

# HADLEY PARK IMPROVEMENTS PROJECT

1650 MIDDLESEX STREET, LOWELL, MA



SEALS	CERTIFYING PROFESSIONALS	DRAWINGS
	CHERI RUANE, FASLA WESTON & SAMPSON, INC. 85 DEVONSHIRE STREET, 3RD FLOOR BOSTON, MA 02109	SHEETS L001-L600
	JAMES PEARSON, P.E. WESTON & SAMPSON, INC. 55 WALKERS BROOK DRIVE, SUITE 100 READING, MA 01867	SHEET C100

OWNER:  
CITY OF LOWELL  
DEPARTMENT OF PLANNING AND  
DEVELOPMENT  
50 ARCAND DRIVE  
LOWELL, MA 01852

LANDSCAPE ARCHITECT/ENGINEER:  
WESTON & SAMPSON ENGINEERS, INC  
85 DEVONSHIRE STREET, 3RD FLOOR  
BOSTON, MA 02109  
SURVEYOR:  
PRECISION LAND SURVEYING, INC.  
32 TURNPIKE ROAD  
SOUTHBOROUGH, MA 01772



-FOR ILLUSTRATIVE PURPOSES ONLY-

**BID DOCUMENTS**

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SITE  
LOCATION

LOCATION MAP  
NOT SCALE

**SEPTEMBER 26, 2024**

Prepared By

**Weston & Sampson**<sup>SM</sup>

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978.532.1900 800.SAMPSON  
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GENERAL NOTES

