLACE WITH NEW BAG IMMEDIATELY. PROPERLY DISPOSE OF SPENT BAGS WITH THEIR SEDIMENTS.
7. THE DISCHARGE FROM THE FILTER BAG SHOULD NOT PASS THROUGH A DISTURBED AREA OR CAUSE AN EROSION PROBLEM DOWN SLOPE.

1 SEDIMENT FILTER BAG FOR PUMPED WATER
C-3.1 TYPICAL NTS

PWD TRACKING NUMBER: FY-19-HERI-56718-01

REVISIONS

ISSUE	DATE	REVISIONS
1	02/24/2020	UTILITY PLAN
2	03/02/2020	REVISION PER PWD
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PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:

KEVIN M. SELGER, RLA - PA LICENSE 002685

PRIMARY CONSULTANT:
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PHILADELPHIA, PA 19103
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SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
EROSION AND SEDIMENT CONTROL DETAILS

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	08/08/2019
SCALE:	AS NOTED
DESIGNED BY:	MDS
CHECKED BY:	KMS

DRAWING NO.: **C-3.1**

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

GENERAL EROSION & SEDIMENT CONTROL NOTES

1. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY TO NOR EXIT DIRECTLY FROM THE GATES ONTO E. DUNCANNON AVENUE.
2. STOCKPILE HEIGHTS MUST NOT EXCEED 35 FEET. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
3. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED.
4. UNTIL THE SITE ACHIEVES FINAL STABILIZATION, THE OPERATOR SHALL ASSURE THAT THE BEST MANAGEMENT PRACTICES ARE IMPLEMENTED, OPERATED, AND MAINTAINED PROPERLY AND COMPLETELY. MAINTENANCE SHALL INCLUDE INSPECTION OF ALL BEST MANAGEMENT PRACTICE FACILITIES. THE OPERATOR SHALL MAINTAIN AND MAKE AVAILABLE TO LOCAL DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) OFFICE COMPLETE, WRITTEN INSPECTION LOGS OF ALL THOSE INSPECTIONS. ALL MAINTENANCE WORK, INCLUDING CLEANING, REPAIR, REPLACEMENT, REGARDING, AND RESTABILIZATION SHALL BE PERFORMED IMMEDIATELY.
5. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.
6. BEFORE INITIATING ANY REVISIONS TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E&S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE LOCAL DEP OFFICE.
7. THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT PLAN HAS BEEN PREPARED, APPROVED BY THE LOCAL PADEP OFFICE, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.
8. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
9. THE OPERATOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH THE PROVISIONS OF THE APPENDIX 64, EROSION CONTROL RULES AND REGULATIONS, TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUBPART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL.
10. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.
11. THE E&S CONTROL PLAN MAPPING MUST DISPLAY A PA ONE CALL SYSTEM INCORPORATED SYMBOL INCLUDING THE SITE IDENTIFICATION NUMBER. (THIS IS A NUMBERED SYMBOL NOT A NOTE.)
12. ONLY LIMITED DISTURBANCE WILL BE PERMITTED TO PROVIDE ACCESS TO FOR GRADING AND ACQUIRING BORROW TO CONSTRUCT THOSE BMP'S.
13. EROSION AND SEDIMENT BMP'S MUST BE CONSTRUCTED, STABILIZED, AND FUNCTIONAL BEFORE SITE DISTURBANCE BEGINS WITHIN THE TRIBUTARY AREAS OF THOSE BMP'S.
14. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP CONTROLS MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.
15. AT LEAST 7 DAYS BEFORE STARTING ANY EARTH DISTURBANCE ACTIVITIES, THE OPERATOR SHALL INVITE ALL CONTRACTORS INVOLVED IN THOSE ACTIVITIES, THE LANDOWNER, ALL APPROPRIATE MUNICIPAL OFFICALS, THE EROSION AND SEDIMENT CONTROL PLAN PREPARER, AND THE LOCAL DEP OFFICE TO AN ON-SITE MEETING. ALSO, 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 UTILITIES LOCATIONS.
16. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE OF CONSTRUCTION. EACH STAGE SHALL BE COMPLETED BEFORE ANY FOLLOWING STAGE IS INITIATED. CLEARING AND GRUBBING SHALL BE LIMITED ONLY TO THOSE AREAS DESCRIBED IN EACH STAGE.
17. IMMEDIATELY AFTER EARTH DISTURBANCE ACTIVITIES CEASE, THE OPERATOR SHALL STABILIZE ANY AREAS DISTURBED BY THE ACTIVITIES. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE SPECIFIED RATES. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTRIBUTED WITHIN 1 YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT VEGETATIVE STABILIZATION SPECIFICATIONS.
18. AN AREA SHALL BE CONSIDERED TO HAVE ACHIEVED FINAL STABILIZATION WHEN IT HAS A MINIMUM UNIFORM 70% PERENNIAL VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED SURFACE EROSION AND SUBSURFACE CHARACTERISTICS SUFFICIENT TO RESIST SLIDING AND OTHER MOVEMENTS.
19. SEDIMENT BASINS MUST BE PROTECTED FROM UNAUTHORIZED ACTS OF THIRD PARTIES.
20. SEDIMENT MUST BE REMOVED FROM STORM WATER INLET PROTECTION AFTER EACH RUNOFF EVENT.
21. AT STREAM CROSSINGS, 50' BUFFER AREAS SHOULD BE MAINTAINED. ON BUFFERS, CLEARING, SOD DISTURBANCES, EXCAVATION, AND EQUIPMENT TRAFFIC SHOULD BE MINIMIZED. ACTIVITIES SUCH AS STACKING LOGS, BURNING CLEARED BRUSH, DISCHARGING RIANWATER FROM TRENCHES, WELDING PIPE SECTIONS, REFUELING AND MAINTAINING EQUIPMENT SHOULD BE ACCOMPLISHED OUTSIDE OF BUFFERS.

TEMPORARY STABILIZATION & PERMANENT STABILIZATION

22. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
23. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
24. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
25. 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 BMPS 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 EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
26. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOOD PLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.
27. THE OPERATOR SHALL REMOVE FROM SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA. CODE 260.1 ET SEQ., 271.1 ET DEG., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT ILLEGALLY BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIAL OR WASTES AT THE SITE.

TOPSOIL

28. 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.
29. 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 OR ADDITIONAL PREPARATION OR TILLAGE. IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOIL PLACEMENT SHOULD BE CORRECTED IN ORDER TO PREVENT FORMATION OR DEPRESSIONS UNLESS SUCH DEPRESSIONS ARE PART OF THE PCSM PLAN.
30. 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.
31. THE NPDES BOUNDARY IS EQUAL TO THE LIMITS OF DISTURBANCE FOR THE SITE, AND ANY OFF-SITE AREAS WITHIN THE LIMITS OF DISTURBANCE THAT ARE THE RESPONSIBILITY OF THE DEVELOPER TO INSTALL. OFF-SITE FACILITIES SUCH AS: UTILITIES AND ROADWAY IMPROVEMENTS.
32. THE PROJECTS RECEIVING WATER COURSE IS GULPH CREEK, AND THE CHAPTER 93 CLASSIFICATIONS IS WWF.

MAINTENANCE & STABILIZATION

1. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.
2. ALL PUMPING OF SEDIMENT LADEN WATER SHALL BE THROUGH A SEDIMENT CONTROL BMP, SUCH AS A PUMPED WATER FILTER BAG DISCHARGING OVER NON-DISTURBED AREAS.
3. AT THE END OF EACH WORKING DAY, ANY SEDIMENT TRACKED OR CONVEYED ONTO A PUBLIC ROADWAY SHALL BE REMOVED AND REDEPOSITED ONTO THE CONSTRUCTION SITE. REMOVAL CAN BE COMPLETED THROUGH USE OF MECHANICAL OR HAND TOOLS, BUT MUST NEVER BE WASHED OFF THE ROAD BY USE OF WATER.
4. HAY OR STRAW MULCH MUST BE APPLIED AT 3.0 TONS PER ACRE.
5. MULCH WITH MULCH CONTROL NETTING OR EROSION CONTROL BLANKETS MUST BE INSTALLED ON ALL SLOPES 3:1 AND STEEPER.
6. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN.
7. UNTIL THE SITE IS STABILIZED, ALL EROSION AND SEDIMENT BMPS MUST BE MAINTAINED PROPERLY. MAINTENANCE MUST INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMPS 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 EROSION AND SEDIMENT CONTROL BMPS FAIL TO PERFORM AS EXPECTED, REPLACEMENT BMPS, OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.
8. CONTRACTOR TO MAINTAIN WRITTEN DOCUMENTATION OF ALL INSPECTIONS AND REPAIR/REPLACEMENT OF BEST MANAGEMENT PRACTICES.
9. SEDIMENT REMOVED FROM BMPS SHALL BE DISPOSED OF IN LANDSCAPED AREAS OUTSIDE OF STEEP SLOPES, WETLANDS, FLOODPLAINS OR DRAINAGE SWALES AND IMMEDIATELY STABILIZED, OR PLACED IN TOPSOIL STOCKPILES.

RESPONSIBILITIES FOR FILL MATERIALS

1. THE OPERATOR MUST USE ENVIRONMENTAL DUE DILIGENCE TO ENSURE THAT ANY NECESSARY FILL MATERIAL ASSOCIATED WITH THIS PROJECT QUALIFIES AS CLEAN FILL. ALL FILL MATERIAL MUST BE USED IN ACCORDANCE WITH PADEP'S POLICY "MANAGEMENT OF FILL", DOCUMENT NUMBER 258-2182-773. A COPY OF THIS POLICY IS AVAILABLE ONLINE AT WWW.DEPWEB.STATE.PA.US.
2. CLEAN FILL IS DEFINED AS: UNCONTAMINATED, NON-WATER SOLUBLE, NON-DECOMPOSED, INERT, SOLID MATERIAL. THE TERM INCLUDES SOIL, ROCK, STONE, DREDGED MATERIAL, USED ASPHALT, AND BRICK, BLOCK OR CONCRETE FROM CONSTRUCTION AND DEMOLITION ACTIVITIES THAT IS SEPARATE FROM THE WASTE AND IS RECOGNIZABLE AS SUCH. THE TERM DOES NOT INCLUDE MATERIALS PLACED IN OR ON THE WATERS OF THE COMMONWEALTH UNLESS OTHERWISE AUTHORIZED (THE TERM "USED ASPHALT" DOES NOT INCLUDE MILLED ASPHALT OR ASPHAIT THAT HAS BEEN PROCESSED FOR RE-USE).
3. CLEAN FILL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE: FILL MATERIALS AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE STILL QUALIFIES AS CLEAN FILL PROVIDED THE TESTING REVEALS THAT THE FILL MATERIAL CONTAINS CONCENTRATIONS OF REGULATED SUBSTANCES THAT ARE BELOW THE RESIDENTIAL LIMITS IN TABLES FP-1A AND FP-1B FOUND IN PADEP'S POLICY "MANAGEMENT OF FILL"
4. ANY PERSON PLACING CLEAN FILL THAT HAS BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE MUST USE PADEP FORM FP-001 TO CERTIFY THE ORIGIN OF THE FILL MATERIAL AND THE RESULTS OF THE ANALYTICAL TESTING TO QUALIFY THE MATERIAL AS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE OWNER OF THE PROPERTY RECEIVING THE FILL. A COPY OF FORM FP-001 CAN BE FOUND AT WWW.DEPWEB.STATE.PA.US.
5. ENVIRONMENTAL DUE DILIGENCE: INVESTIGATIVE TECHNIQUES, INCLUDING, BUT NOT LIMITED TO, VISUAL PROPERTY INSPECTIONS, ELECTRONIC DATA BASE SEARCHES, REVIEW OF PROPERTY OWNERSHIP, REVIEW OF PROPERTY USE HISTORY, SANBORN MAPS, ENVIRONMENTAL QUESTIONNAIRES, TRANSACTION SCREEN, ANALYTICAL TESTING, ENVIRONMENTAL ASSESSMENTS OR AUDITS.
6. ANALYTICAL TESTING IS NOT A REQUIRED PART OF DUE DILIGENCE UNLESS VISUAL INSPECTION AND/OR REVIEW OF THE PAST LAND USE OF THE PROPERTY INDICATES THAT THE FILL MAY HAVE BEEN SUBJECTED TO A SPILL OR RELEASE OF A REGULATED SUBSTANCE. IF THE FILL MAY HAVE BEEN AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE, IT MUST BE TESTED TO DETERMINE IF IT QUALIFIES AS CLEAN FILL. TESTING SHOULD BE PERFORMED IN ACCORDANCE WITH APPENDIX A OF PADEP'S POLICY "MANAGEMENT OF FILL".
7. FILL MATERIAL THAT DOES NOT QUALIFY AS CLEAN FILL IS REGULATED FILL. REGULATED FILL IS WASTE AND MUST BE MANAGED IN ACCORDANCE WITH THE MUNICIPAL OR RESIDUAL WASTE REGULATIONS IN 25 PA CODE CHAPTERS 287 RESIDUAL WASTE MANAGEMENT OR 271 MUNICIPAL WASTE MANAGEMENT, WHICHEVER IS APPLICABLE.
8. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE SUPPING, EROSION OR EXCESS SATURATION.

UTILITY LINE TRENCH EXCAVATION NOTES:

1. LIMIT ADVANCED CLEARING AND GRUBBING OPERATIONS TO A DISTANCE EQUAL TO TWO TIMES THE LENGTH OF PIPE INSTALLATION THAT CAN BE COMPLETED IN ONE DAY.
2. WORK CREWS AND EQUIPMENT FOR TRENCHING, PLACEMENT OF PIPE, PLUG CONSTRUCTION, AND BACKFILLING WILL BE SELF-CONTAINED AND SEPARATE FROM CLEARING AND GRUBBING, SITE RESTORATION, AND STABILIZATION OPERATIONS.
3. ALL SOIL EXCAVATED FROM THE TRENCH WILL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
4. LIMIT DAILY EXCAVATION LENGTH OF PIPE PLACEMENT, PLUG INSTALLATION, AND BACKFILLING THAT CAN BE COMPLETED THE SAME DAY.
5. WATER WHICH ACCUMULATES IN THE OPEN TRENCH WILL BE COMPLETELY REMOVED BY PUMPING BEFORE PIPE PLACEMENT AND/ OR BACKFILLING BEGINS. WATER REMOVED FROM THE TRENCH SHALL BE PUMPED THROUGH A FILTRATION DEVICE.
6. ON THE DAY FOLLOWING PIPE PLACEMENT AND TRENCH BACKFILLING, THE DISTURBED AREA WILL BE GRADED TO FINAL CONTOURS AND IMMEDIATELY STABILIZED.

PWD TRACKING NUMBER:
FY-19-HERI-56718-01

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PHILADELPHIA MANETO

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PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

LAND. ARCH. SEAL:

PENNSYLVANIA KEVIN M. SELGER REGISTRATION NUMBER 002685 REGISTERED LANDSCAPE ARCHITECT

KEVIN M. SELGER, RLA - PA LICENSE 002685

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
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SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
EROSION AND SEDIMENT CONTROL NOTES

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	08/08/2019
SCALE:	AS NOTED
DESIGNED BY:	MDS
CHECKED BY:	KMS

DRAWING NO.: **C-3.2**

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

PLAN SYMBOL LEGEND

POWER DEVICE SYMBOLS

WALL MOUNT	
	SINGLE RECEPTACLE
IG	DUPLEX RECEPTACLE IG - ISOLATED GROUND DUPLEX RECEPTACLE SP - SURGE SUPPRESSION DUPLEX RECEPTACLE WP - DUPLEX RECEPTACL WITH WEATHERPROOF COVER TP - TAMPER PROOF DUPLEX RECEPTACLE XP - EXPLOSION PROOF DUPLEX RECEPTACLE USB - WITH USB CHARGER
	DUPLEX RECEPTACLE (1) RECPT CONTROLLED BY SWITCH
	QUADRAPLEX RECEPTACLE
	DUPLEX RECEPTACLE GROUND FAULT CIRCUIT INTERRUPTER
	QUADRAPLEX RECEPTACLE GROUND FAULT CIRCUIT INTERRUPTER
	DUPLEX RECEPTACLE ON EMERGENCY POWER
	SINGLE RECEPTACLE ON EMERGENCY POWER
	NON-LOCKING SPECIAL PURPOSE RECEPTACLE NEMA CONFIGURATION AS INDICATED
	LOCKING SPECIAL PURPOSE RECEPTACLE NEMA CONFIGURATION AS INDICATED
	FLOOR OR CEILING DUPLEX RECEPTACLE
	FLOOR OR CEILING QUADRAPLEX RECEPTACLE
ES	EMERGENCY SHUTDOWN PUSHBUTTON
	JUNCTION BOX
	POWER SURFACE RACEWAY WITH DUPLEX RECEPTACLES
	CEILING MOUNTED JUNCTION BOX W/HANGING RECEPTACLE CORD
FF	FURNITURE SYSTEM FF - POWER CONNECTION FC - TELE/DATA, NUMBER INDICATES DATA TERMINATIONS PP - POWER & TELE/DATA POLE CONNECTION (FROM CEILING)
TC	TIME CLOCK
FP	FLUSH-MOUNTED, 6-GANG, FLOOR BOX WITH HINGED COVER PLATE AND DIVIDED COMPARTMENTS FOR POWER AND TELECOMMUNICATIONS/AV CABLING. WIREMOLD EVOLUTION SERIES FLOOR BOX MODEL #EFB6S-OG. PROVIDE (2) NEMA 5-20R DUPLEX RECEPTACLES IN POWER COMPARTMENT. PROVIDE (1) 3/4" CONDUIT FOR POWER. PROVIDE (1) 1-1/4" CONDUIT FOR TELECOMMUNICATIONS CABLING WITH PULLSTING IN SLAB TO NEAREST WALL AND STUB ABOVE ACCESSIBLE CEILING. PROVIDE TRENCHING AS REQUIRED
PT	6-IN RECESSED POKE-THRU DEVICE FOR POWER, AV, AND TELECOMMUNICATIONS WITH HINGED SURFACE STYLE COVER PLATE. PROVIDE WIREMOLD EVOLUTION 6AT SERIES POKE-THRU DEVICE. CENTER MOUNT TELECOMMUNICATIONS DEVICE PLATE AND SIDE MOUNT 2 NEMA 5-20R RECEPTACLES. PROVIDE (1) 3/4" CONDUIT FOR POWER. PROVIDE (1) 1-1/4" CONDUIT FOR TELECOMMUNICATIONS/AV CABLING WITH PULLSTRING TO ABOVE ACCESSIBLE CEILING.