- 1. SITE SURVEY AND TOPOGRAPHICAL INFORMATION BASED ON THE GROUND SURVEY PERFORMED BY PRECISION LAND SURVEYING, INC. MAY 10, 2024.
2. PROPERTY LINES ARE APPROXIMATELY LOCATIONS AS PROVIDED FROM THE CITY OF LOWELL GIS DEPARTMENT ON 8/27/2024.
3. ALL BIDDERS ARE REQUIRED TO INSPECT THE PROJECT SITE IN ITS ENTIRETY PRIOR TO SUBMITTING THEIR BID, AND BECOME FAMILIAR WITH ALL CONDITIONS AS THEY MAY AFFECT THEIR BID.
4. LOCATIONS OF ANY UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY.
5. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE OWNER'S REPRESENTATIVE FOR RESOLUTION OF THE CONFLICT.
6. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY OWNER AT NO ADDITIONAL COST TO THE CITY OF LOWELL.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE THE EXTENT OF EXCAVATION AND DEMOLITION REQUIRED TO RECEIVE SITE IMPROVEMENTS.
8. ANY DISCREPANCIES OR CONFLICTS BETWEEN THE DRAWINGS AND EXISTING CONDITIONS, EXISTING CONDITIONS TO REMAIN, TEMPORARY CONSTRUCTION, PERMANENT CONSTRUCTION AND WORK OF ADJACENT CONTRACTS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER BEFORE PROCEEDING.
9. ANY ALTERATIONS TO THESE DRAWINGS MADE IN THE FIELD DURING CONSTRUCTION SHALL BE RECORDED BY THE GENERAL CONTRACTOR ON "AS-BUILT" DRAWINGS.
10. ALL AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS OUTSIDE THE PROJECT LIMITS, SHALL BE RESTORED TO THE ORIGINAL CONDITION BY THE CONTRACTOR AT NO ADDITIONAL COST AND TO THE SATISFACTION OF THE OWNER.
11. ALL WORK SHOWN ON THE PLANS AS BOLD SHALL REPRESENT PROPOSED WORK. THE TERM "PROPOSED (PROP)" INDICATES WORK TO BE CONSTRUCTED USING NEW MATERIALS OR, WHERE APPLICABLE, RE-USING EXISTING MATERIALS IDENTIFIED AS 'REMOVE AND SALVAGE (R&S)', OR REMOVE, RELOCATE, SALVAGE, (R,R&S).
12. ALL KNOWN EXISTING STATE, COUNTY AND CITY LOCATION LINES AND PRIVATE PROPERTY LINES HAVE BEEN ESTABLISHED FROM AVAILABLE INFORMATION AND ARE INDICATED ON THE PLANS.
13. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT HIS EMPLOYEES, AS WELL AS PUBLIC USERS FROM INJURY DURING THE ENTIRE CONSTRUCTION PERIOD USING ALL NECESSARY SAFEGUARDS, INCLUDING BUT NOT LIMITED TO, THE ERECTION OF TEMPORARY WALKS, STRUCTURES, PROTECTIVE BARRIERS, COVERING, OR FENCES AS NEEDED.
14. THE CONTRACTOR SHALL SUPPLY THE OWNER WITH THE NAME OF THE OSHA "COMPETENT PERSON" PRIOR TO CONSTRUCTION.
15. FILLING OF EXCAVATED AREAS SHALL NOT TAKE PLACE WITHOUT THE PRESENCE OR PERMISSION OF THE OWNER.
16. EXISTING TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO STOCKPILING OF MATERIAL, EQUIPMENT OR VEHICULAR TRAFFIC SHALL BE ALLOWED WITHIN THE DRIP LINE OF TREES TO REMAIN.
17. TREES AND SHRUBS WITHIN THE LIMITS OF WORK SHALL BE REMOVED ONLY UPON THE APPROVAL OF THE OWNER'S REPRESENTATIVE OR AS NOTED ON THE PLANS.
18. NO FILLING SHALL OCCUR AROUND EXISTING TREES TO REMAIN WITHOUT THE APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
19. THE CONTRACTOR SHALL REMOVE ALL SURFACE VEGETATION PRIOR TO GRADING THE SITE. TREES AND STUMPS SHALL BE REMOVED AND DISPOSED COMPLETE BY CONTRACTOR. TEMPORARY EROSION CONTROL MEASURES SHOWN ON THE DRAWINGS INCLUDING SILT FENCE, STRAW WATTLE, OR SILT SOCKS SHALL BE INSTALLED BY THE CONTRACTOR.
20. ALL UNSUITABLE UNCONTAMINATED EXCESS SOIL FROM CONSTRUCTION ACTIVITIES SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CITY.
21. CONTRACTOR IS RESPONSIBLE FOR STAKING CONSTRUCTION BASELINES IN FIELD WITH A MASSACHUSETTS REGISTERED PROFESSIONAL LAND SURVEYOR. NO CONSTRUCTION WILL BE PERFORMED WITHOUT THE PROPOSED BASELINES AND LAYOUTS APPROVED BY THE OWNER'S REPRESENTATIVE.
22. NO FILL SHALL CONTAIN HAZARDOUS MATERIALS. IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
23. CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AROUND PERIMETER OF WORK AREA (LIMIT OF WORK), FENCE SHALL NOT IMPEDE TRAVEL WAYS.
24. ANY QUANTITIES SHOWN ON PLANS ARE FOR COMPARATIVE BIDDING PURPOSES ONLY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE PROJECT SITE TO VERIFY ALL QUANTITIES AND CONDITIONS PRIOR TO SUBMITTING BID.
25. ALL EXISTING DRAINAGE FACILITIES TO REMAIN SHALL BE MAINTAINED FREE OF DEBRIS, SOIL, SEDIMENT, AND FOREIGN MATERIAL AND OPERATIONAL THROUGHOUT THE LIFE OF THE CONTRACT.
26. CONTRACTOR'S STAGING AREA MUST BE WITHIN THE CONTRACT LIMIT LINE AND IN AREAS APPROVED BY OWNER. ANY OTHER AREAS THAT THE CONTRACTOR MAY WISH TO USE FOR STAGING MUST BE COORDINATED WITH THE OWNER.
27. THE CONTRACTOR SHALL KEEP ALL STREETS, PARKING LOTS AND WALKS THAT ARE NOT RESTRICTED FROM PUBLIC USE DURING CONSTRUCTION BROOM CLEAN AT ALL TIMES.
28. CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER.
29. CONTRACTOR SHALL DEWATER AS NECESSARY TO PERFORM THE PROPOSED WORK.
30. THE LIMIT OF WORK SHALL BE DELINEATED IN THE FIELD PRIOR TO THE START OF SITE CLEARING OR CONSTRUCTION AND AGREED UPON WITH THE OWNER'S REPRESENTATIVE.
31. DEEP SUMP CATCH BASINS AND STORMWATER BASIN SHALL BE CLEANED FOLLOWING CONSTRUCTION AND SHALL FOLLOW THE OPERATION AND MAINTENANCE PLAN THEREAFTER.
32. HAULING OF EARTH MATERIALS TO AND FROM THE SITE SHALL BE RESTRICTED TO THE HOURS OF 7 AM TO 5 PM.
33. ANY BOULDERS 3 CY OR SMALLER SHALL BE CONSIDERED UNDOCUMENTED FILL AND SHALL BE DISPOSED OF AT NO ADDITIONAL COST TO THE CITY.
34. WORK ON SATURDAYS SHALL ONLY BE CONDUCTED IF PRIOR WRITTEN PERMISSION IS PROVIDED BY THE CITY.
35. NO TRUCKS LEFT IDLING ON CITY STREETS DURING CONSTRUCTION. CONSTRUCTION TRAFFIC AT NO TIME SHALL IMPEDE FLOW OF RESIDENT TRAFFIC.

EROSION & SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE PUT INTO PLACE PRIOR TO BEGINNING ANY CONSTRUCTION OR DEMOLITION. REFER TO PLANS FOR APPROXIMATE LOCATION OF EROSION AND SEDIMENT CONTROL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTINUAL MAINTENANCE OF ALL CONTROL DEVICES THROUGHOUT THE DURATION OF THE PROJECT.
3. CONTRACTOR SHALL MEET ALL OF THE STATE OF MASSACHUSETTS D.E.P. AND THE CITY OF LOWELL WETLAND ORDINANCE REGULATIONS FOR SEDIMENT AND EROSION CONTROL.
4. EXCAVATED MATERIAL STOCKPILED ON THE SITE SHALL BE SURROUNDED BY A RING OF UNBROKEN SEDIMENT AND EROSION CONTROL FENCE.
5. ALL CATCH BASINS AND DRAIN GRATES WITHIN LIMIT OF CONTRACT SHALL BE PROTECTED WITH SILT SACKS DURING THE ENTIRE DURATION OF CONSTRUCTION.
6. EROSION CONTROL BARRIERS TO BE INSTALLED AT THE TOE OF SLOPES.
7. THE CONTRACTOR SHALL PROVIDE DUST CONTROL FOR CONSTRUCTION OPERATIONS AS APPROVED BY THE OWNER.
8. ALL POINTS OF CONSTRUCTION EGRESS OR INGRESS SHALL BE MAINTAINED TO PREVENT TRACKING OR FLOWING OF SEDIMENT ON TO PUBLIC/PRIVATE ROADS.

DEMOLITION & SITE PREPARATION NOTES

- 1. THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS.
2. THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS.
3. UNLESS SPECIFICALLY NOTED TO BE REMOVED / SALVAGED (R&S), ALL SITE FEATURES CALLED FOR REMOVAL (REM) SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC.
4. ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD.
5. DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN.
6. IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.
7. 'STRIP AND STOCKPILE TOPSOIL' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH.
8. TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
9. THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE.
10. LOAM / TOP SOIL SHALL NOT BE REUSED AS GENERAL FILL.
11. THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN. CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

LAYOUT & MATERIALS NOTES

- 1. REFER TO EXISTING CONDITIONS PLANS FOR SURVEY INFORMATION (SHEET L100).
2. COORDINATE ALL LAYOUT ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES OPERATIONS ENCOMPASSED BY THIS CONTRACT.
3. ALL WORK SHALL BE PERFORMED BY CONTRACTOR UNLESS SPECIFICALLY INDICATED THAT THE WORK WILL BE PERFORMED "BY OTHERS" OR "UNDER SEPARATE CONTRACT".
4. TO FACILITATE LAYOUT OF PROPOSED SITE FEATURES AND FACILITIES, LAYOUT INFORMATION FOR CERTAIN FUTURE WORK, WHICH IS NOT INCLUDED WITHIN THE SCOPE OF THIS CONTRACT HAS BEEN PROVIDED ON THE LAYOUT AND MATERIALS PLAN FOR INFORMATION ONLY.
5. THE LAYOUT OF SITE AMENITIES AND FENCES MUST BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
6. THE LAYOUT OF ALL NEW PATHWAYS / WALKWAYS AND THE GRADING OF ALL SLOPES AND CROSS SLOPES SHALL CONFORM TO THE STATE OF MASSACHUSETTS RULES AND REGULATIONS, AND THE AMERICANS WITH DISABILITIES ACT (ADA), TITLE 3.
7. ALL LAYOUT LINES, OFFSETS, OR REFERENCES TO LOCATING OBJECTS ARE EITHER PARALLEL OR PERPENDICULAR UNLESS OTHERWISE DESIGNATED WITH ANGLE OFFSETS NOTED.
8. ALL PROPOSED SITE FEATURES SHALL BE LAID OUT AND STAKED FOR REVIEW AND APPROVAL BY THE OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF INSTALLATION.
9. ALL PROPOSED PAVEMENTS SHALL MEET THE LINE AND GRADE OF EXISTING ADJACENT PAVEMENT SURFACES.
10. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENT OF ALL PROPOSED FENCES AND GATES.
12. THE DEPTH OF LOAM BORROW FOR ALL PROPOSED LAWN AREAS SHALL BE 6" MINIMUM.
13. SURVEY CONTROL POINTS AND COORDINATES ARE INDICATED ON THE PLANS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT OR CREATE HIS OWN PROTECTED CONTROL POINTS FROM THIS INFORMATION.