POWER EQUIPMENT SYMBOLS

	VERTICAL MOTOR
	UNFUSED SAFETY DISCONNECT SWITCH
	FUSED SAFETY DISCONNECT SWITCH
	MOTOR STARTER
	COMBINATION MOTOR STARTER AND DISCONNECT SWITCH
T	TRANSFORMER
	ELECTRICAL 208/120 VOLT PANEL - SURFACE MOUNTED [ACCESS AREA DOES NOT PLOT]
	ELECTRICAL 208/120 VOLT PANEL - SURFACE MOUNTED [ACCESS AREA DOES NOT PLOT]
	ELECTRICAL 480/277 VOLT PANEL - FLUSH MOUNTED [ACCESS AREA DOES NOT PLOT]
	ELECTRICAL 480/277 VOLT PANEL - FLUSH MOUNTED [ACCESS AREA DOES NOT PLOT]
	DISTRIBUTION PANEL [ACCESS AREA DOES NOT PLOT]
VFD	VARIABLE FREQUENCY DRIVE WITH DISCONNECT SWITCH
	BUILDING SYSTEM GROUND BUS. 'MGB' DENOTES MAIN GROUNDING BUS BAR 'GB' DENOTES SUPPLEMENTAL GROUNDING BUS BAR.
M	ELECTRICITY METERING BY UTILITY COMPANY
M	ELECTRICITY METERING BY OWNER

LIGHTING SYMBOLS

A L-1 a	LIGHT FIXTURE CIRCUIT SWITCH DESIGNATION LIGHTING FIXTURE SYMBOL LIGHTING FIXTURE TYPE
	RECESSED OR SURFACE MOUNTED FIXTURE
	RECESSED OR SURFACE MOUNTED FIXTURE WITH EMERG. BATTERY BALLAST "NL" TO DENOTES NIGHT LIGHT
	INDUSTRIAL, UNDERCOUNTER, STRIP, OR CASEWORK FIXTURE
	INDUSTRIAL OR STRIP FIXTURE WITH EMERG. BATTERY BALLAST
	DOWNLIGHT FIXTURE
	DOWNLIGHT FIXTURE WITH EMERG. BATTERY BALLAST
	DIRECTIONAL INCANDESCENT OR FLUORESCENT DOWNLIGHT FIXTURE
	WALL OR SURFACE MOUNTED FIXTURE
	WALL OR SURFACE MOUNTED FIXTURE WITH EMERG. BATTERY BALLAST
	EXIT FIXTURE - CEILING MOUNTED - ARROWS AS INDICATED
	EXIT FIXTURE - WALL OR SURFACE MOUNTED - ARROWS AS INDICATED
	EMERGENCY BATTERY UNIT WITH ADJUSTABLE HEAD(S)
	EMERGENCY BATTERY UNIT FOR REMOTE EMERGENCY FIXTURES
	REMOTE EMERGENCY FIXTURE SINGLE HEAD
	REMOTE EMERGENCY FIXTURES DUAL HEAD
	TRACK SYSTEM WITH LIGHTS
	EXTERIOR LIGHTING FIXTURE - POLE MOUNTED
	EXTERIOR LIGHTING FIXTURE - WALL MOUNTED WITH EMERG. BATTERY BALLAST
	EXTERIOR DIRECTIONAL FLOOD LIGHTING FIXTURE - POLE OR WALL MOUNTED
	EXTERIOR BOLLARD LIGHTING FIXTURE
	EXTERIOR WALKWAY LIGHTING FIXTURE
A 1 a	HID PENDANT MOUNTED LIGHTING FIXTURE
PC	CEILING MOUNTED PHOTO CELL SENSOR
OS	CEILING MOUNTED MOTION/OCCUPANCY SENSOR
$X	SINGLE POLE SWITCH (SHOWN WITHOUT SUBSCRIPT) [SUBSCRIPT INDICATES TYPE OF SWITCH] 2 - DOUBLE POLE SINGLE THROW SWITCH 3 - THREE WAY SWITCH 4 - FOUR WAY SWITCH D - SINGLE POLE DIMMING SWITCH P - SWITCH WITH PILOT LIGHT K - KEY OPERATED MOMENTARY CONTACT SWITCH T - TIMER SWITCH L - LOW VOLTAGE SWITCH M - MANUAL SWITCH (MOTOR RATED) /W LOCKOUT DEVICE, W/O OVERLOADS LM - LOW VOLTAGE MASTER SWITCH XP - EXPLOSION PROOF CLASS 1 DIV. 2 OS - OCCUPANCY SENSOR, AUTOMATIC ON/MANUAL ON, WALL SWITCH VS - VACANCY SENSOR, AUTOMATIC OFF/MANUAL ON, WALL SWITCH

SECURITY SYSTEM SYMBOLS

EH	SECURITY ALARM DEVICE AND/OR CONTACT [ALARM CONTROL FUNCTION] AS - DURESS ALARM SWITCH CCTV - CLOSED CIRCUIT TV CAMERA CR - CARD READER CRC - CARD READER CONTROLLER DA - DURESS ALARM DO - DOOR OPERATOR DSS - DOOR STATUS SENSOR EA - EXIT ALARM EH - ELECTRIC DOOR HINGE EML - ELECTRICAL MAGNETIC LOCK ES - ELECTRIC DOOR STRIKE GS - GUARD TOUR STATION HB - HOLD UP BUTTON, "SILENT ALARM" KP - KEY PAD KS - LOCAL KEY SWITCH FOR ALARM BYPASS MD - MOTION DETECTOR MR - MANUAL DOOR RELEASE MS - MAGNETIC SWITCH PS - POWER SUPPLY PR - PROXIMITY READER SD - SOUND DETECTOR SC - SECURITY DOOR CONTACTS
RTE	REQUEST TO ENTRY
PTZ	CCTV CAMERA PTZ - PAN/TILT/ZOOM
SP	SECURITY PANEL

GROUNDING SYMBOLS

EG	existing ground cable
G	grounding cable (exposed)
	grounding cable (buried or concealed)
GB	grounding bus bar
	ground test well
	ground rod
	ground connection exothermic weld
	ground connection bolted
	ground connection point

COMMUNICATIONS SYSTEM SYMBOLS

P	TELE/DATA (DOUBLE GANG JUNCTION BOX, W/SINGLE GANG PLASTER RING AND EMPTY 1-1/4"C RACEWAY W/PULLSTRING, SEE SPECIFICATIONS) INDICATES FLOOR OR CEILING [SPECIAL FUNCTION] P - PRINTER OUTLET # - QTY OF JACKS
W	TELEPHONE (DOUBLE GANG JUNCTION BOX, W/SINGLE GANG PLASTER RING AND EMPTY 3/4"C RACEWAY W/PULLSTRING, SEE SPECIFICATIONS) INDICATES FLOOR OR CEILING [SPECIAL FUNCTION] W - WALL SINGLE GANG (TELEPHONE ONLY) HP - HANDICAPPED PHONE F - FIREMAN'S PHONE JACK E - EMERGENCY H - HOUSE PHONE # - QTY OF JACKS
M	DATA OUTLET (DOUBLE GANG JUNCTION BOX, W/SINGLE GANG PLASTER RING AND EMPTY 1-1/4"C RACEWAY W/PULLSTRING, SEE SPECIFICATIONS) INDICATES FLOOR OR CEILING [SPECIAL FUNCTION] M - NETWORK CABLE OUTLET FOR MONITORING WS - WIRELESS SYSTEM CONNECTION POINT # - QTY OF JACKS
TV	TELEVISION OUTLET (EMPTY 3/4"C RACEWAY W/ PULLSTRING)
	INTERCOM HANDS FREE STATION (WALL MOUNTED)
IMS W	INTERCOM MASTER STATION (DESK MOUNTED) W - INDICATES WALL MOUNTED DW - INDICATES DESK MODEL WITH WALL BRACKET
S V S V	SPEAKER [SPEAKER FUNCTION] NC - NURSE CALL M - MUSIC ONLY PA - PUBLIC ADDRESS V - VOICE PAGING ONLY VM - VOICE PAGING AND MUSIC
M	SOUND SYSTEM MICROPHONE
VC	VOLUME CONTROL
M	MAGNETIC HOLD - OPEN DEVICE ACTIVATED BY FIRE ALARM SYSTEM

FIRE ALARM SYSTEM SYMBOLS

FACP	FIRE ALARM CONTROL PANEL
FAAP	FIRE ALARM ANNUNICATOR PANEL
F	FIRE ALARM MANUAL PULL STATION
	FIRE ALARM SIGNAL CHIME
F	FIRE ALARM WALL MOUNTED AUDIO/VISUAL UNIT
	FIRE ALARM SIREN
F	FIRE ALARM HORN
	FIRE ALARM STROBE
	FIRE ALARM BELL
S	FIRE EVACUATION SPEAKER
S F	COMBINATION FIRE EVACUATION SPEAKER W/ FIRE ALARM STROBE
H	EMERGENCY HELP NURSE CALL
H	EMERGENCY HELP BUTTON W/ PULLCORD
	ADA HORN/STROBE (AUDIO/VISUAL TYPE)
	ADA DOORBELL PUSHBUTTON
C	FIRE ALARM ADDRESSABLE RELAY [RELAY FUNCTION] I - INTERFACE C - CONTROL M - MONITOR S - SIGNAL
	ELECTRIC DOOR HOLDER PROVIDED WITH DOOR HARDWIRE MOUNTED AND WIRED BY ELECTRICAL CONTRACTOR
D	AUTOMATIC DETECTOR [DETECTOR CLASSIFICATION] D - DUCT MOUNTED, SMOKE IONIZATION F - THERMAL, FIXED TEMPERATURE FR - THERMAL, COMBINATION RATE OF RISE PLUS FIXED TEMPERATURE PE - SMOKE REFRACTION, PHOTO ELECTRIC SA - SMOKE REFRACTION, PHOTO ELECTRIC WITH MULTI-STATION ALARM R - THERMAL, RATE OF RISE S - AREA SMOKE, IONIZATION E - ELEVATOR RECALL, IONIZATION CO - CARBON MONOXIDE SA/CO - SMOKE REFRACTION, PHOTO ELECTRIC/ CARBON MONOXIDE WITH MULTI-STATION ALARM
MS	ALARM INITIATING CONTACT [CONTACT FUNCTION] EP - ELECTRIC PNEUMATIC SWITCH ETL - ELECTRIC THERMAL LINK FS - FLOW SWITCH "ALARM" FA - FIRST AID (HOSE SYSTEM) "ALARM" G - GAS ALARM PANEL GM - GAS MANIFOLD R - REFRIGERATION UNIT OS&Y - ALARM CHECK VALVE "TROUBLE" TS - TAMPER SWITCH "TROUBLE" PS - PRESSURE SWITCH

LIGHTNING PROTECTION SYMBOLS

L	grounding conductor
	air terminal
	ground loop drop to lower level
	ground conductor through roof to steel
	one inch PVC conduit - roof-to-grade

SINGLE LINE DIAGRAM LEGEND

*	SWITCH LOAD INTERRUPTER, OR SAFETY DISCONNECT * SWITCH RATING IN AMPS
	POLE SWITCH
	CONTACTOR
	CAPACITOR
*	FUSE * RATING IN AMPS
or * **	CIRCUIT BREAKER * FRAME RATING IN AMPS ** TRIP RANGE/SETTING IN AMPS
N C	TRANSFER SWITCH
GF GFSC	CIRCUIT BREAKER WITH GROUND FAULT
52 1200A N.O.	DRAWOUT TYPE CIRCUIT BREAKER (MEDIUM VOLTAGE) 1200A MEANS RATED CONTINUOUS CURRENT RATING N.O. MEANS NORMALLY OPEN N.C. MEANS NORMALLY CLOSED
MO 600/600 LSIG	LOW VOLTAGE DRAWOUT TYPE AIR CIRCUIT BREAKER MO=INDICATES MANUALLY OPERATED EO=INDICATES ELECTRICALLY OPERATED 600/600 INDICATES FRAME & TRIP SIZE LSIG INDICATES TRIP CHARACTERISTICS L = LONG TIME S = SHORT TIME I = INSTANTANEOUS G = GROUND
125E CLF	FUSIBLE LOAD INTERRUPTER 125E CLF INDICATES TYPE OF CURRENT LIMITING FUSE
*	DRAW OUT DEVICE * INDICATES UNIT LOCATION
	POWER DISTRIBUTION TRANSFORMER
* * *	POTENTIAL TRANSFORMER * VOLTAGE RATIO ** NO. OF TRANSFORMERS
* * *	CURRENT TRANSFORMER * CURRENT RATIO ** NO. OF TRANSFORMERS AT ONE PER PHASE
	CONTROL POWER TRANSFORMER
	RECTIFIER/INVERTER
	GENERATOR
A	AUTOMATIC TRANSFER SWITCH
	MANUAL TRANSFER SWITCH
	HEATER
25	MOTOR [NUMBER INDICATES MOTOR HORSEPOWER]
	UTILITY CONNECTION
	GROUND CONNECTION POINT
	GROUND TEST WELL
	GROUND ROD
SPD	SURGE PROTECTION DEVICE
GFP	GROUND FAULT PROTECTION
ST	SHUNT TRIP

NOTE:

THIS IS A STANDARD SYMBOLS LEGEND. ALL DEVICE SYMBOLS AND ABBREVIATIONS MAY NOT NECESSARILY APPEAR ON THE FLOOR PLANS OR DETAIL SHEETS. ONLY THOSE SYMBOLS INDICATED ON THE FLOOR PLANS ARE USED FOR THIS PROJECT. ALL OTHERS ARE TO BE CONSIDERED NOT USED AND SHOULD BE DISREGARDED.