GRADING, DRAINAGE AND UTILITY NOTES

- 1. ALL WORK RELATED TO INSTALLATION, RENOVATION OR MODIFICATION OF WATER, DRAINAGE AND/OR SEWER SERVICES SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS OF THE CITY OF LOWELL DPW.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND AND REPORT ANY DISCREPANCIES IMMEDIATELY TO THE OWNER.
3. ALL GRADING IS TO BE SMOOTH AND CONTINUOUS WHERE PROPOSED SURFACES MEET EXISTING SURFACES.
4. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE (1.5% MINIMUM) AWAY FROM ALL BUILDING FOUNDATIONS AND STRUCTURES.
5. CONTRACTOR SHALL ENSURE ALL AREAS ARE PROPERLY PITCHED TO DRAIN, WITH NO SURFACE WATER PONDING OR PUDDLING.
6. MINIMUM CROSS SLOPE ON ALL WALKWAYS WILL BE 1% OR 1.5% TO PROVIDE POSITIVE DRAINAGE.
7. ALL UTILITY GRATES, COVERS OR OTHER SURFACE ELEMENTS INTENDED TO BE EXPOSED AT GRADE SHALL BE FLUSH WITH THE ADJACENT FINISHED GRADE AND ADJUSTED TO PROVIDE A SMOOTH TRANSITION AT ALL EDGES.
8. THE CONTRACTOR SHALL SET SUBGRADE ELEVATIONS TO ALLOW FOR POSITIVE DRAINAGE AND PROVIDE EROSION CONTROL DEVICES, STRUCTURES, MATERIALS AND CONSTRUCTION METHODS TO DIRECT SILT MIGRATION AWAY FROM DRAINAGE AND OTHER UTILITY SYSTEMS.
9. EXCAVATION REQUIRED WITHIN PROXIMITY OF KNOWN EXISTING UTILITY LINES SHALL BE DONE BY HAND.
10. WHERE NEW EARTHWORK MEETS EXISTING EARTHWORK, CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDS AT ALL TOP AND BOTTOM OF SLOPES.
11. WHERE A SPECIFIC LIMIT OF WORK LINE IS NOT OBVIOUS OR IMPLIED, BLEND GRADES TO EXISTING CONDITIONS WITHIN 5 FEET OF PROPOSED CONTOURS.
12. RESTORE ALL DISTURBED AREAS AND LIMITS OF ALL REMOVALS TO LOAM AND SEED (L&S) UNLESS OTHERWISE NOTED.
13. SEE EARTHWORK SECTION OF SPECIFICATIONS FOR SPECIFIC EXCAVATION AND FILLING PROCEDURES.
14. FOR STRUCTURE REMODELING (REMOD), CONSTRUCTION METHODS SHALL FOLLOW NEW HAMPSHIRE DOT STANDARD SPEC. LATEST EDITION.
15. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS, STRUCTURE RIMS AND INVERTS, ALONG WITH PIPE SIZES AND CONDITIONS PRIOR TO CONSTRUCTION.

PLANTING NOTES

- 1. COORDINATE ALL PLANTING ACTIVITIES WITH THE SCOPE OF WORK CALLED FOR BY DEMOLITION, GRADING AND UTILITIES PLANS ENCOMPASSED BY THIS CONTRACT.
2. ALL PLANT MATERIAL WILL NEED TO BE TAGGED AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
3. THE CONTRACTOR SHALL IDENTIFY PROPOSED TREE LOCATIONS PRIOR TO PLACEMENT WITH A STAKE AND COORDINATE WITH THE OWNER'S REPRESENTATIVE TO MAKE ANY NECESSARY ADJUSTMENTS BEFORE ACTUAL PLACEMENT.
4. ALL EXISTING TREES TO REMAIN AND BE PROTECTED ARE TO BE PRUNED FOR CROWN CLEANING AND DEADWOOD REMOVAL.
5. PLANT LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE ONLY AND SHALL BE APPROVED IN THE FIELD BY THE OWNER'S REPRESENTATIVE PRIOR TO INSTALLATION.
6. GROUND COVER ARE TO BE EQUALLY SPACED WITHIN PLANTING BED AREA. REFER TO PLANT SCHEDULE FOR SPACING.

ABBREVIATIONS

Table with 2 columns: Abbreviation and Full Name. Includes entries like A.A.A. ABANDON, ADJ. ADJUST, B.M. BENCH MARK, BIT. CONC. BITUMINOUS CONCRETE, BVCL. BLACK VINYL CHAIN LINK, CEM. CONC. CEMENT CONCRETE, CLF. CHAIN LINK FENCE, C.E. CONNECT TO EXISTING, E.C. ELECTRICAL CONTRACTOR, EOP. EDGE OF PAVEMENT, EQ. EQUIPMENT, EXIST. (OR EX.) EXISTING, F.L. (OR F) FLOW LINE, FDN. FOUNDATION, FF. FINISHED FLOOR, G.C. GENERAL CONTRACTOR, GRAN.CURB. GRANITE CURB, H.C. HANDICAP, HMA. HOT MIX ASPHALT, L.O.W. LIMIT OF WORK, MB. MAIL BOX, NIC. NOT IN CONTRACT, P. PROPERTY LINE, P.C. PLUMBING CONTRACTOR, PROP. PROPOSED, PROT. PROTECT, PVMT. PAVEMENT, R&D. REMOVE AND DISPOSE, R&S. REMOVE AND SALVAGE, R.R&S. REMOVE, RELOCATED AND SALVAGE, R.O.W. RIGHT-OF-WAY, REM. REMOVE, RET. RETAIN, TEMP. TEMPORARY, TYP. TYPICAL, VIF. VERIFY IN FIELD, WCR. WHEELCHAIR RAMP.

UTILITIES

Table with 2 columns: Abbreviation and Full Name. Includes entries like ACCM PIPE. ASPHALT COATED CORRUGATED METAL PIPE, C.I.T. CHANGE IN TYPE, CB. CATCH BASIN, CBCI. CATCH BASIN W/ CURB INLET, C.I. CURB INLET, CI. CAST IRON, CIP. CAST-IN-PLACE, CMP. CORRUGATED METAL PIPE, CO. CLEANOUT, CU. CONNECTION UNKNOWN, DI. DRAIN INLET, DMH. DRAIN MANHOLE, DS. DOWN SPOUT, F&C. FRAME AND COVER, F&G. FRAME AND GRATE, GI. GUTTER INLET, GICI. GUTTER INLET W/ CURB INLET, GV. GATE VALVE, GW. GARAGE WASTE, HOPE. HIGH DENSITY POLYETHYLENE PIPE, HH. HANDHOLE, HYD. HYDRANT, INV.ELEV. INVERT ELEVATION, LB. LEACHING BASIN, LC. LEACHING CHAMBER, LG. LEACHING GALLEY, LP. LIGHT POLE, OCS. OUTLET CONTROL STRUCTURE, OGT. OIL AND GRIT TRAP, OHW. OVERHEAD WIRE, PVC. POLYVINYL CHLORIDE, RCP. REINFORCED CONCRETE PIPE, SMH. SEWER MANHOLE, SWTU. STORM WATER TREATMENT UNIT, UP. UTILITY POLE, UPLP. UTILITY POLE WITH LIGHT, VC. VITRIFIED CLAY PIPE, WG. WATER GATE.

ALIGNMENT/GRADING

Table with 2 columns: Abbreviation and Full Name. Includes entries like BC. BOTTOM OF CURB, BW. BOTTOM OF WALL, CC. CENTER OF CURVE, ELEV. ELEVATION, H.P. HIGH POINT, L.P. LOW POINT, TC. TOP OF CURB, TW. TOP OF WALL.

Project: CITY OF LOWELL. Logo of the City of Lowell. HADLEY PARK. 1650 MIDDLESEX STREET, LOWELL, MA.

Weston & Sampson logo. Weston & Sampson Engineers, Inc. 85 Devonshire Street, 3rd Floor Boston, MA 02109. 978.532.1900 800.SAMPSON. www.westonandsampson.com

Table with 3 columns: No., Date, Description. Revisions section.

Table with 3 columns: No., Date, Description. COA section.

Seal: Professional Engineer Seal for Massachusetts, No. 1220, dated 08/20/2024.

BID DOCUMENTS

Table with 2 columns: Field and Value. Includes Date: SEPTEMBER 26, 2024, Drawn By: YW, KH, EB, Reviewed By: JLCR, Approved By: CR, W&S Project No.: ENG24-0401, W&S File No.: ---.

GENERAL NOTES

Sheet Number: L001

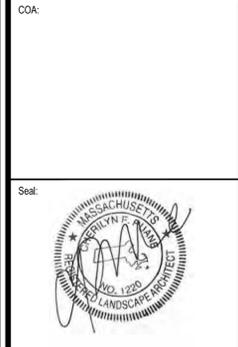




Consultants:

No.	Date	Description

COA:



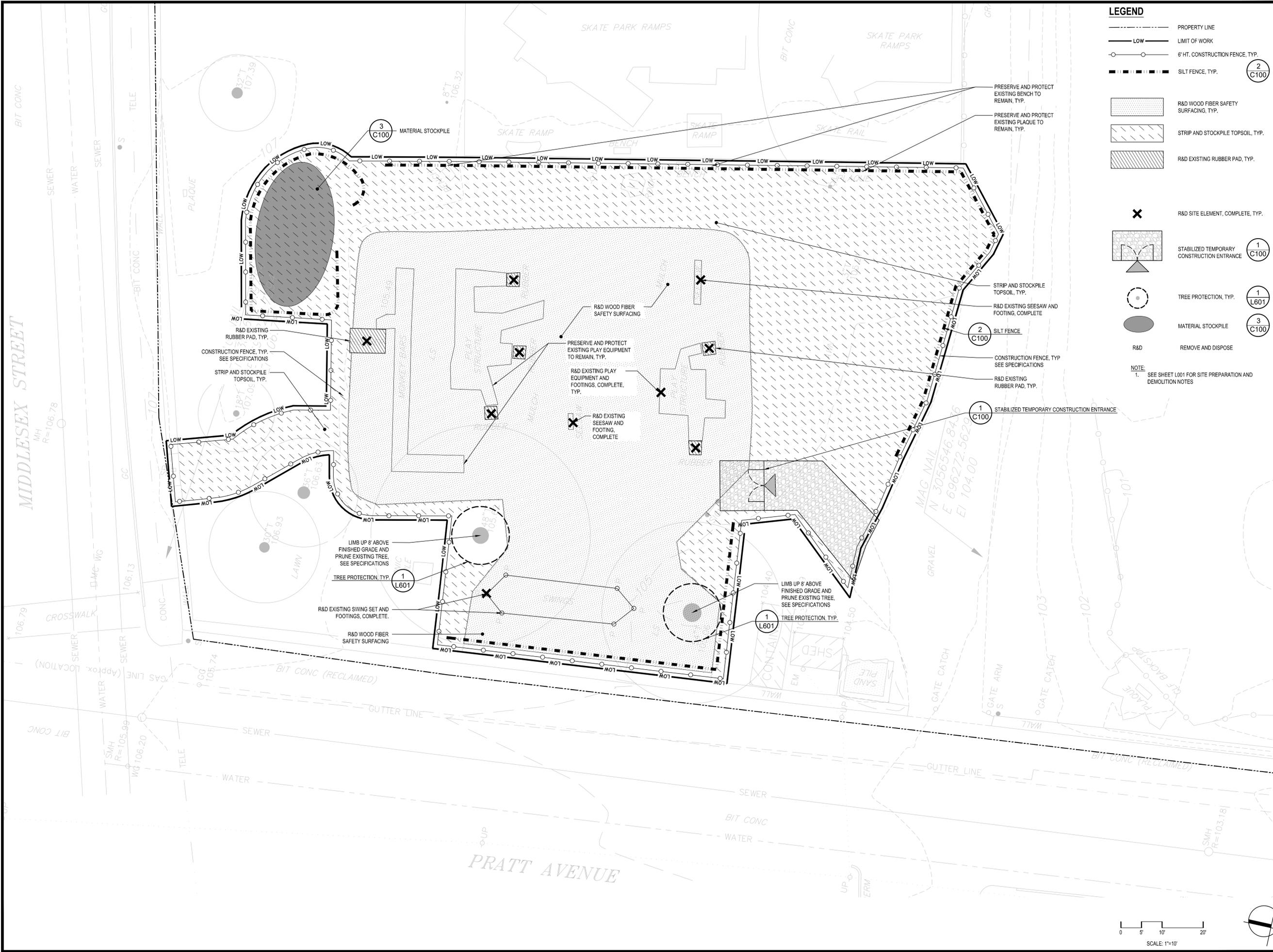
Issued For: **BID DOCUMENTS**

Scale: 1"=10'

Date: SEPTEMBER 26, 2024  
 Drawn By: YW, KH, EB  
 Reviewed By: JLCR  
 Approved By: CR  
 W&S Project No.: ENG24-0401  
 W&S File No.: ---

Drawing Title: **EXISTING CONDITIONS PLAN**

Sheet Number: **L100**



**LEGEND**

- PROPERTY LINE
- LIMIT OF WORK
- 6' HT. CONSTRUCTION FENCE, TYP.
- SILT FENCE, TYP.
- R&D WOOD FIBER SAFETY SURFACING, TYP.
- STRIP AND STOCKPILE TOPSOIL, TYP.
- R&D EXISTING RUBBER PAD, TYP.
- R&D SITE ELEMENT, COMPLETE, TYP.
- STABILIZED TEMPORARY CONSTRUCTION ENTRANCE
- TREE PROTECTION, TYP.
- MATERIAL STOCKPILE
- R&D REMOVE AND DISPOSE

NOTE:  
1. SEE SHEET L001 FOR SITE PREPARATION AND DEMOLITION NOTES

Project: CITY OF LOWELL

HADLEY PARK  
1650 MIDDLESEX STREET,  
LOWELL, MA

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Revisions:

No.	Date	Description

COA:

Seal:

Issued For:

**BID DOCUMENTS**

Scale: 1"=10'

Date: SEPTEMBER 26, 2024

Drawn By: YW, KH, EB

Reviewed By: JLCR

Approved By: CR

W&S Project No.: ENC24-0401

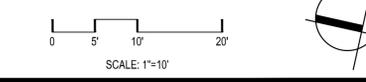
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Drawing Title:

**SITE PREPARATION  
DEMOLITION EROSION  
& SEDIMENT PLAN**

Sheet Number:

**L200**



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Consultants:

No.	Date	Description

COA:

Seal:



Issued For:

**BID DOCUMENTS**

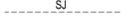
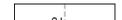
Scale: 1"=10'

Date: SEPTEMBER 26, 2024  
 Drawn By: YW, EW, YZ  
 Reviewed By: JLCR  
 Approved By: CR  
 W&S Project No.: ENG24-0401  
 W&S File No.: ---