REVISIONS

ISSUE	DATE	REVISIONS
A	04/18/22	ISSUED FOR BID

PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076

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PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

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CONSULTANT PROJECT NUMBER 21016

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER XX-XXX

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
ELECTRICAL LEAD SHEET

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04-18-2022
SCALE:	AS NOTED
DRAWN BY:	SI
CHECKED BY:	GSP

DRAWING NO.: E-0.0

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

ABBREVIATIONS

@	AT	JB	JUNCTION BOX
ABV	ABOVE	JUNC	JUNCTION
ADO	AUTOMATIC DOOR OPENER	KVA	KILOVOLT AMPERE
AE	AERIAL ELECTRIC	KW	KILOWATT
AF	AMP FRAME	KWH	KILOWATT HOUR
AFC	ABOVE FINISHED CEILING	LAN	LOCAL AREA NETWORK
AFF	ABOVE FINISHED FLOOR	LIM	LINE ISOLATION MONITOR
AFG	ABOVE FINISHED GRADE	LO	LUGS ONLY
AIC	AMPERE INTERRUPTING CAPACITY	LS	LIMIT SWITCH
AL	ALUMINUM	LTS	LIGHTS
ALT	ALTERNATE	LTG	LIGHTING
AM	AMMETER	LP	LIGHTING PANEL
AMP/A	AMPERE	LV	LOW VOLTAGE
ANNUN	ANNUNCIATOR	MC	MECHANICAL CONTRACTOR
ANT	ANTENNA	MCB	MAIN CIRCUIT BREAKER
AS	AMMETER SWITCH	MDP	MAIN DISTRIBUTION PANEL
AT	AMP TRIP	MLO	MAIN LUGS ONLY
ATC	AUTOMATIC TEMPERATURE CONTROL	MFR	MANUFACTURER
ATS	AUTOMATIC TRANSFER SWITCH	MH	MANHOLE
AUX	AUXILIARY	MTS	MANUAL TRANSFER SWITCH
BC	BARE COPPER	MCC	MOTOR CONTROL CENTER
BKBD	BACKBOARD	MO	MECHANICALLY OPERATED
BKR	BREAKER	MIN	MINIMUM
BLDG	BUILDING	MSP	MOTOR STARTER PANEL
BSMT	BASEMENT	MTD	MOUNTED
C	CONDUIT	MTGHGT	MOUNTING
COND	CONDENSING UNIT	N	NEW
CAB	CABINET	NC	NORMALLY CLOSED
CB, C/B	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CBL	CABLE	NFSS	NON-FUSED SAFETY SWITCH
CCTV	CLOSED CIRCUIT TV	NL	NIGHT LIGHT
CUH	CABINET UNIT HEATER	NO	NORMALLY OPEN
CKT	CIRCUIT	NTS	NOT TO SCALE
CLG	CEILING	OC	ON CENTER
CONN	CONNECTION	OCB	OIL CIRCUIT BREAKER
CONST	CONSTRUCTION	OCP	OVERCURRENT PROTECTION
CONT	CONTROLLER	PMP	PUMP
CONTR	CONTRACTOR	PB	PULL BOX
CT	CURRENT TRANSFORMER	PC	PLUMBING CONTRACTOR
CU	COPPER	P	POLE
DB	DIRECT BURIAL	PF	POWER FACTOR
DEMO	DEMOLITION	POD	POWER OPERATED DAMPER
DC	DIRECT CURRENT	PH	PHASE
DIA	DIAMETER	PL	PILOT LIGHT
DISC	DISCONNECT	PNL	PANEL
DIST	DISTRIBUTION	PRI	PRIMARY
DWG	DRAWING	PS	PULL STATION
E	EXISTING TO REMAIN	PSI	POUNDS PER SQUARE INCH
EA	EACH	PT	POTENTIAL TRANSFORMER
EC	EMPTY CONDUIT	PWR	POWER
EF	EXHAUST FAN	PP	POWER PANEL
EG	EQUIPMENT GROUND	R	EXISTING TO BE REMOVED
EJ	EXPANSION JOINT	RE	RELOCATED
ELEC	ELECTRICAL	RECPT	RECEPTACLE (S)
ELEV	ELEVATOR	RGIP	REMOTE GROUND INDICATOR PANEL
EMERG	EMERGENCY	REQ	REQUIRED
EMT	ELECTRICAL METALLIC TUBING	SEC	SECONDARY
ENCL	ENCLOSURE	SIG	SIGNAL
EO	ELECTRICALLY OPERATED	SPEC	SPECIFICATION
EBBH	ELECTRIC BASEBOARD HEATER	SS	SAFETY SWITCH
EQUIP	EQUIPMENT	ST	SHUNT TRIP
ER	EXISTING TO BE RELOCATED	STD	STANDARD
EWC	ELECTRIC WATER COOLER	STR	STARTER
EX	EXISTING	SW	SWITCH
EXP	EXPLOSION PROOF	SWGR	SWITCHGEAR
FC	FLUID COOLER	SYS	SYSTEM
F	FUSE(D)	TEL	TELEPHONE
FA	FIRE ALARM	TEMP	TEMPERATURE
FACP	FIRE ALARM CONTROL PANEL	TP	TAMPERPROOF (CONSTRUCTION)
FAAP	FIRE ALARM ANNUNCIATOR PANEL	TV	TELEVISION
FCU	FAN COIL UNIT	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
FDR	FEEDER	TYP	TYPICAL
FI	FILM ILLUMINATOR	UC	UNDERCOUNTER
FIXT	FIXTURE	U/F	UNFUSED
FL	FLOOR	UNO	UNLESS NOTED OTHERWISE
FS	FLOW SWITCH	UL	UNDERWRITERS' LABORATORY
FUT	FUTURE	UV	UNDER VOLTAGE
GA	GAUGE	UH	UNIT HEATER
GC	GENERAL CONTRACTOR	V	VOLT
GEN	GENERATOR	VERT	VERTICAL
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	VM	VOLTMETER
GFSC	GROUND FAULT SENSING RELAY COIL	VP	VAPOR PROOF
G/GND	GROUND	VS	VOLTMETER SWITCH
GTB	GROUND TERMINAL BOX	WSHP	WATER SOURCE HEAT PUMP
H	HOSPITAL GRADE	W	WATT
HH	HANDHOLE	W	WIRE
HOA	HAND-OFF-AUTO	WP	WEATHERPROOF
HT	HEIGHT	WAP	WIRELESS ACCESS POINT
HVAC	HEATING, VENTILATING, AIR CONDITION	WT	WATER TIGHT
HID	HIGH INTENSITY DISCHARGE	XFMR	TRANSFORMER
HORZ	HORIZONTAL	XFR	TRANSFER
HV	HIGH VOLTAGE	XMTR	TRANSMITTER
HP	HORSEPOWER	XPDR	TRANSPONDER
INCAND	INCANDESCENT	XP	EXPLOSION PROOF
INST	INSTANT		
ILL	ILLUMINATION		
IMC	INTERMEDIATE METAL CONDUIT		

GENERAL ELECTRICAL NOTES

1. ALL ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND SHOW DESIGN INTENT ONLY. THE EXACT LOCATION AND SIZES OF ALL EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR AND COORDINATED WITH THE ARCHITECT AND ALL OTHER TRADES.
2. THE CONTRACTOR(S) IS/ARE RESPONSIBLE TO PROVIDE A FUNCTIONAL INSTALLATION AS INTENDED BY THE ENGINEER OF RECORD.
3. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL WORK WITH OTHER TRADES.
4. CONTRACTOR SHALL ENSURE MINIMUM NEC CLEARANCES IN FRONT OF ALL ACCESS PANELS.
5. SCHEDULES DO NOT NECESSARILY INDICATE EQUIPMENT QUANTITIES.
6. CONTRACTOR SHALL COORDINATE THE LOCATION OF DEVICES AND MOUNTING HEIGHTS WITH THE ARCHITECT AND/OR OWNER/TENANT PRIOR TO ROUGH IN.
7. FURNISH AND INSTALL WRITTEN PANEL SCHEDULES FOR ALL ELECTRICAL PANELS ASSOCIATED WITH THIS PROJECT.
8. PROVIDE A SEPARATE WHITE NEUTRAL WIRE WITH EACH CIRCUIT, UNLESS NOTED OTHERWISE. USE OF ONE NEUTRAL WIRE WITH 3 HOT WIRES IS NOT ACCEPTABLE.
9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT FOR ALL DEVICES AND EQUIPMENT INSTALLED BY THE ELECTRICAL CONTRACTOR. SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR ALL FLOOR PLAN DIMENSIONS.
11. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING OF LIGHTING, POWER, FIRE ALARM, ETC. SHUTDOWNS WITH THE LANDLORD. COORDINATION OF NIGHTS AND WEEKEND ELECTRICAL WORK SHALL BE BY THE ELECTRICAL CONTRACTOR. ADJACENT AREAS WILL REMAIN IN OPERATION DURING NORMAL WORKING HOURS.
12. ALL CONDUIT, HANGERS, AND SUPPORTS SHALL BE INSTALLED SUCH THAT THEY DO NOT INTERFERE WITH EQUIPMENT ACCESS OR EQUIPMENT REMOVAL SPACE.
13. FURNISH ALL LABOR, MATERIALS, APPARATUS, TOOLS, EQUIPMENT, TRANSPORTATION, A. TEMPORARY CONSTRUCTION AND SPECIAL OR OCCASIONAL SERVICES AS REQUIRED TO MAKE A COMPLETE WORKING ELECTRICAL INSTALLATION, AS SHOWN ON THE DRAWINGS OR DESCRIBED IN THESE SPECIFICATIONS.
14. GENERAL LAYOUT SHOWN ON THE DRAWINGS SHALL BE FOLLOWED EXCEPT WHERE OTHER WORK MAY CONFLICT WITH THE DRAWINGS.
15. CONTRACTOR SHALL VERIFY LINES, LEVELS AND DIMENSIONS SHOWN ON THE DRAWINGS AND SHALL BE RESPONSIBLE FOR THE ACCURACY OF THE SETTING OUT OF WORK AND FOR ITS STRICT CONFORMANCE WITH EXISTING CONDITIONS AT THE SITE.
16. EQUIPMENT AND MATERIALS SHALL BE PROPERLY STORED AND ADEQUATELY PROTECTED AND CAREFULLY HANDLED TO PREVENT DAMAGE BEFORE AND DURING INSTALLATION. EQUIPMENT AND MATERIALS SHALL BE HANDLED, STORED, AND PROTECTED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND AS APPROVED BY THE OWNER'S REPRESENTATIVE. ELECTRICAL CONDUIT SHALL BE STORED TO PROVIDE PROTECTION FROM THE WEATHER AND ACCIDENTAL DAMAGE. PLASTIC CONDUIT SHALL BE STORED ON EVEN SUPPORTS AND IN LOCATIONS NOT SUBJECT TO DIRECT SUN RAYS OR EXCESSIVE HEAT. CABLES SHALL BE SEALED, STORED AND HANDLED CAREFULLY TO AVOID DAMAGE TO THE OUTER COVERING OR INSULATION AND DAMAGE FROM MOISTURE AND WEATHER. DAMAGED OR DEFECTIVE ITEMS, IN THE OPINION OF THE OWNER'S REPRESENTATIVE, SHALL BE REPLACED WITH NEW ITEMS AT THE EXPENSE OF THE CONTRACTOR.
17. SUBSTITUTIONS OF SPECIFIED DEVICES AND EQUIPMENT SHALL NOT BE ALLOWED UNLESS OTHERWISE APPROVED BY THE ENGINEER OF RECORD.
18. PREPARATION, HANDLING AND INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND TECHNICAL DATA PARTICULAR TO THE PRODUCT SPECIFIED AND/OR APPROVED EXCEPT AS OTHERWISE SPECIFIED. COORDINATE WORK AND COOPERATE WITH OTHER IN FURNISHING AND PLACING THIS WORK. WORK TO APPROVED SHOP DRAWINGS FOR WORK BY OTHERS AND TO FIELD MEASUREMENTS AS NECESSARY TO PROPERLY FIT THE WORK.
19. CONFORM TO THE NATIONAL ELECTRICAL CONTRACTOR'S ASSOCIATION STANDARD OF INSTALLATION FOR GENERAL INSTALLATION PRACTICE.
20. INSTALL ELECTRICAL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS.
21. SCHEDULE OF WORK: ARRANGE WORK TO CONFORM TO THE SCHEDULE WHICH HAS BEEN ESTABLISHED FOR THE PROGRESS OF THE WORK. ADVISE REGARDING SHIPPING SCHEDULE OF MAJOR EQUIPMENT.
22. CONTRACTOR SHALL PERSONALLY OR THROUGH AN AUTHORIZED AND COMPETENT REPRESENTATIVE CONSTANTLY SUPERVISE THE WORK FROM BEGINNING TO COMPLETION AND, WITHIN REASON, KEEP THE SAME WORKMEN AND FOREMAN ON THE PROJECT THROUGHOUT THE PROJECT DURATION.
23. PROTECT WORK, MATERIALS AND EQUIPMENT FROM DAMAGE BEFORE, DURING, AND AFTER INSTALLATION. CAP OR PLUG TEMPORARY OPENINGS. PROTECT SYSTEM PIPING, DUCTWORK, CONDUIT, ETC., FROM ACCUMULATION OF DEBRIS OR WATER. ENSURE THAT WATER IS NOT TRAPPED IN WRAPPINGS OF EQUIPMENT AND THAT HEATERS ARE PLACED IN EQUIPMENT IN AREAS WITHOUT TEMPERATURE OR HUMIDITY CONTROL. REPAIR OR RESTORE RUSTED OR OTHERWISE DAMAGED MATERIALS AND EQUIPMENT TO "AS NEW" CONDITION AS ACCEPTABLE TO THE OWNER.
24. KEEP CONDUITS, JUNCTION BOXES, OUTLET BOXES, AND OTHER OPENINGS CLOSED TO PREVENT ENTRY OF FOREIGN MATTER. COVER FIXTURES, EQUIPMENT AND APPARATUS AND PROTECT AGAINST DIRT, PAINT, WATER, CHEMICAL OR MECHANICAL DAMAGE, BEFORE AND DURING CONSTRUCTION PERIOD. RESTORE TO ORIGINAL CONDITION ANY FIXTURE, APPARATUS, OR EQUIPMENT DAMAGED PRIOR TO FINAL ACCEPTANCE. PROTECT BRIGHT FINISHED SURFACES AND SIMILAR ITEMS UNTIL IN SERVICE. NO RUST OR DAMAGE WILL BE PERMITTED.
25. COORDINATE SEQUENCING WITH ALL OTHER TRADES, CONSTRUCTION PHASING, AND OWNER OCCUPANCY.
26. ALL SPECIAL TOOLS FOR PROPER OPERATION AND MAINTENANCE OF THE EQUIPMENT PROVIDED UNDER THIS SECTION SHALL BE DELIVERED TO THE OWNER'S REPRESENTATIVE.
27. NO CUTTING OF FINISHED OR STRUCTURAL WORK MAY BE DONE WITHOUT ACCEPTANCE. WHEN NECESSARY TO HAVE FINISHED MATERIAL OR STRUCTURAL WORK CUT, FURNISH NECESSARY DRAWINGS TO TRADE WHOSE MATERIALS ARE OUT TO BE CUT.
28. FOR EACH PIECE OF ELECTRICAL EQUIPMENT PROVIDE A PERMANENT NAMEPLATE-INDICATING MANUFACTURER, PRODUCT NAME, MODEL NUMBER, SERIAL NUMBER, CAPACITY, OPERATING AND/OR POWER CHARACTERISTICS, LABELS SHOWING COMPLIANCE WITH TESTING, AND SIMILAR ESSENTIAL DATA. LOCATE NAMEPLATES IN AN EASILY OBSERVED ACCESSIBLE LOCATION.
29. WIRING METHODS WITHIN AREAS INVOLVING EXAMINATION AND TREATMENT OF PATIENTS. (I.E. - EXAM ROOM) SHALL MEET THE REQUIREMENTS OF NATIONAL ELECTRICAL CODE - ARTICLE 517.

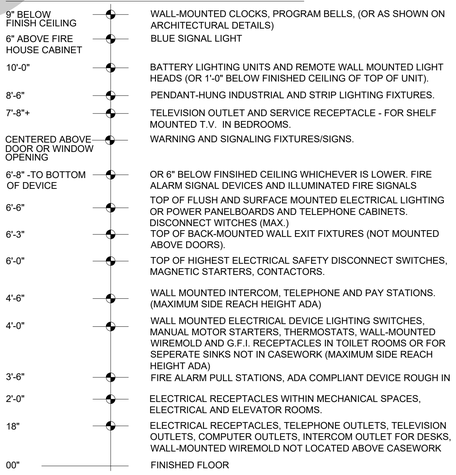
GENERAL CONSTRUCTION NOTES

1. LEAD SHEET IS A GENERAL ELECTRICAL LEGEND. ALL ABBREVIATIONS, DESIGNATIONS, SYMBOLS, ETC. MAY NOT APPEAR ON THE DRAWINGS.
2. THE SUBMISSION OF A PROPOSAL BY THE CONTRACTOR IS NOTIFICATION THAT THE CONTRACTOR HAS TOTALLY FAMILIARIZED HIMSELF WITH THE CONTRACT DOCUMENTS AND EXISTING SITE CONDITIONS AND HAS AGREED TO PROVIDE THE NECESSARY LABOR AND MATERIAL FOR THE COMPLETE INSTALLATION OF EACH SYSTEM IN A NEAT AND WORKMANLIKE MANNER IN ACCORDANCE WITH ALL AUTHORITIES HAVING JURISDICTION.
3. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, SIZES, CLEARANCES AND LOCATIONS PRIOR TO THE START OF CONSTRUCTION. MAKE NECESSARY CHANGES IN FIELD WITH APPROVAL OF DESIGN ENGINEER. ALL CHANGES SHALL BE MADE AT NO ADDITIONAL COST.
4. THE DRAWINGS INDICATE ARRANGEMENTS AND APPROXIMATE SIZES AND RELATIVE LOCATIONS OF PRINCIPLE APPARATUS, EQUIPMENT, DEVICES AND SERVICES TO BE PROVIDED. DRAWINGS ARE DIAGRAMMATIC AND ARE A GRAPHIC REPRESENTATION OF THE CONTRACT REQUIREMENTS TO BEST AVAILABLE STANDARDS AT THE SCALE INDICATED.
5. LAYOUT OF EQUIPMENT INDICATED ON THE DRAWINGS SHALL BE CHECKED AND COMPARED AGAINST ALL DRAWINGS AND SPECIFICATIONS OF ALL TRADES AND EXACT LOCATIONS DETERMINED USING APPROVED SHOP DRAWINGS OF SUCH EQUIPMENT. WHERE PHYSICAL INTERFERENCE OCCURS, CONSULT WITH ENGINEER AND PREPARE DATED, DIMENSIONED DRAWINGS COORDINATED WITH ALL OTHER TRADES. OBTAIN WRITTEN APPROVAL OF THE ENGINEER FOR USE OF SUCH DRAWINGS AND DISTRIBUTE SAME AS REQUIRED.
6. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER/TENANT AND ALL OTHER CONTRACTORS. HE SHALL ALSO SCHEDULE HIS WORK IN ACCORDANCE WITH THE CONSTRUCTION SCHEDULE SO THAT ALL OF HIS WORK CAN BE INSTALLED WITHOUT DELAYING THE PROJECT.
7. CONTRACTOR SHALL SECURE AND PAY ALL FEES AND PERMITS PERTAINING TO THE CONTRACT.
8. ALL EQUIPMENT SHALL BE INSTALLED IN STRICT COMPLIANCE WITH THE MANUFACTURERS' WRITTEN INSTRUCTIONS.
9. CONTRACTOR SHALL BE RESPONSIBLE FOR WORKMEN'S IDENTIFICATION AND BADGING, SAFETY AND FIRE PROTECTION, BARRICADES, WARNING SIGNS, TRASH REMOVAL, CUTTING AND PATCHING.
10. CONTRACTOR SHALL SCHEDULE WITH THE LANDLORD ALL SHUTDOWNS THAT AFFECT UTILITIES AND PORTIONS OF THE BUILDING THAT MUST REMAIN IN OPERATION.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RIGGING, HANDLING AND PROTECTION OF MATERIALS. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND WITHOUT BLEMISH OR DEFECT.
12. CONTRACTOR SHALL PROVIDE LABOR TO RECEIVE, UNLOAD, STORE, PROTECT AND TRANSFER TO POINT OF INSTALLATION OF OWNER/TENANT FURNISHED ITEMS.
13. USE TEMPORARY ENCLOSURES, OR OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT CONTAMINATION TO LOWEST PRACTICAL LEVEL. COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SLAB OPENINGS, WALL OPENINGS, ROOF PENETRATIONS, BEAM PENETRATIONS AND CORING AS IT RELATES TO HIS/HER WORK. CONTRACTOR SHALL SUBMIT SIZE AND LOCATION TO THE STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL.
15. CONTRACTOR SHALL SUBMIT SCHEDULE OF SUBMITTALS PRIOR TO FURNISHING ANY SHOP DRAWINGS. THIS SCHEDULE SHALL IDENTIFY ALL PRODUCT DATA, DRAWINGS, ETC TO BE SUBMITTED FOR THIS PROJECT, INCLUDING THE ANTICIPATED DATE OF EACH SUBMISSION. CONTRACTOR SHALL SUBMIT ELECTRONIC SHOP DRAWINGS AND EQUIPMENT CUTS TO THE ENGINEER FOR APPROVAL PRIOR TO PURCHASING EQUIPMENT OR STARTING ANY WORK. CONTRACTOR SHALL SUBMIT ELECTRONIC PRINTS OF ALL PIPING, DUCTWORK, FIRE PROTECTION, CONDUIT, AND CABLE TRAY FIELD INSTALLATION DRAWINGS FOR EACH SYSTEM TO BE INSTALLED. ANY WORK INSTALLED OR EQUIPMENT PURCHASED PRIOR TO RECEIPT OF ENGINEER-APPROVED SHOP DRAWINGS THAT REQUIRES CHANGES SHALL BE REPLACED AT THE EXPENSE OF THE CONTRACTOR.
16. SUBMIT CATALOG INFORMATION, FACTORY ASSEMBLY DRAWINGS AND FIELD INSTALLATION DRAWINGS AS REQUIRED FOR A COMPLETE EXPLANATION AND DESCRIPTION OF ALL ITEMS TO BE PROVIDED. THE CONTRACTOR SHALL REVIEW AND APPROVE ALL SHOP DRAWINGS. NO SUBMISSION WILL BE ACCEPTED WITHOUT THE SIGNED APPROVAL OF THE CONTRACTOR. THE CONTRACTOR SHALL CHECK AND VERIFY ALL FIELD MEASUREMENTS.
17. FURNISH ACCESS DOORS AS REQUIRED FOR OPERATION AND MAINTENANCE OF CONCEALED EQUIPMENT, VALVES, CONTROLS, ETC. ALL ACCESS DOORS SHALL BE COORDINATED WITH THE ARCHITECT AND/OR OWNER/TENANT AND SHALL MATCH THE FIRE RATING OF THE PENETRATION AS REQUIRED, AND BE PAINTED TO GENERALLY MATCH EXISTING CONDITIONS.
18. ALL WORK FURNISHED UNDER THE CONTRACT SHALL BE GUARANTEED AGAINST ANY AND ALL DEFECTS IN WORKMANSHIP AND MATERIALS FOR A PERIOD OF NOT LESS THAN ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE. ANY DEFECTS OF WORKMANSHIP DEVELOPING DURING THIS PERIOD SHALL BE REMEDIED AND ANY DEFECTIVE MATERIAL SHALL BE REPLACED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT.
19. CONTRACTOR SHALL NOTIFY ENGINEER OF ESTIMATED DATE OF COMPLETION OF ROUGH-IN WORK AND DATE OF BOTH WALL AND CEILING INSTALLATION. NOTIFICATION SHALL BE A MINIMUM OF ONE WEEK PRIOR TO DATE TO ENABLE ENGINEER TO SCHEDULE PRELIMINARY PUNCHLIST INSPECTION. CONTRACTOR SHALL SIMILARLY NOTIFY ENGINEER OF COMPLETION OF ALL WORK, INDICATING THE CONTRACTOR IS READY FOR THE ENGINEER TO PERFORM THE FINAL PUNCHLIST INSPECTION.
20. UPON COMPLETION OF ALL UNFINISHED OR FAULTY WORK NOTED IN ENGINEER'S FINAL PUNCHLIST, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER IN WRITING A LETTER OF COMPLETION CERTIFYING THAT ALL PUNCHLIST ITEMS HAVE BEEN COMPLETED AND ALL AS-BUILT PLANS, MANUALS, ETC. HAVE BEEN SUBMITTED.
21. ALL CHANGES MADE BY THE CONTRACTOR WHICH ARE NOT APPROVED BY THE DESIGN ENGINEER SHALL BE DONE AT THE EXPENSE OF THE CONTRACTOR.
22. ALL DEVICES AND RELATED EQUIPMENT CAN BE LOCATED UP TO 10'-0" AWAY FROM LOCATION AS SHOWN ON THE CONTRACT DRAWINGS WITHOUT ANY ADDITIONAL COST.

GENERAL GROUNDING NOTES

1. ALL ELECTRICAL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AS WELL AS ALL APPLICABLE STATE & LOCAL CODES & ORDINANCES.
2. ALLOW PROVISIONS FOR ALL GROUND CONNECTIONS BONDED TO STEEL TO BE CONNECTED TO DOWN CONDUCTORS.
3. ALL ELECTRICAL MATERIALS SHALL BE NEW AND SHALL BEAR THE UL LABEL.
4. WHERE GROUND CONNECTIONS TO EQUIPMENT ARE SHOWN, ALLOW AMPLE PIGTAIL FOR CONNECTION WHEN EQUIPMENT IS IN PLACE. LOCATE PIGTAILS SO AS NOT TO INTERFERE WITH STRUCTURAL COLUMNS, ETC. PROTECT ABOVE GROUND WIRES AGAINST DAMAGE.
5. GROUND WIRE TO BE BARE #4/0 AWG CLASS AA STRANDED SOFT DRAWN COPPER.
6. ALL GROUND CONNECTIONS TO BE EXOTHERMICALLY WELDED, UNLESS OTHERWISE INDICATED ON THE DRAWINGS.
7. ALL EXOTHERMICALLY WELDED CONNECTIONS SHALL SUCCESSFULLY RESIST MODERATE HAMMER BLOWS. ANY CONNECTION WHICH FAILS SUCH TEST, OR WHICH INSPECTION INDICATES A POROUS OR DEFORMED WELD, SHALL BE REMADE.
8. GROUND CONDUCTORS TO BE BURIED A MINIMUM OF 3'-0" BELOW GRADE AND 4'-0" FROM EDGE OF BUILDING WALL. COORDINATE DEPTH OF GROUND CONDUCTORS WHERE THEY CROSS DUCT BANKS.
9. GROUND PIGTAILS SHALL BE MINIMUM 10' LONG UNLESS OTHERWISE NOTED.
10. GROUND CABLE SHALL BE PLACED ON TOP OF EXCAVATION PRIOR TO INSTALLATION OF COMPACTED BACKFILL (INSTALLATION OF BACKFILL BY OTHERS).
11. AFTER INSTALLATION OF COMPLETE BUILDING GROUND LOOP INCLUDING CABLE, RODS AND WELDS SHOWN, AND PRIOR TO BACKFILL, THE ELECTRICAL CONTRACTOR SHALL PERFORM A TEST TO MEASURE THE GROUND LOOP RESISTANCE TO REMOTE EARTH. THE ELECTRICAL CONTRACTOR SHALL PROVIDE PERSONNEL EXPERIENCED IN PERFORMING THIS TEST, OR SHALL PROVIDE A QUALIFIED OUTSIDE TESTING FIRM TO PERFORM THE TEST.
12. THE MAXIMUM ACCEPTABLE VALUE OF RESISTANCE TO REMOTE EARTH SHALL BE 3 OHMS.
13. IN THE EVENT THE TEST INDICATES THE NEED FOR ADDITIONAL GROUND CONDUCTOR OR RODS, ADD RODS AS NECESSARY TO OBTAIN ACCEPTABLE VALUES.

STANDARD MOUNTING HEIGHTS



MOUNTING HEIGHT NOTES:

1. STANDARD MOUNTING HEIGHTS: (COORDINATE WITH ARCH DRAWINGS) ALL MOUNTING HEIGHTS SHALL BE AS INDICATED BY ARCHITECT. IF NOT INDICATED BY ARCHITECT THEN PROVIDE AS NOTED ABOVE.
2. ALL MOUNTING HEIGHTS SHALL BE IN ACCORDANCE WITH ICC / ANSI A117.1-2009.
3. MOUNTING HEIGHTS TO CENTER OF OUTLETS UNLESS OTHERWISE NOTED. IN MASONRY CONSTRUCTION THE ABOVE MOUNTING HEIGHTS SHALL BE USED FOR REFERENCE TO NEAREST BLOCK OR BRICK COURSING.
4. THE ABOVE MOUNTING HEIGHTS SHALL BE ADHERED TO UNLESS SPECIFICALLY NOTED OR DETAILED OTHERWISE ON THE DRAWING OR SPECIFICATIONS. INDICATION (+) NEXT TO A DEVICE INDICATES THAT DEVICE IS MOUNTED 6" ABOVE COUNTER OR CASEWORK. COORDINATE WITH ARCHITECTURAL DETAILS AND CASEWORK CONTRACTOR.
5. INDICATION (UC) NEXT TO A DEVICE INDICATES THAT DEVICE IS MOUNTED 4" BELOW COUNTER OR CASEWORK OR 18" ABOVE FINISHED FLOOR, WHICHEVER IS FEASIBLE. COORDINATE WITH ARCHITECTURAL DETAILS AND CASEWORK CONTRACTOR.
6. INDICATION (U) NEXT TO A DEVICE INDICATES THAT DEVICE IS MOUNTED 6" BELOW CEILING OR FLUSH TO CEILING, WHICHEVER IS FEASIBLE. COORDINATE WITH ARCHITECTURAL DETAILS AND CASEWORK CONTRACTOR.
7. 3'-6" FOR ADA COMPLIANT DEVICES VERIFY EXACT HEIGHT PRIOR TO ROUGH IN.

REVISIONS

ISSUE	DATE	REVISIONS
A	04/18/22	ISSUED FOR BID

PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1078

BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

SEAL:

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:
PSQUARED CONSULTING ENGINEERS
920 GERMANTOWN PIKE, SUITE 20
PLYMOUTH MEETING, PA 19462
P: 484-539-9459
WWW.PSQUAREDENG.COM

CONSULTANT PROJECT NUMBER 21016

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER XX-XXX

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
ELECTRICAL LEAD SHEET

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: E-0.1
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04-18-2022	
SCALE: AS NOTED	
DRAWN BY: SI	
CHECKED BY: GSP	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

CODES AND STANDARDS

COMPLY WITH ALL CODES ENFORCED BY THE STATE AND LOCAL JURISDICTIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

- INTERNATIONAL BUILDING CODE, 2018 AS AMENDED & APPROVED BY CITY OF PHILADELPHIA
- NATIONAL ELECTRICAL CODE, 2017
- INTERNATIONAL ENERGY CONSERVATION CODE, 2018
- INTERNATIONAL FIRE CODE, 2018 AS AMENDED & APPROVE BY CITY OF PHILADELPHIA

EQUIPMENT AND MATERIALS SPECIFIED UNDER THIS DIVISION SHALL CONFORM TO THE FOLLOWING STANDARDS WHERE APPLICABLE.

- UL UNDERWRITERS' LABORATORIES.
- ASTM AMERICAN SOCIETY FOR TESTING MATERIALS.
- ANSI AMERICAN NATIONAL STANDARDS. INSTITUTE.
- NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION

SUBMITTALS

1. GENERAL: SUBJECT TO COMPLIANCE WITH THE REQUIREMENTS OF THE INDIVIDUAL SPECIFICATION SECTION, PROVIDE MATERIALS AND EQUIPMENT FROM THE INDICATED MANUFACTURERS ONLY. SUBMITTALS OF MATERIAL OR EQUIPMENT MANUFACTURED BY OTHER THAN THOSE INDICATED WILL BE RETURNED.
2. PROVIDE SUBMITTALS FOR THE FOLLOWING ITEMS:
   - CONDUCTORS AND CABLES.
   - RACEWAYS.
   - LIGHTING FIXTURES
   - WIRING DEVICES
   - FIRE ALARM DEVICES
3. FORMAT: FURNISH SUBMITTAL DATA NEATLY BOUND IN AN 8-1/2" X 11" FOLDER OR BINDER WITH A TABLE OF CONTENTS LISTING IN ORDER OF SPECIFICATION SECTION AND PARAGRAPH NUMBER.
4. SUBMITTALS SHALL CONSIST OF DETAILED SHOP DRAWINGS, SPECIFICATIONS, CATALOG "CUTS" AND DATA SHEETS CONTAINING PHYSICAL AND DIMENSIONED INFORMATION, PERFORMANCE DATA, ELECTRICAL CHARACTERISTICS, MATERIALS USED IN FABRICATION, MATERIAL FINISH AND THOSE OPTIONAL ACCESSORIES WHICH ARE INCLUDED AND THOSE WHICH ARE EXCLUDED.
5. EACH SUBMITTAL SHALL BE THOROUGHLY REVIEWED BY THE CONTRACTOR. THE COVER LETTER ACCOMPANYING SUBMITTAL LETTER SHALL LIST IN FULL THE ITEMS AND DATA SUBMITTED AND SHALL CONTAIN A STATEMENT ACKNOWLEDGING THAT THE CONTRACTOR HAS PERFORMED A DETAILED REVIEW OF THE SUBMITTAL DOCUMENTS PRIOR TO SUBMISSION. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL CONSTITUTE GROUNDS FOR RETURN OF DATA FOR RESUBMISSION WITHOUT REVIEW.
6. CONTRACTOR AGREES THAT SHOP DRAWING SUBMITTALS PROCESSED BY THE ENGINEER ARE NOT CHANGE ORDERS, THAT THE PURPOSE OF SHOP DRAWING SUBMITTALS BY THE CONTRACTOR IS TO DEMONSTRATE TO THE ENGINEER THAT THE CONTRACTOR UNDERSTANDS THE DESIGN CONCEPT, THAT HE DEMONSTRATES HIS UNDERSTANDING BY INDICATING WHICH EQUIPMENT AND MATERIAL HE INTENDS TO FURNISH AND INSTALL AND BY DETAILING THE FABRICATION AND INSTALLATION METHODS HE INTENDS TO USE.