Drawing Title:  
**MATERIALS AND PLANTING PLAN**

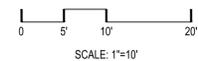
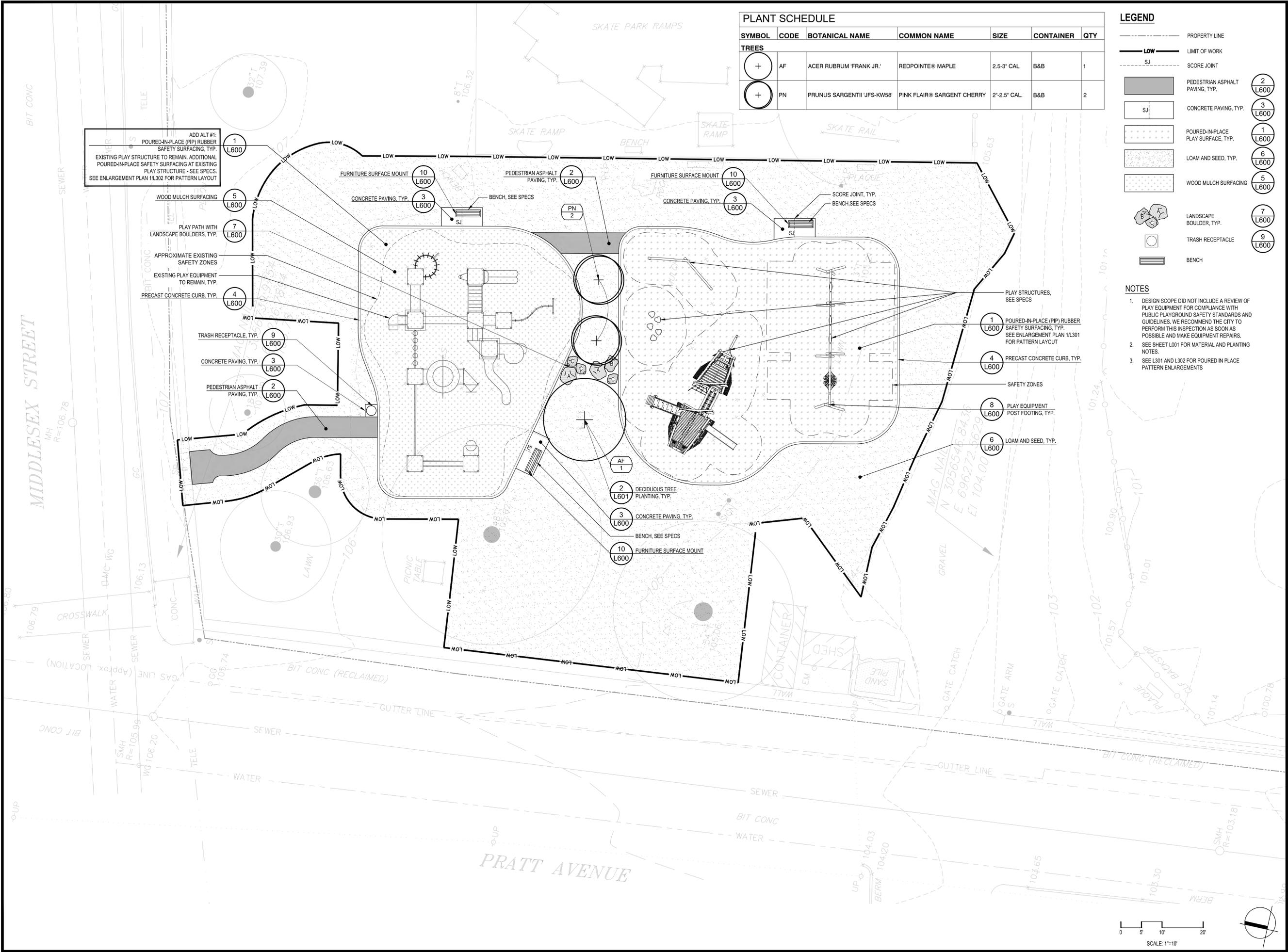
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**L300**

SYMBOL	CODE	BOTANICAL NAME	COMMON NAME	SIZE	CONTAINER	QTY
<b>TREES</b>						
	AF	ACER RUBRUM 'FRANK JR.'	REDPOINTE® MAPLE	2.5-3" CAL	B&B	1
	PN	PRUNUS SARGENTII 'JFS-KW58'	PINK FLAIR® SARGENT CHERRY	2"-2.5" CAL.	B&B	2

LEGEND	
	PROPERTY LINE
	LOW LIMIT OF WORK
	SCORE JOINT
	PEDESTRIAN ASPHALT PAVING, TYP.
	CONCRETE PAVING, TYP.
	POURED-IN-PLACE PLAY SURFACE, TYP.
	LOAM AND SEED, TYP.
	WOOD MULCH SURFACING
	LANDSCAPE BOULDER, TYP.
	TRASH RECEPTACLE
	BENCH