TURNOVER DOCUMENTATION

1. AT THE TIME OF COMPLETION, AN ADEQUATE PERIOD SHALL BE ALLOTTED BY THE CONTRACTOR FOR INSTRUCTION OF BUILDING OPERATING AND MAINTENANCE PERSONNEL IN THE USE OF ALL SYSTEMS. ALL PERSONNEL SHALL BE INSTRUCTED AT ONE TIME, THE CONTRACTOR MAKING ALL NECESSARY ARRANGEMENTS WITH MANUFACTURERS'S REPRESENTATIVES. THE EQUIPMENT MANUFACTURER SHALL PROVIDE PRODUCT LITERATURE AND APPLICATION GUIDES FOR THE USERS' REFERENCE. COSTS, IF ANY, SHALL BE PAID BY THE CONTRACTOR.
2. PROVIDE PROJECT RECORD DRAWINGS (AUTOCAD). SUCH DRAWINGS SHALL FULLY REPRESENT INSTALLED CONDITIONS INCLUDING ACTUAL LOCATION OF EQUIPMENT, CORRECT CONDUIT AND WIRE SIZING AS WELL AS ROUTING.
3. ALL CHANGES TO DRAWINGS SHALL BE MADE BY QUALIFIED DRAFTSPERSONS TO MATCH EXISTING LINE WORK AND LETTERING AS CLOSELY AS POSSIBLE.

TESTING

TESTS SHALL BE CONDUCTED DURING THE CONSTRUCTION PERIOD AND AT COMPLETION TO DETERMINE CONFORMITY WITH APPLICABLE CODES AND WITH THESE SPECIFICATIONS. TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE AND SHALL INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

1. INSULATION RESISTANCE: PERFORM 500-VOLT D.C. TESTS FOR ONE MINUTE ON ALL FEEDER CONDUCTORS, INCLUDING THE NEUTRAL, AND MAKE A TYPED RECORD OF ALL READINGS TO BE INCLUDED IN THE MAINTENANCE INSTRUCTIONS. REPAIR OR REPLACE CIRCUITS SHOWING LESS THAN 40 MEGOHMS RESISTANCE TO GROUND. MAKE TESTS USING BIDDLE INSULATION RESISTANCE MEGGER, OR EQUAL.
2. GROUND RESISTANCE: TEST GROUND RESISTANCE PER IEEE STANDARD NO. 81.
3. CIRCUITS CONTINUITY: TEST ALL FEEDER AND BRANCH FOR CONTINUITY. TEST ALL NEUTRALS FOR IMPROPER GROUNDS.
4. PRODUCT FAILURE: ANY PRODUCTS WHICH FAIL DURING THE TESTS OR ARE RULED UNSATISFACTORY BY THE OWNER'S REPRESENTATIVE SHALL BE REPLACED, REPAIRED, OR CORRECTED AS PRESCRIBED BY THE OWNER'S REPRESENTATIVE AT THE EXPENSE OF THE CONTRACTOR. TESTS SHALL BE PERFORMED AFTER REPAIRS, REPLACEMENTS OR CORRECTIONS UNTIL SATISFACTORY PERFORMANCE IS DEMONSTRATED.
5. PHYSICAL INSPECTION OF ELECTRICAL EQUIPMENT AND CABLES: INSPECTION SHALL BE MADE OF ALL EQUIPMENT TO INSURE PROPER ASSEMBLY AND CONSTRUCTION.

SUPPORTING DEVICES

1. RACEWAY SUPPORTS: BOLTED CONDUIT CLAMPS, BOLTED BEAM CLAMPS, RISER CLAMPS, CEILING TRAPEZE HANGERS, WALL BRACKETS, AND ONE-HOLE AND TWO-HOLE STRAPS
2. FASTENERS: TYPES, MATERIALS, AND CONSTRUCTION FEATURES AS FOLLOWS:
3. EXPANSION ANCHORS: CARBON STEEL WEDGE OR SLEEVE TYPE.
4. POWDER-DRIVEN THREADED STUDS: HEAT-TREATED STEEL, DESIGNED SPECIFICALLY FOR THE INTENDED SERVICE.
5. CONDUIT SEALING BUSHINGS: FACTORY-FABRICATED WATERTIGHT CONDUIT SEALING BUSHING ASSEMBLIES SUITABLE FOR SEALING AROUND CONDUIT, OR TUBING PASSING THROUGH CONCRETE FLOORS AND WALLS. CONSTRUCT SEALS WITH STEEL SLEEVE, MALLEABLE IRON BODY, NEOPRENE SEALING GROMMETS OR RINGS, METAL PRESSURE RINGS, PRESSURE CLAMPS, AND CAP SCREWS.
6. CABLE SUPPORTS FOR VERTICAL CONDUIT: FACTORY-FABRICATED ASSEMBLY CONSISTING OF THREADED BODY AND INSULATING WEDGING PLUG FOR NONARMORED ELECTRICAL CABLES IN RISER CONDUITS. PROVIDE PLUGS WITH NUMBER AND SIZE OF CONDUCTOR GRIPPING HOLES AS REQUIRED TO SUIT INDIVIDUAL RISERS. CONSTRUCT BODY OF MALLEABLE-IRON CASTING WITH HOT-DIP GALVANIZED FINISH.
7. U-CHANNEL SYSTEMS: 12 GAUGE MINIMUM STEEL CHANNELS. PROVIDE FITTINGS AND ACCESSORIES THAT MATE AND MATCH WITH U-CHANNEL AND ARE OF THE SAME MANUFACTURER.

FIRE RESISTANT SEALANTS

1. SEALANTS AND ACCESSORIES SHALL HAVE FIRE-RESISTANCE RATINGS INDICATED, AS ESTABLISHED BY TESTING IDENTICAL ASSEMBLIES IN ACCORDANCE WITH ASTM E 814, BY UNDERWRITERS' LABORATORIES, INC., OR OTHER TESTING AND INSPECTION AGENCY ACCEPTABLE TO THE ENGINEER AND AUTHORITIES HAVING JURISDICTION.
2. ONE-PART, FIRE STOPPING, MILDEW-RESISTANT, SILICONE SEALANT CONSISTING OF ONE PART ELASTOMERIC SEALANT FORMULATED FOR USE IN A THROUGH-PENETRATION FIRE STOP SYSTEM FOR SEALING OPENINGS AROUND CABLES, CONDUIT, PIPES AND SIMILAR PENETRATIONS THROUGH WALLS AND FLOORS.
3. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE ONE OF THE FOLLOWING:
   - HILTI
   - SPECIFIED TECHNOLOGIES, INC.
   - 3M COMPANY

ELECTRICAL BOXES AND FITTINGS

ACCEPTABLE MANUFACTURERS

SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE PRODUCTS BY ONE OF THE FOLLOWING:

- APPLETON ELECTRIC; EMERSON ELECTRIC CO.
- OZ/GEDNEY; GENERAL SIGNAL CO.
- RACO; HUBBELL, INC.
- CROUSE-HINDS, COOPER SYSTEMS, INC.
- WIREMOLD COMPANY

PRODUCTS

A. JUNCTION AND PULL BOXES

PROVIDE GALVANIZED CODE-GAUGE SHEET STEEL JUNCTION AND PULL BOXES, WITH SCREW-ON COVERS; OF TYPES, SHAPES AND SIZES, TO SUIT EACH RESPECTIVE LOCATION AND INSTALLATION; WITH WELDED SEAMS AND EQUIPPED WITH STAINLESS STEEL NUTS, BOLTS, SCREWS AND WASHERS.

B. BUSHINGS, KNOCKOUT, CLOSURES AND LOCKNUTS

PROVIDE CORROSION-RESISTANT BOX KNOCKOUT CLOSURES, CONDUIT LOCKNUTS AND MALLEABLE IRON CONDUIT BUSHINGS, OFFSET CONNECTORS, OF TYPES AND SIZES, TO SUIT RESPECTIVE INSTALLATION REQUIREMENTS AND APPLICATIONS.

INSTALLATION OF ELECTRICAL BOXES AND FITTINGS

INSTALL ELECTRICAL BOXES AND FITTINGS, AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS, APPLICABLE REQUIREMENTS OF NEC AND NECA'S "STANDARD OF INSTALLATION", AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO FULFILL PROJECT REQUIREMENTS.

1. COORDINATE INSTALLATION OF ELECTRICAL BOXES AND FITTINGS WITH WIRE/CABLE, WIRING DEVICES, AND RACEWAY INSTALLATION WORK.
2. PROVIDE KNOCKOUT CLOSURES TO CAP UNUSED KNOCKOUT HOLES WHERE BLANKS HAVE BEEN REMOVED.
3. INSTALL ELECTRICAL BOXES IN THOSE LOCATIONS THAT ENSURE READY ACCESSIBILITY TO ENCLOSED ELECTRICAL WIRING.
4. AVOID INSTALLING BOXES BACK-TO-BACK IN WALLS. PROVIDE NOT LESS THAN 6" (150 MM) SEPARATION.
5. AVOID USING ROUND BOXES WHERE CONDUIT MUST ENTER BOX THROUGH SIDE OF BOX, WHICH WOULD RESULT IN DIFFICULT AND INSECURE CONNECTIONS WHEN FASTENED WITH LOCKNUT OR BUSHING ON ROUNDED SURFACES.
6. FASTEN ELECTRICAL BOXES FIRMLY AND RIGIDLY TO SUBSTRATES, OR STRUCTURAL SURFACES TO WHICH ATTACHED, OR SOLIDLY EMBED ELECTRICAL BOXES IN CONCRETE OR MASONRY.
7. PROVIDE ELECTRICAL CONNECTIONS FOR INSTALLED BOXES.
8. SUBSEQUENT TO INSTALLATION OF BOXES, PROTECT BOXES FROM CONSTRUCTION DEBRIS AND DAMAGE.

WIRES AND CABLES

GENERAL: PROVIDE WIRE AND CABLE SUITABLE FOR THE TEMPERATURE, CONDITIONS AND LOCATION WHERE INDICATED.

CONDUCTORS: PROVIDE STRANDED CONDUCTORS FOR POWER, CONTROL, AND LIGHTING CIRCUITS. MINIMUM CONDUCTOR SIZE: #12 AWG.

CONDUCTOR MATERIAL: COPPER FOR ALL WIRES AND CABLES.

INSULATION: PROVIDE THHN/THWN INSULATION FOR ALL CONDUCTORS SIZE #8 AWG AND SMALLER. FOR ALL OTHER SIZES, PROVIDE XHHW INSULATION.

CABLES: PROVIDE THE FOLLOWING TYPE(S) OF CABLES IN NEC APPROVED LOCATIONS AND APPLICATIONS WHERE INDICATED. PROVIDE CABLE UL LISTED FOR PARTICULAR APPLICATION:

CONNECTORS FOR CONDUCTORS: PROVIDE UL LISTED FACTORY-FABRICATED, SOLDERLESS METAL PRESSURE CONNECTORS AND LUGS OF SIZES, AMPACITY RATINGS, MATERIALS, TYPES AND CLASSES FOR APPLICATIONS AND FOR SERVICES INDICATED. USE CONNECTORS WITH TEMPERATURE RATINGS EQUAL TO OR GREATER THAN THOSE OF THE WIRES UPON WHICH USED.

PRESSURE CONNECTORS SHALL BE USED TO CONNECT CONDUCTORS TO DEVICES WITH LUG-TYPE TERMINALS THAT ARE NOT EQUIPPED WITH SADDLE STRAPS OR EQUIVALENT MEANS OF RETAINING CONDUCTOR STRANDS.

INSTALLATION OF WIRES AND CABLES

INSTALL ELECTRICAL CABLES, WIRES, AND CONNECTORS IN COMPLIANCE WITH NEC.

1. COORDINATE CABLE INSTALLATION WITH OTHER WORK.
2. PULL CONDUCTORS SIMULTANEOUSLY WHERE MORE THAN ONE IS BEING INSTALLED IN SAME RACEWAY. USE UL LISTED PULLING COMPOUND OR LUBRICANT, WHERE NECESSARY.
3. USE PULLING MEANS INCLUDING, FISH TAPE, CABLE, ROPE, AND BASKET WEAVE WIRE/CABLE GRIPS WHICH WILL NOT DAMAGE CABLES OR RACEWAYS. DO NOT USE ROPE HITCHES FOR PULLING ATTACHMENT TO WIRE OR CABLE.
4. CONCEAL ALL CABLE IN FINISHED SPACES.
5. INSTALL EXPOSED CABLE PARALLEL AND PERPENDICULAR TO SURFACES OR EXPOSED STRUCTURAL MEMBERS, AND FOLLOW SURFACE CONTOURS, WHERE POSSIBLE.
6. KEEP CONDUCTOR SPLICES TO A MINIMUM.
7. INSTALL SPLICE AND TAP CONNECTORS THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATING THAN CONDUCTORS BEING SPLICED. FOR CONDUCTORS #8 AWG AND SMALLER, SPLICE AND TAP CONNECTORS SHALL BE SPRING CONNECTORS WITH MOLDED VINYL CAPS. FOR CONDUCTORS #6 AWG AND LARGER, SPLICE AND TAP CONNECTORS SHALL BE SPLIT-BOLT OR COMPRESSION TYPE INSTALLED WITH HYDRAULIC TOOL OF PROPER CAPACITY AS RECOMMENDED BY THE MANUFACTURER FOR THE SIZE OF CONDUCTOR ON WHICH THE CONNECTOR IS USED.
8. USE SPLICE AND TAP CONNECTORS WHICH ARE COMPATIBLE WITH CONDUCTOR MATERIAL.
9. PROVIDE ADEQUATE LENGTH OF CONDUCTORS WITHIN ELECTRICAL ENCLOSURES AND TRAIN THE CONDUCTORS TO TERMINAL POINTS WITH NO EXCESS. BUNDLE MULTIPLE CONDUCTORS, WITH CONDUCTORS LARGER THAN #10 AWG CABLED IN INDIVIDUAL CIRCUITS. MAKE TERMINATIONS SO THERE ARE NO BARE CONDUCTORS AT THE TERMINAL.
10. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALUES. WHERE MANUFACTURER'S TORQUE REQUIREMENTS ARE NOT INDICATED, TIGHTEN CONNECTORS AND TERMINALS TO COMPLY WITH TIGHTENING TORQUE SPECIFIED IN UL 486A AND UL 486B.

FIELD QUALITY CONTROL

1. PRIOR TO ENERGIZING, CHECK INSTALLED WIRES AND CABLES WITH MEGOHM METER TO DETERMINE INSULATION RESISTANCE LEVELS.
2. PRIOR TO ENERGIZING, TEST WIRES AND CABLES FOR ELECTRICAL CONTINUITY AND FOR SHORT CIRCUITS.
3. SUBSEQUENT TO WIRE AND CABLE HOOKUPS, ENERGIZE CIRCUITS AND DEMONSTRATE PROPER FUNCTIONING. CORRECT MALFUNCTIONING UNITS, AND RETEST TO DEMONSTRATE COMPLIANCE.
4. COLOR CODE. COLOR CODE ALL CONDUCTORS IN ACCORD WITH NEC AS FOLLOWS:

	120/208V	277/480V
PHASE A	BLACK	BROWN
PHASE B	RED	ORANGE
PHASE C	BLUE	YELLOW
NEUTRAL	WHITE	GRAY
GROUND	GREEN	GREEN

GROUNDING

MATERIALS AND COMPONENTS:

EXCEPT AS OTHERWISE INDICATED, PROVIDE ELECTRICAL GROUNDING AND BONDING SYSTEMS INDICATED; WITH ASSEMBLY OF MATERIALS, INCLUDING, BUT NOT LIMITED TO, CABLES/WIRES, CONNECTORS, SOLDERLESS LUG TERMINALS, AND ADDITIONAL ACCESSORIES NEEDED FOR A COMPLETE INSTALLATION. WHERE MORE THAN ONE TYPE OF COMPONENT PRODUCT MEETS INDICATED REQUIREMENTS, SELECTION IS THE CONTRACTOR'S OPTION. WHERE MATERIALS OR COMPONENTS ARE NOT INDICATED, PROVIDE PRODUCTS WHICH COMPLY WITH NEC, UL, AND IEEE REQUIREMENTS AND WITH ESTABLISHED INDUSTRY STANDARDS FOR THOSE APPLICATIONS INDICATED.

A. CONDUCTORS

IN ALL CONDUITS, UNLESS OTHERWISE NOTED, PROVIDE AN EQUIPMENT-GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC. MATERIAL FOR CONDUCTOR SHALL MATCH BUILDING POWER WIRING SPECIFIED ELSEWHERE.

B. BONDING CONNECTORS, TERMINALS AND CLAMPS

PROVIDE ELECTRICAL BONDING CONNECTORS, TERMINALS, LUGS AND CLAMPS AS RECOMMENDED BY BONDING CONNECTOR, TERMINAL, AND CLAMP MANUFACTURERS FOR INDICATED APPLICATIONS.

BELOW GRADE CONNECTIONS SHALL BE MADE WITH EXOTHERMIC WELDING PROCESS.

INSTALLATION

ENCLOSURES OF EQUIPMENT, RACEWAYS, AND FIXTURES SHALL BE PERMANENTLY AND EFFECTIVELY GROUNDED. PROVIDE CODE-SIZED, (UNLESS OTHERWISE INDICATED) COPPER, INSULATED GREEN EQUIPMENT GROUND WITH ALL BRANCH AND FEEDER CIRCUIT RUNS. EQUIPMENT GROUND SHALL ORIGINATE AT PANELBOARD GROUND BUS AND SHALL BE BONDED TO ALL ELECTRICAL EQUIPMENT ENCLOSURES.

REVISIONS

ISSUE	DATE	REVISIONS
A	04/18/22	ISSUED FOR BID

PHILADELPHIA MANAYUNK

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

SEAL:

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:
PSQUARED CONSULTING ENGINEERS
920 GERMANTOWN PIKE, SUITE 20
PLYMOUTH MEETING, PA 19462
P: 484-539-9459
WWW.PSQUAREDENG.COM

CONSULTANT PROJECT NUMBER: 21016

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER: XX-XXX

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
ELECTRICAL SPECIFICATION SHEET

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: E-1.0
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04-18-2022	
SCALE: AS NOTED	
DRAWN BY: SI	
CHECKED BY: GSP	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.

UNDERGROUND DUCTS AND RACEWAYS

PART 1 - PRODUCTS

A. METAL CONDUIT AND FITTINGS
1. GRC: COMPLY WITH ANSI C80.1 AND UL 6.
2. COATED STEEL CONDUIT: PVC-COATED GRC.
   a. COMPLY WITH NEMA RN 1.
   b. COATING THICKNESS: 0.040 INCH (1 MM), MINIMUM.
   c. LISTED AND LABELED AS DEFINED IN NFPA 70, BY A NATIONALLY RECOGNIZED TESTING LABORATORY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.

B. RIGID NONMETALLIC DUCT
1. UNDERGROUND PLASTIC UTILITIES DUCT: TYPE EPC-80-PVC AND TYPE EPC-40-PVC RNC, COMPLYING WITH NEMA TC 2 AND UL 651, WITH MATCHING FITTINGS COMPLYING WITH NEMA TC 3 BY SAME MANUFACTURER AS DUCT.
2. LISTED AND LABELED AS DEFINED IN NFPA 70, BY A NATIONALLY RECOGNIZED TESTING LABORATORY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.

C. HANDHOLES AND BOXES WITH POLYMER CONCRETE COVER
1. DESCRIPTION: MOLDED OF SAND AND AGGREGATE, BOUND TOGETHER WITH A POLYMER RESIN, AND REINFORCED WITH STEEL OR FIBERGLASS OR A COMBINATION OF THE TWO.
2. STANDARD: COMPLY WITH SCTE 77. COMPLY WITH TIER REQUIREMENTS IN "UNDERGROUND ENCLOSURE APPLICATION" ARTICLE.
3. COLOR: GREEN.
4. CONFIGURATION: UNITS SHALL BE DESIGNED FOR FLUSH BURIAL AND HAVE OPEN BOTTOM UNLESS OTHERWISE INDICATED.
5. COVER: WEATHERPROOF, SECURED BY TAMPER-RESISTANT LOCKING DEVICES AND HAVING STRUCTURAL LOAD RATING CONSISTENT WITH ENCLOSURE.
6. COVER FINISH: NONSKID FINISH SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50.
7. COVER LEGEND: MOLDED LETTERING, "ELECTRIC."

D. FIBERGLASS HANDHOLES AND BOXES WITH POLYMER CONCRETE FRAME AND COVER
1. DESCRIPTION: SHEET-MOLDED, FIBERGLASS-REINFORCED, POLYESTER RESIN ENCLOSURE JOINED TO POLYMER CONCRETE TOP RING OR FRAME.
2. STANDARD: COMPLY WITH SCTE 77. COMPLY WITH TIER REQUIREMENTS IN "UNDERGROUND ENCLOSURE APPLICATION" ARTICLE.
3. COLOR: GREEN.
4. CONFIGURATION: UNITS SHALL BE DESIGNED FOR FLUSH BURIAL AND HAVE OPEN BOTTOM UNLESS OTHERWISE INDICATED.
5. COVER: WEATHERPROOF, SECURED BY TAMPER-RESISTANT LOCKING DEVICES AND HAVING STRUCTURAL LOAD RATING CONSISTENT WITH ENCLOSURE.
6. COVER FINISH: NONSKID FINISH SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50.
7. COVER LEGEND: MOLDED LETTERING, "ELECTRIC."

PART 2 - EXECUTION

A. PREPARATION
1. COORDINATE LAYOUT AND INSTALLATION OF DUCT, DUCT BANK, MANHOLES, HANDHOLES, AND BOXES WITH FINAL ARRANGEMENT OF OTHER UTILITIES, SITE GRADING, AND SURFACE FEATURES AS DETERMINED IN THE FIELD. NOTIFY ARCHITECT IF THERE IS A CONFLICT BETWEEN AREAS OF EXCAVATION AND EXISTING STRUCTURES OR ARCHAEOLOGICAL SITES TO REMAIN.
2. COORDINATE ELEVATIONS OF DUCT AND DUCT-BANK ENTRANCES INTO MANHOLES, HANDHOLES, AND BOXES WITH FINAL LOCATIONS AND PROFILES OF DUCT AND DUCT BANKS, AS DETERMINED BY COORDINATION WITH OTHER UTILITIES, UNDERGROUND OBSTRUCTIONS, AND SURFACE FEATURES. REVISE LOCATIONS AND ELEVATIONS AS REQUIRED TO SUIT FIELD CONDITIONS AND TO ENSURE THAT DUCT AND DUCT BANK WILL DRAIN TO MANHOLES AND HANDHOLES, AND AS APPROVED BY ARCHITECT.

B. UNDERGROUND DUCT APPLICATION
1. DUCT FOR ELECTRICAL BRANCH CIRCUITS: TYPE EPC-80-PVC RNC, DIRECT-BURIED UNLESS OTHERWISE INDICATED.
2. UNDERGROUND DUCTS CROSSING PAVED PATHS AND DRIVEWAYS: TYPE EPC-40 PVC RNC, ENCASED IN REINFORCED CONCRETE.
3. STUB-UPS: CONCRETE-ENCASED GRC.

C. HANDHOLES AND BOXES
1. UNITS IN ROADWAYS AND OTHER DELIBERATE TRAFFIC PATHS: PRECAST CONCRETE. AASHTO HB 17, H-10 STRUCTURAL LOAD RATING.
2. UNITS IN DRIVEWAY, PARKING LOT, AND OFF-ROADWAY LOCATIONS, SUBJECT TO OCCASIONAL, NONDELIBERATE LOADING BY HEAVY VEHICLES: POLYMER CONCRETE, SCTE 77, TIER 15 FIBERGLASS ENCLOSURES WITH POLYMER CONCRETE FRAME AND COVER, SCTE 77, TIER 15 STRUCTURAL LOAD RATING.
3. UNITS IN SIDEWALK AND SIMILAR APPLICATIONS WITH A SAFETY FACTOR FOR NONDELIBERATE LOADING BY VEHICLES: POLYMER CONCRETE UNITS, SCTE 77, TIER 8 STRUCTURAL LOAD RATING.
4. UNITS SUBJECT TO LIGHT-DUTY PEDESTRIAN TRAFFIC ONLY: FIBERGLASS-REINFORCED POLYESTER RESIN, STRUCTURALLY TESTED ACCORDING TO SCTE 77 WITH 3000-LBF (13 345-N) VERTICAL LOADING.
5. COVER DESIGN LOAD SHALL NOT EXCEED THE DESIGN LOAD OF THE HANDHOLE OR BOX.

D. DUCT AND DUCT-BANK INSTALLATION
1. WHERE INDICATED ON DRAWINGS, INSTALL DUCT, SPACERS, AND ACCESSORIES INTO THE DUCT-BANK CONFIGURATION SHOWN. DUCT INSTALLATION REQUIREMENTS IN THIS SECTION ALSO APPLY TO DUCT BANK.
2. INSTALL DUCT ACCORDING TO NEMA TCB 2.
3. SLOPE: PITCH DUCT A MINIMUM SLOPE OF 1:300 DOWN TOWARD MANHOLES AND HANDHOLES AND AWAY FROM BUILDINGS AND EQUIPMENT. SLOPE DUCT FROM A HIGH POINT BETWEEN TWO MANHOLES, TO DRAIN IN BOTH DIRECTIONS.
4. CURVES AND BENDS: USE 5-DEGREE ANGLE COUPLINGS FOR SMALL CHANGES IN DIRECTION. USE MANUFACTURED LONG SWEEP BENDS WITH A MINIMUM RADIUS OF 48 INCHES (1200 MM), BOTH HORIZONTALLY AND VERTICALLY, AT OTHER LOCATIONS UNLESS OTHERWISE INDICATED.
   a. DUCT SHALL HAVE MAXIMUM OF TWO 90 DEGREE BENDS OR THE TOTAL OF ALL BENDS SHALL BE NO MORE 180 DEGREES BETWEEN PULL POINTS.
5. JOINTS: USE SOLVENT-CEMENTED JOINTS IN DUCT AND FITTINGS AND MAKE WATERTIGHT ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS. STAGGER COUPLINGS SO THOSE OF ADJACENT DUCT DO NOT LIE IN SAME PLANE.
6. INSTALLATION ADJACENT TO HIGH-TEMPERATURE STEAM LINES: WHERE DUCT IS INSTALLED PARALLEL TO UNDERGROUND STEAM LINES, PERFORM CALCULATIONS SHOWING THE DUCT WILL NOT BE SUBJECT TO ENVIRONMENTAL TEMPERATURES ABOVE 40 DEG C. WHERE ENVIRONMENTAL TEMPERATURES ARE CALCULATED TO RISE ABOVE 40 DEG C, AND ANYWHERE THE DUCT CROSSES ABOVE AN UNDERGROUND STEAM LINE, INSTALL INSULATION BLANKETS LISTED FOR DIRECT BURIAL TO ISOLATE THE DUCT BANK FROM THE STEAM LINE.
7. SEALING: PROVIDE TEMPORARY CLOSURE AT TERMINATIONS OF DUCT WITH PULLED CABLES. SEAL SPARE DUCT AT TERMINATIONS. USE SEALING COMPOUND AND PLUGS TO WITHSTAND AT LEAST 15-PSIG (1.03-MPA) HYDROSTATIC PRESSURE.
8. PULLING CORD: INSTALL 200-LBF- (1000-N-) TEST NYLON CORD IN EMPTY DUCTS.
9. DIRECT-BURIED DUCT AND DUCT BANK:
10. EXCAVATE TRENCH BOTTOM TO PROVIDE FIRM AND UNIFORM SUPPORT FOR DUCT. COMPLY WITH REQUIREMENTS IN SECTION 312000 "EARTH MOVING" FOR PREPARATION OF TRENCH BOTTOMS FOR PIPES LESS THAN 6 INCHES (150 MM) IN NOMINAL DIAMETER.
11. WIDTH: EXCAVATE TRENCH 12 INCHES (300 MM) WIDER THAN DUCT ON EACH SIDE.
12. WIDTH: EXCAVATE TRENCH 3 INCHES (75 MM) WIDER THAN DUCT ON EACH SIDE.
13. DEPTH: INSTALL TOP OF DUCT AT LEAST 36 INCHES (900 MM) BELOW FINISHED GRADE UNLESS OTHERWISE INDICATED.
14. SET ELEVATION OF BOTTOM OF DUCT BANK BELOW FROST LINE.
15. SUPPORT DUCTS ON DUCT SPACERS COORDINATED WITH DUCT SIZE, DUCT SPACING, AND OUTDOOR TEMPERATURE.
16. SPACER INSTALLATION: PLACE SPACERS CLOSE ENOUGH TO PREVENT SAGGING AND DEFORMING OF DUCT, WITH NOT LESS THAN [FOUR] [FIVE] SPACERS PER 20 FEET (6 M) OF DUCT. PLACE SPACERS WITHIN 24 INCHES (600 MM) OF DUCT ENDS. STAGGER SPACERS APPROXIMATELY 6 INCHES (150 MM) BETWEEN TIERS. SECURE SPACERS TO EARTH AND TO DUCTS TO PREVENT FLOATING DURING CONCRETING. TIE ENTIRE ASSEMBLY TOGETHER USING FABRIC STRAPS; DO NOT USE TIE WIRES OR REINFORCING STEEL THAT MAY FORM CONDUCTIVE OR MAGNETIC LOOPS AROUND DUCTS OR DUCT GROUPS.
17. INSTALL DUCT WITH A MINIMUM OF 3 INCHES (75 MM) BETWEEN DUCTS FOR LIKE SERVICES AND 6 INCHES (150 MM) BETWEEN POWER AND COMMUNICATIONS DUCT.
18. INSTALL MANUFACTURED GRC ELBOWS FOR STUB-UPS, AT BUILDING ENTRANCES, AND AT CHANGES OF DIRECTION IN DUCT.
19. COUPLE RNC DUCT TO GRC WITH ADAPTERS DESIGNED FOR THIS PURPOSE, AND ENCASE COUPLING WITH 3 INCHES (75 MM) OF CONCRETE.
20. STUB-UPS TO OUTDOOR EQUIPMENT: EXTEND CONCRETE-ENCASED GRC HORIZONTALLY A MINIMUM OF 60 INCHES (1500 MM) FROM EDGE OF BASE. INSTALL INSULATED GROUNDING BUSHINGS ON TERMINATIONS AT EQUIPMENT.
21. STUB-UPS SHALL BE MINIMUM 4 INCHES (100 MM) ABOVE FINISHED FLOOR AND MINIMUM 3 INCHES (75 MM) FROM CONDUIT SIDE TO EDGE OF SLAB.
22. AFTER INSTALLING FIRST TIER OF DUCT, BACKFILL AND COMPACT. START AT TIE-IN POINT AND WORK TOWARD END OF DUCT RUN, LEAVING DUCTS AT END OF RUN FREE TO MOVE WITH EXPANSION AND CONTRACTION AS TEMPERATURE CHANGES DURING THIS PROCESS. REPEAT PROCEDURE AFTER PLACING EACH TIER. AFTER PLACING LAST TIER, HAND PLACE BACKFILL TO 4 INCHES (100 MM) OVER DUCT AND HAND TAMP. FIRMLY TAMP BACKFILL AROUND DUCTS TO PROVIDE MAXIMUM SUPPORTING STRENGTH. USE HAND TAMPER ONLY. AFTER PLACING CONTROLLED BACKFILL OVER FINAL TIER, MAKE FINAL DUCT CONNECTIONS AT END OF RUN AND COMPLETE BACKFILLING WITH NORMAL COMPACTION. COMPLY WITH REQUIREMENTS IN SECTION 312000 "EARTH MOVING" FOR INSTALLATION OF BACKFILL MATERIALS.
23. PLACE MINIMUM 3 INCHES (75 MM) OF SAND AS A BED FOR DUCT. PLACE SAND TO A MINIMUM OF 6 INCHES (150 MM) ABOVE TOP LEVEL OF DUCT.

UNDERGROUND DUCTS AND RACEWAYS (CONT'D)

E. INSTALLATION OF HANDHOLES AND BOXES
1. INSTALL HANDHOLES AND BOXES LEVEL AND PLUMB AND WITH ORIENTATION AND DEPTH COORDINATED WITH CONNECTING DUCT, TO MINIMIZE BENDS AND DEFLECTIONS REQUIRED FOR PROPER ENTRANCES. USE BOX EXTENSION IF REQUIRED TO MATCH DEPTHS OF DUCT, AND SEAL JOINT BETWEEN BOX AND EXTENSION AS RECOMMENDED BY MANUFACTURER.
2. UNLESS OTHERWISE INDICATED, SUPPORT UNITS ON A LEVEL BED OF CRUSHED STONE OR GRAVEL, GRADED FROM 1/2-INCH (12.5-MM) SIEVE TO NO. 4 (4.75-MM) SIEVE AND COMPACTED TO SAME DENSITY AS ADJACENT UNDISTURBED EARTH.
3. ELEVATION: IN PAVED AREAS AND TRAFFICWAYS, SET COVER FLUSH WITH FINISHED GRADE. SET COVERS OF OTHER HANDHOLES 1 INCH (25 MM) ABOVE FINISHED GRADE.
4. INSTALL REMOVABLE HARDWARE, INCLUDING PULLING EYES, CABLE STANCHIONS, CABLE ARMS, AND INSULATORS, AS REQUIRED FOR INSTALLATION AND SUPPORT OF CABLES AND CONDUCTORS AND AS INDICATED. SELECT ARM LENGTHS TO BE LONG ENOUGH TO PROVIDE SPARE SPACE FOR FUTURE CABLES, BUT SHORT ENOUGH TO PRESERVE ADEQUATE WORKING CLEARANCES IN ENCLOSURE.
5. FIELD CUT OPENINGS FOR DUCT ACCORDING TO ENCLOSURE MANUFACTURER'S WRITTEN INSTRUCTIONS. CUT WALL OF ENCLOSURE WITH A TOOL DESIGNED FOR MATERIAL TO BE CUT. SIZE HOLES FOR TERMINATING FITTINGS TO BE USED, AND SEAL AROUND PENETRATIONS AFTER FITTINGS ARE INSTALLED.
6. FOR ENCLOSURES INSTALLED IN ASPHALT PAVING AND SUBJECT TO OCCASIONAL, NONDELIBERATE, HEAVY-VEHICLE LOADING, FORM AND POUR A CONCRETE RING ENCIRCLING, AND IN CONTACT WITH, ENCLOSURE AND WITH TOP SURFACE SCREEDED TO TOP OF BOX COVER FRAME. BOTTOM OF RING SHALL REST ON COMPACTED EARTH.
   a. CONCRETE: 3000 PSI (20 KPA), 28-DAY STRENGTH, WITH A TROWELED FINISH.
   b. DIMENSIONS: 10 INCHES WIDE BY 12 INCHES DEEP (250 MM WIDE BY 300 MM DEEP).

ELECTRIC MANHOLES AND HANDHOLES

PART 1. - GENERAL

1.1. QUALITY ASSURANCE

CONTRACTOR'S QUALIFICATIONS: FIRMS WITH AT LEAST THREE (3) YEARS OF SUCCESSFUL INSTALLATION ON PROJECTS WITH VAULTS, MANHOLES AND HAND HOLES SIMILAR TO THOSE REQUIRED FOR PROJECT.

ANSI COMPLIANCE: COMPLY WITH REQUIREMENTS OF ANSI C2, "NATIONAL ELECTRICAL SAFETY CODE", PERTAINING TO CONSTRUCTION AND INSTALLATION OF VAULTS, MANHOLES AND HAND HOLES.

ASTM COMPLIANCE: COMPLY WITH APPLICABLE REQUIREMENTS OF AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) STANDARDS PERTAINING TO CONSTRUCTION AND MATERIALS FOR VAULTS, MANHOLES AND HANDHOLES.

UL COMPLIANCE: COMPLY WITH APPLICABLE REQUIREMENTS OF STD. 486A, "WIRE CONNECTORS AND SOLDERING LUGS FOR USE WITH COPPER CONDUCTORS". PROVIDE VAULT, MANHOLE AND HANDHOLE ACCESSORIES WHICH ARE UL LISTED AND LABELED.

PART 2. - PRODUCTS

2.1. MATERIALS FOR FIELD-FABRICATED UNITS

CONCRETE MASONRY UNITS: ASTM C 139.

MASONRY MORTAR: ASTM C 270, TYPE M.

FOR MINOR AMOUNTS OF MORTAR, COMPRISING LESS THAN 2.0 CU. FT., PACKAGED MORTAR MATERIALS COMPLYING WITH ASTM C 387, TYPE M, MAY BE SUBSTITUTED AT CONTRACTOR'S OPTION.

MANHOLE FRAMES AND COVERS: GREY CAST-IRON, ASTM A 48, CLASS 30B.

COMPLY WITH REQUIREMENTS OF FS RR-F-621 FOR TYPE AND STYLE INDICATED.

FURNISH COVERS WITH CAST-IN LEGEND "ELECTRIC" ON ROADWAY FACE.

VAULT AND MANHOLE STEPS: GREY CAST-IRON, ASTM A 48, CLASS 30B, INTEGRALLY CAST INTO VAULT AND MANHOLE SIDEWALLS, UNLESS OTHERWISE INDICATED.

2.2. FACTORY-FABRICATED VAULTS, MANHOLES, AND HANDHOLES

CONCRETE VAULTS AND MANHOLES: PROVIDE WATERTIGHT PRECAST CONCRETE VAULTS AND MANHOLES IN TYPES AND SIZES INDICATED, WITH ACCESS KNOCKOUT ENTRANCE HOLES FOR RACEWAYS AND CABLE, CAST-IRON MANHOLE ACCESS COVER AND FRAME WITH MACHINED BEARING SURFACES, SUITABLE FOR STREET LOADING, WITH PULLING/LIFT IRONS, SUMP/DRAINAGE BOX AND VERTICAL EMBEDDED CONTINUOUS SLOT INSERTS.

PROVIDE REINFORCED CONCRETE FOR VAULTS AND MANHOLES.

HANDHOLES AND BOXES: PROVIDE HANDHOLES AND BOXES, FOR PULLING, SPLICING AND TERMINATING CONDUCTORS, IN TYPES AND SIZES INDICATED, WITH WATERTIGHT COVER AND PENTA-HEAD BOLTS, AND KNOCKOUT ACCESS HOLES; EQUIP BASE WITH SUMP/DRAINAGE BOX.

PROVIDE CONCRETE BODY WITH CAST-IRON COVER AND RING.

GROUND RODS: PROVIDE GROUND RODS CONSTRUCTED OF THE FOLLOWING MATERIALS AND SIZES:

SOLID COPPER, 5/8" DIAMETER X 10'.

SOLID COPPER CLAD STEEL, 3/4" DIAMETER X 10'.

STAINLESS STEEL, 3/4" DIAMETER X 10'.

ACCESSORIES: PROVIDE VAULT, MANHOLE AND HANDHOLE ACCESSORIES, INCLUDING PULLING-IN IRONS, EMBEDDED CABLE SUPPORT ACCESSORIES, CABLE RACK ARMS, PORCELAIN SADDLES, SUMP PUMP PITS, LADDERS, MASTICS AND SEALANTS AS RECOMMENDED BY FABRICATOR/MANUFACTURER.

PART 3. - EXECUTION

3.1. INSTALLATION OF VAULTS, MANHOLES AND HANDHOLES

INSTALL VAULTS, MANHOLES AND HAND HOLES AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT VAULTS, MANHOLES AND HAND HOLES COMPLY WITH REQUIREMENTS.

COORDINATE WITH OTHER WORK, INCLUDING ELECTRICAL RACEWAY AND WIRING WORK, AS NECESSARY TO INTERFACE INSTALLATION OF VAULTS, MANHOLES AND HAND HOLES WITH OTHER WORK.

3.2. INSTALLATION OF FIELD-FABRICATED UNITS

GENERAL: FABRICATE VAULTS, MANHOLES AND HANDHOLES OF TYPES AND SIZES INDICATED; WATERTIGHT AND EQUIP WITH MANHOLE METAL ACCESS COVER, STEPS, ACCESS HOLES FOR RACEWAYS AND CABLES, SUMP/DRAINAGE BOX AND BOLTING INSERTS.

MASONRY CONSTRUCTION MANHOLES

USE CONCRETE MASONRY UNITS TO CONSTRUCT MASONRY MANHOLES AND VAULTS.

CONSTRUCT MANHOLES AND VAULTS IN SIZES AND SHAPES INDICATED.

MIX MORTAR WITH ONLY ENOUGH WATER FOR WORKABILITY. RETEMPERING OF MORTAR IS NOT PERMITTED. KEEP MORTAR MIXING AND CONVEYING EQUIPMENT CLEAN. DO NOT DEPOSIT MORTAR UPON OR PERMIT CONTACT WITH THE GROUND.

LAY MASONRY IN MORTAR TO FORM FULL-BED JOINTS WITH END AND SIDE JOINTS FORMED IN ONE OPERATION AND WITH BED AND VERTICAL JOINTS NOT MORE THAN 5/8" WIDE. PROTECT FRESH MASONRY FROM FREEZING AND ALSO FROM TOO RAPIDLY FREEZING OR TOO RAPIDLY DRYING.

APPLY A 1/2" THICK MORTAR COATING ON BOTH INTERIOR AND EXTERIOR WALL SURFACES.

WHERE MANHOLES ARE INSTALLED IN PAVEMENTS, SET TOPS OF FRAMES AND COVERS FLUSH WITH FINISH SURFACE. ELSEWHERE, SET TOPS 3" ABOVE FINISH SURFACE, UNLESS OTHERWISE INDICATED.

USE AN EPOXY-BONDING COMPOUND WHERE MANHOLE STEPS ARE MORTARED INTO MASONRY WALLS.

CAST-IN-PLACE CONCRETE MANHOLES

USE CAST-IN-PLACE CONCRETE TO CONSTRUCT MANHOLES AND VAULTS.

CONSTRUCT MANHOLES AND VAULTS OF SIZES AND SHAPES INDICATED.

SET CAST-IRON FRAMES AND COVERS TO ELEVATIONS INDICATED, AND CAST-IN-PLACE.

DAMP PROOFING AND WATERPROOFING

COORDINATE DAMP PROOFING AND WATERPROOFING WORK WITH INSTALLATION OF FIELD-FABRICATED UNITS, AS NECESSARY, FOR PROPER INTERFACE.

INSTALL DAMP PROOFING AND WATERPROOFING MATERIALS AS INDICATED.

ELECTRIC MANHOLES AND HANDHOLES (CONT'D)

3.1. INSTALLATION OF FACTORY-FABRICATED UNITS

GENERAL: INSTALL VAULTS, MANHOLES AND HANDHOLES AS INDICATED, IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH RECOGNIZED INDUSTRY PRACTICES TO ENSURE THAT VAULTS, MANHOLES AND HANDHOLES COMPLY WITH REQUIREMENTS AND SERVE INTENDED PURPOSES.

PRECAST CONCRETE UNITS: PLACE PRE-CAST CONCRETE SECTIONS AS INDICATED. WHERE UNITS OCCUR IN PAVEMENTS, SET TOPS OF FRAMES AND COVERS FLUSH WITH FINISH SURFACE, UNLESS OTHERWISE INDICATED. USE EPOXY-BONDING COMPOUND WHERE STEPS ARE MORTARED INTO UNIT WALLS.

INSTALL RUBBER JOINT GASKET, COMPLYING WITH ASTM C 433, AT JOINTS BETWEEN SECTIONS.

APPLY BITUMINOUS MASTIC CASTING AT JOINTS BETWEEN SECTIONS.

COORDINATE DAMP PROOFING AND WATERPROOFING WORK WITH INSTALLATION OF PRE-CAST CONCRETE UNITS AS NECESSARY FOR PROPER INTERFACE.

INSTALL DAMP PROOFING AND WATERPROOFING MATERIALS AS INDICATED.

3.2. BACKFILLING

GENERAL: DELAY BACKFILLING OF EXCAVATIONS SURROUNDING VAULTS, MANHOLES AND HANDHOLES UNTIL AFTER INITIAL INSPECTION HAS BEEN COMPLETED.

3.3. GROUNDING AND BONDING

PROVIDE EQUIPMENT GROUNDING AND BONDING CONNECTIONS FOR EXPOSED METAL PARTS IN VAULTS, MANHOLES AND HANDHOLES AS INDICATED. TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUES SPECIFIED IN UL STANDARD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDS.

3.4. TESTING

UPON COMPLETION OF INSTALLATION OF GROUNDING CONNECTIONS FOR VAULTS, MANHOLES AND HAND HOLES, TEST RESISTANCE-TO-GROUND (EARTHEN CONNECTION) WITH RESISTANCE TESTER. WHERE TESTS INDICATE RESISTANCE-TO-GROUND IS OVER FIVE (5) OHMS, TAKE APPROPRIATE ACTION TO REDUCE RESISTANCE TO FIVE (5) OHMS OR LESS, BY DRIVING ADDITIONAL, PROPERLY SPACED, GROUND RODS, AND TREATING SOIL IN PROXIMITY TO GROUND RODS WITH COMMON SALT, COPPER SULFATE OR MAGNESIUM SULFATE. THEN RETEST TO DEMONSTRATE COMPLIANCE.

ELECTRICAL IDENTIFICATION

1. PANELBOARD DIRECTORIES: SHALL BE TYPEWRITTEN, ARRANGED IN NUMERICAL ORDER AND SHALL SHOW THE NUMBER OF THE CIRCUIT IS INDICATED. THE ROOM NUMBERS USED SHALL BE VERIFIED WITH THE OWNER'S REPRESENTATIVE AND SHALL NOT NECESSARILY BE THOSE USED IN THE DRAWINGS. MOUNT DIRECTORIES IN A 6" X 8" METAL FRAME UNDER PLEXIGLASS INSIDE EACH PANELBOARD.
2. WIRE & TERMINAL MARKERS: VINYL OR VINYL-CLOTH, SELF-ADHESIVE, SELF-LAMINATING, WRAPAROUND, CABLE/CONDUCTOR MARKERS WITH PREPRINTED OR TYPE WRITTEN NUMBER AND LETTER ASSIGNMENTS AS INDICATED ON DRAWINGS OR SHOP DRAWINGS.
3. ENGRAVED, PLASTIC-LAMINATED LABELS, SIGNS, AND INSTRUCTION PLATES: ENGRAVING STOCK MELAMINE PLASTIC LAMINATE, 1/16" MINIMUM THICK FOR SIGNS UP TO 20 SQUARE INCHES, OR 8" IN LENGTH; 1/8" THICK FOR LARGER SIZES. ENGRAVED LEGEND IN WHITE LETTERS ON BLACK FACE AND PUNCHED FOR MECHANICAL FASTENERS. PROVIDE NAMEPLATES FOR ALL ELECTRICAL DISTRIBUTION EQUIPMENT; DISCONNECT SWITCHES, RELAY CABINETS, AND ANY OTHER ITEM AS SPECIFICALLY INDICATED.

ELECTRICAL CONNECTIONS FOR EQUIPMENT

1. GENERAL: FOR EACH ELECTRICAL CONNECTION INDICATED, PROVIDE COMPLETE ASSEMBLY OF MATERIALS, INCLUDING BUT NOT NECESSARILY LIMITED TO, PRESSURE CONNECTORS, TERMINALS (LUGS), ELECTRICAL INSULATING TAPE, ELECTRICAL SOLDER, ELECTRICAL SOLDERING FLUX, HEAT-SHRINKABLE INSULATING TUBING, CABLE TIES, SOLDERLESS WIRE-NUTS, AND OTHER ITEMS AND ACCESSORIES AS NEEDED TO COMPLETE SPLICES AND TERMINATION OF TYPES INDICATED.
2. CONNECTORS AND TERMINALS: PROVIDE ELECTRICAL CONNECTORS AND TERMINALS THAT MATE AND MATCH, INCLUDING SIZES AND RATINGS, WITH EQUIPMENT TERMINALS AND ARE RECOMMENDED BY EQUIPMENT MANUFACTURER FOR INTENDED APPLICATIONS.

REVISIONS

ISSUE	DATE	REVISIONS
A	04/18/22	ISSUED FOR BID

PHILADELPHIA MANETO

PENNSYLVANIA ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122 - 1076
BEFORE YOU DIG ANYWHERE IN PENNSYLVANIA! CALL 1-800-242-1776
NON-MEMBERS MUST BE CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS NOTICE TO UTILITIES BEFORE YOU EXCAVATE, DRILL, BLAST OR DEMOLISH

PA ONE-CALL NUMBER (FOR DESIGN ONLY): 20191973397

PPR PROJECT COORDINATOR: NOBUKI IIJIMA, RLA

SEAL:

PRIMARY CONSULTANT:
GILMORE & ASSOCIATES, INC.
DESIGN, ENGINEERING, LANDSCAPE ARCHITECTURE & TECHNICAL CONSULTING
1617 JOHN F. KENNEDY BLVD., SUITE 425
PHILADELPHIA, PA 19103
PHONE: (215) 345-4330

SUB-CONSULTANT:
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920 GERMANTOWN PIKE, SUITE 20
PLYMOUTH MEETING, PA 19462
P: 484-539-9459
WWW.PSQUAREDENG.COM

CONSULTANT PROJECT NUMBER: 21016

SUB-CONSULTANT:

CONSULTANT PROJECT NUMBER: XX-XXX

CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

PPR PROJECT NUMBER: 16-16-4955-99

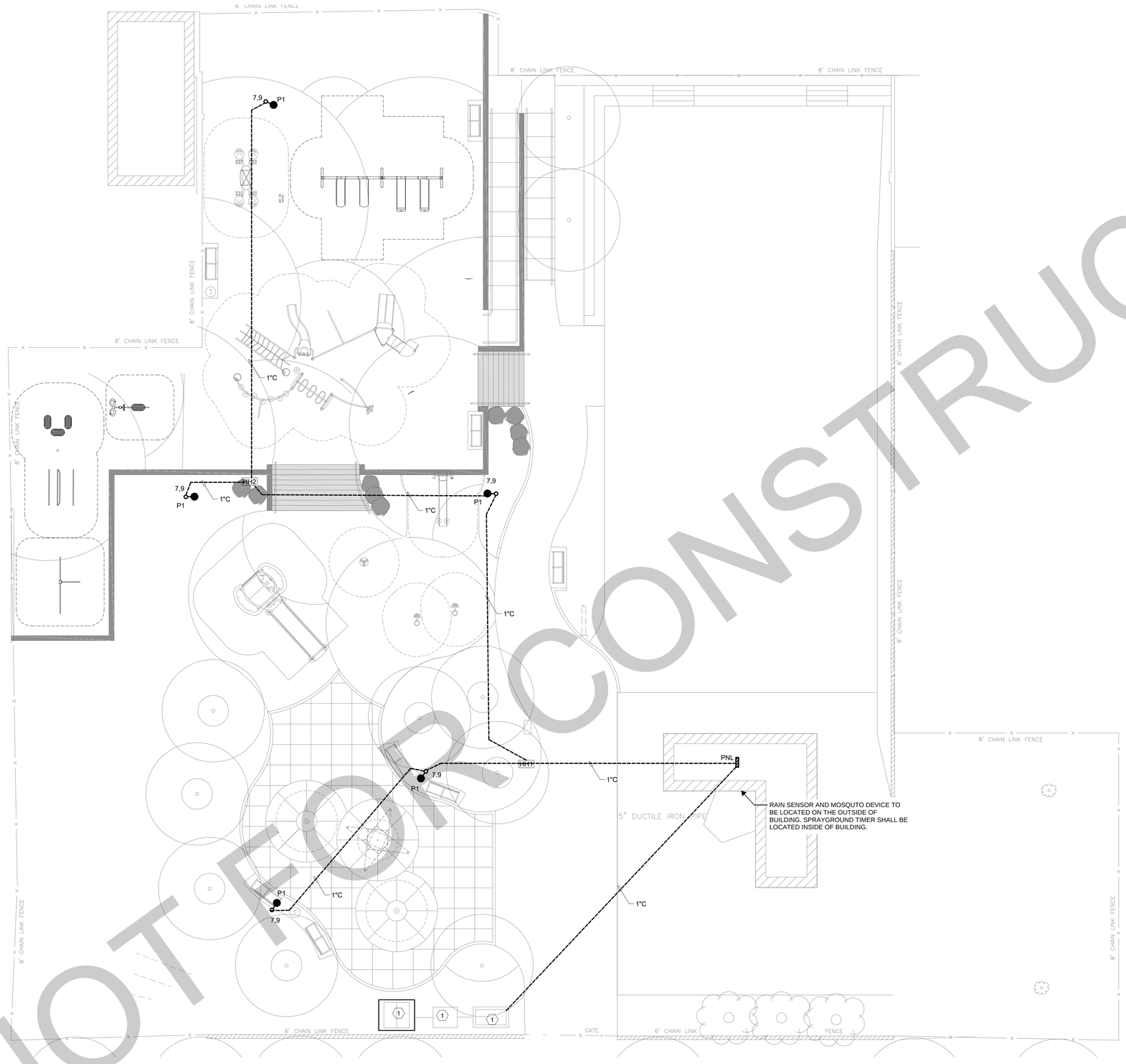
PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
ELECTRICAL SPECIFICATION SHEET

PPR PROJECT NO.:	16-18-4176-01
CONSULTANT PROJECT NO.:	2018-07077
DATE:	04-18-2022
SCALE:	AS NOTED
DRAWN BY:	SI
CHECKED BY:	GSP

DRAWING NO.: E-1.1

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



1 E-2.0 ELECTRICAL SITE LIGHTING PLAN

SCALE: 1" = 20'-0"

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE AS WELL AS ALL APPLICABLE STATE & LOCAL CODES & ORDINANCES.
2. FOR SYMBOLS, ABBREVIATIONS AND GENERAL NOTES, REFER TO ELECTRICAL LEAD SHEET.
3. ELECTRICAL SITE PLAN DRAWING IS DIAGRAMMATIC. REFER TO CIVIL ENGINEER'S DRAWINGS FOR EXACT LOCATIONS OF NEW AND EXISTING HANDHOLES, CONDUITS AND OTHER ABOVEGROUND AND UNDERGROUND STRUCTURES AND UTILITIES, FINAL CONDUIT ROUTING, FINAL CONDUIT TERMINATION LOCATIONS, AND REROUTING OR REMOVAL OF ANY EXISTING UNDERGROUND UTILITIES. COORDINATE CONDUIT ROUTING WITH OTHER TRADES AND UTILITIES.
4. HAND HOLE AND CONDUIT STUB-UP AND TERMINATION LOCATIONS SHOWN ARE APPROXIMATE, PROVIDE AS REQUIRED. COORDINATE FINAL/EXACT STUB-UP AND TERMINATION LOCATIONS AS REQUIREMENT.
5. ALL LIGHT FIXTURES SHALL BE CONNECTED TO EXISTING LIGHTING PANEL LOCATED WITHIN EXISTING RECREATION CENTER. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION.

SHEET NOTES

(1) PROVIDE 120V POWER CONNECTION TO SPRAYGROUND MAINFOLD, RPZ IN HOTBOX AND WATER METER PIT AS REQUIRED. CONNECT TO NEW 20A CIRCUIT WITHIN PANEL AT THE RECREATION CENTER. REFER TO PANEL SCHEDULE FOR ADDITIONAL INFORMATION. MANIFOLD SOLENOID TO BE LOCAATED INSIDE OF SPRAYGOUND MANIFOLD VAULT.

LEGEND

------ UNDERGROUND CONDUIT, REFER TO CONDUIT DETAIL 1/E-3.0 FOR ADDITIONAL INFORMATION.

HHx POWER HANDHOLE WITH COVER; MINIMUM SIZE 12"W x 24"L. "x" INDICATES DESIGNATION. PROVIDE DEPTH AS REQUIRED.

120V POLE-MOUNTED, SINGLE LIGHTING FIXTURE. REFER TO LIGHTING FIXTURE SCHEDULE FOR SPECIFICATION OF FIXTURE AND ASSOCIATED POLE.

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CITY OF PHILADELPHIA
DEPARTMENT OF PARKS AND RECREATION
1515 ARCH STREET
11TH FLOOR, ONE PARKWAY BUILDING
PHILADELPHIA PENNSYLVANIA

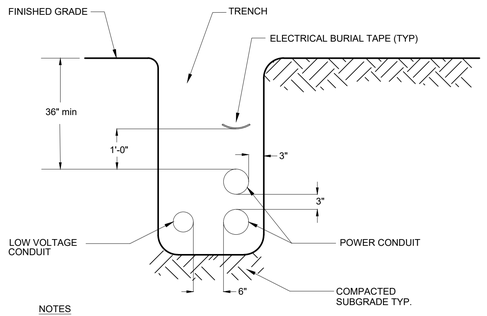
PPR PROJECT NUMBER: 16-16-4955-99

PROJECT TITLE:
IMPROVEMENTS TO HERITAGE PLAYGROUND
1511 CLEARFIELD ST., PHILADELPHIA PA

DRAWING TITLE:
ELECTRICAL SITE LIGHTING PLAN

PPR PROJECT NO.: 16-18-4176-01	DRAWING NO.: E-2.0
CONSULTANT PROJECT NO.: 2018-07077	
DATE: 04-18-2022	
SCALE: AS NOTED	
DRAWN BY: SI	
CHECKED BY: GSP	

NOTE: ALL DIMENSIONS AND CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE SITE BEFORE PROCEEDING WITH THE WORK.



NOTES

1. DETAIL INDICATES MINIMUM REQUIREMENTS. EXACT CONDUIT CONFIGURATION, ROUTING AND DEPTHS SHALL BE BY CONTRACTOR.

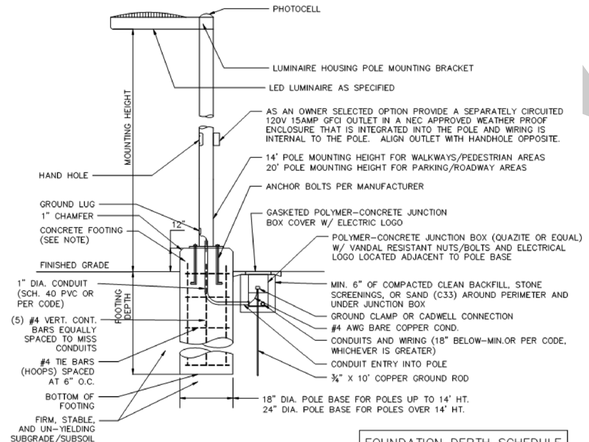
1 / E-3.0 — UNDERGROUND CONDUIT DETAIL

SCALE: NOT TO SCALE

			MAX. LENGTH WHEN USING			
VOLTAGE	PHASE	AMPS	#12	#10	#8	#6
120	1	4	250'	410'	620'	-
120	1	8	125'	200'	310'	-
120	1	12	80'	135'	205'	320'
120	1	16	60'	100'	155'	240'
208	1	4	420'	700'	-	-
208	1	8	210'	350'	530'	-
208	1	12	140'	235'	350'	550'
208	1	16	105'	175'	270'	410'
277	1	6	380'	620'	-	-
277	1	8	280'	470'	-	-
277	1	10	225'	380'	560'	-
277	1	12	190'	310'	480'	-

2 / E-3.0 — VOLTAGE DROP TABLE

SCALE: NOT TO SCALE



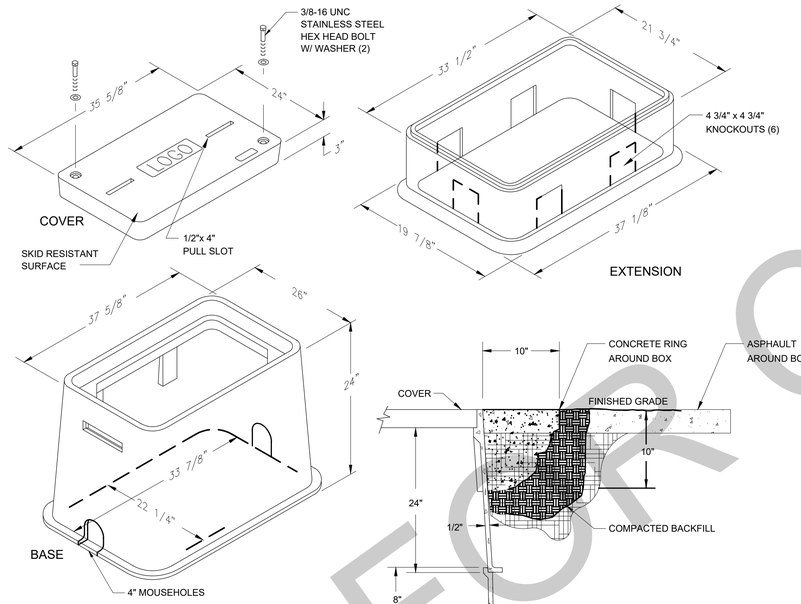
NOTE(S):

1. CONCRETE STRENGTH SHALL BE A MINIMUM OF 3,500 PSI @ 28 DAYS OR PER CIVIL/STRUCTURAL DRAWINGS, WHICHEVER IS GREATER. PROVIDE 3" OF CONCRETE COVER SHALL BE PROVIDED OVER ALL REINFORCEMENT BARS. REINFORCEMENT SHOWN IS MINIMUM. ENGINEER/DESINGER OF RECORD IS RESPONSIBLE FOR FOOTING DESIGN.
2. COORDINATE ELECTRICAL CONDUIT AND GROUNDING WITH ELECTRICAL DRAWINGS.
3. REFER TO LIGHTING SCHEDULE ON LIGHTING PLAN FOR LUMINAIRE TYPE AND MOUNTING HEIGHT.
4. SEE GRADING PLANS FOR FINISHED GRADE ELEVATIONS.
5. USE GASKETED CONDUIT HUBS BETWEEN HAND HOLES/JUNCTION BOX AND CONDUITS TO PREVENT ENTRY OF SOIL, DEBRIS, AND WATER INTO HANDHOLE/JUNCTION BOX.
6. FOOTING DEPTH MAY VARY DUE TO UNSUITABLE SUB-SURFACE SOIL CONDITIONS, VERIFY IN FIELD WITH CIVIL/GEOTECHNICAL ENGINEER AND/OR SOILS INSPECTOR.

FOUNDATION DEPTH SCHEDULE	
MOUNTING HEIGHT	MIN. FOOTING DEPTH
8 TO 14 FEET	4'-6" MIN.
14 TO 25 FEET	5'-0" MIN.

4 / E-3.0 — LIGHT POLE BASE DETAIL

SCALE: NOT TO SCALE



BOXES (NESTABLE)

DESCRIPTION	PART NO.	WEIGHT
WITH NO BASE (2) Mouseholes	PG2436BG24	178# (80.7 kg)

COVERS (WITH LOGO)

DESCRIPTION	PART NO.	WEIGHT
WITH (2) BOLTS	PG2436CG00**	100# (45.4 kg)

EXTENSIONS (FOR UNDER BOX USE ONLY)

DESCRIPTION	PART NO.	WEIGHT	QUANTITY
WITH NO BASE	PG2436EA08	57# (25.9 kg)	2

NOTES:

1. LOGO TO READ "ELECTRICAL", OR "TELECOM", AS INDICATED.

3 / E-3.0 — TYPICAL HANDHOLE DETAIL

SCALE: NOT TO SCALE

PNL (EX)

CKT	KVA	DESCRIPTION	CIRCUIT SIZE NO.	WIRE	GND	COND	CB P	CB A	LOAD A	LOAD B	CB A	CB P	CIRCUIT SIZE NO.	WIRE	GND	COND	DESCRIPTION	KVA	CKT
1		EXISTING CIRCUIT (EX)					1	20	0.0		20	1					EXISTING CIRCUIT (EX)		2
3		HEATER (EX)					2	30		0.0	20	1					EXISTING CIRCUIT (EX)		4
5									0.0		20	1					EXISTING CIRCUIT (EX)		6
7	2.5	PLAYGROUND POLE LIGHTING (N)					1	20		2.5	20	1					EXISTING CIRCUIT (EX)		8
9	0.9	PLAYGROUND POLE RECEPT. (N)					1	20	0.9		20	1					EXISTING CIRCUIT (EX)		10
11	0.5	MANIFOLD, HOTBOX, METER PIT					1	20		0.5	20	1					SPACE		12
13		SPACE							0.0								SPACE		14
15		EXISTING CIRCUIT (EX)					2	50		0.0	30	2					EXISTING CIRCUIT (EX)		16
17									0.0										18
19		SPACE								0.0							SPACE		20

VOLTS: 240/120 — 1 — 3 WIRE — MOUNTING: SURFACE
BUS: 100 — X GROUND BAR — ENCLOSURE: NEMA 1
MLO 100 AMPS — MINIMUM AIC: MATCH EXISTING

		PHASE A:	7.5	AMPS	0.9 KVA
1	(EX) DENOTES EXISTING CIRCUIT TO REMAIN. MAINTAIN EXISTING WIRING.	PHASE B:	25.0	AMPS	3.0 KVA
2	(N) DENOTES NEW CIRCUIT. PROVIDE NEW CIRCUIT BREAKER AND FEEDER AS INDICATED.	TOTAL:	16	AMPS	3.9 KVA

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMP DATA NO.	LAMP DATA TYPE	LENS	MOUNTING	MANUFACTURER & CATALOG NUMBER	VOLTAGE	INPUT WATTS	TOTAL LUMENS
P1	DISCERA 4 LED AREA LUMINAIRE FIXTURE, S35 16' POLE	1	P1 LED 4000K	TEMPERED AND SCREENED GLASS	S35 POLE 16' ABOVE GRADE	SELUX CORPORATION LIGHT: DSCLS-R3-1-L50-40 -18-XX-120-PC POLE: S35 16 BK BC1 REC	120V	49.8 WATTS	3978 LUMENS

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