**NOTES**

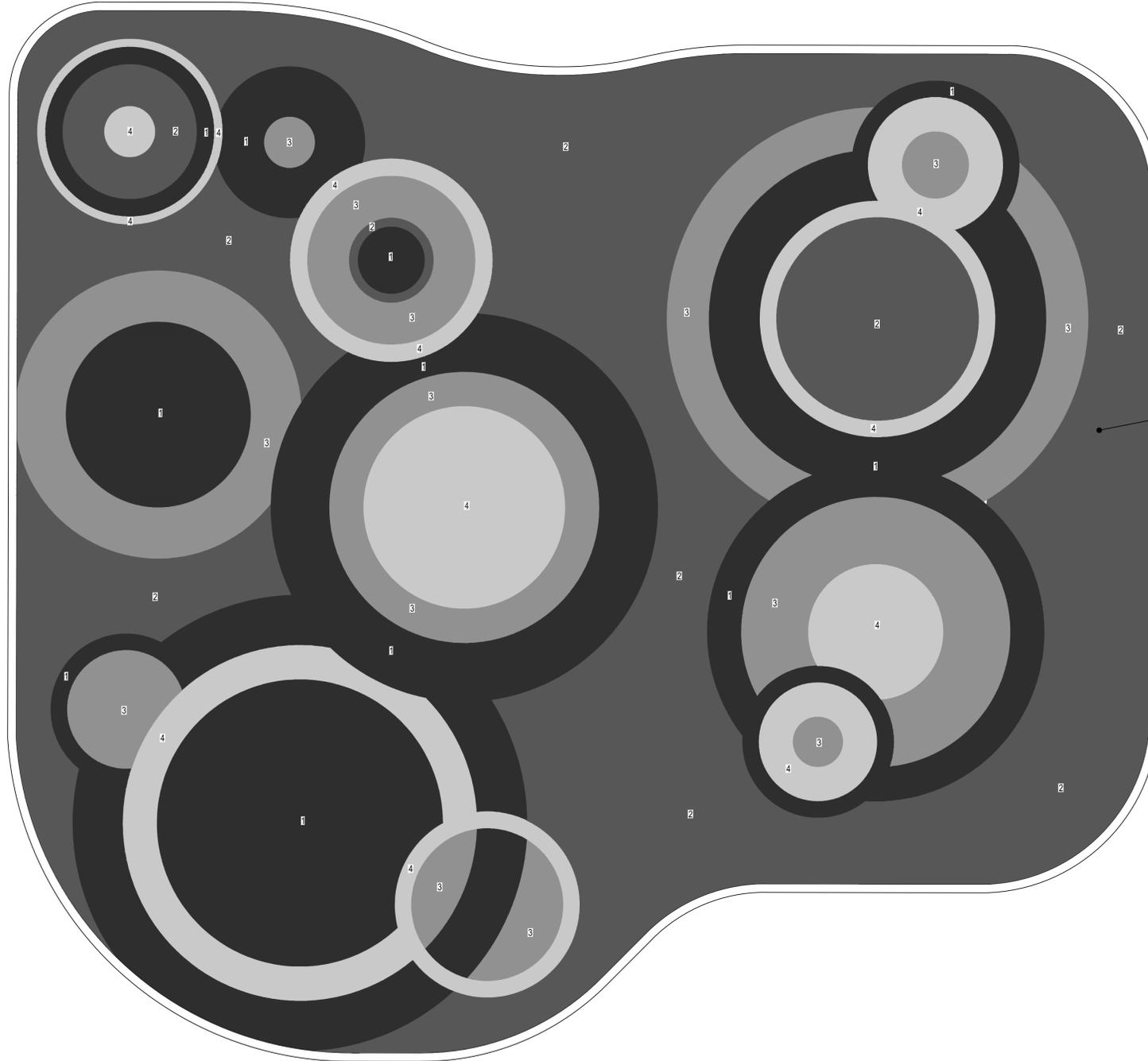
- DESIGN SCOPE DID NOT INCLUDE A REVIEW OF PLAY EQUIPMENT FOR COMPLIANCE WITH PUBLIC PLAYGROUND SAFETY STANDARDS AND GUIDELINES. WE RECOMMEND THE CITY TO PERFORM THIS INSPECTION AS SOON AS POSSIBLE AND MAKE EQUIPMENT REPAIRS.
- SEE SHEET L001 FOR MATERIAL AND PLANTING NOTES.
- SEE L301 AND L302 FOR POURED IN PLACE PATTERN ENLARGEMENTS



P:\Projects\2024\Hadley Park\Drawings\Materials and Planting Plan.dwg

**LEGEND**

- COLOR 1: ROYALE BLUE  
SEE SPECIFICATIONS
- COLOR 2: SKY BLUE  
SEE SPECIFICATIONS
- COLOR 3: TEAL  
SEE SPECIFICATIONS
- COLOR 4: BEIGE  
SEE SPECIFICATIONS



1  
L600  
POURED-IN-PLACE (PIP) RUBBER  
SAFETY SURFACING, TYP.

4  
L600  
PRECAST CONCRETE CURB, TYP.

1  
POURED-IN-PLACE SAFETY SURFACING PATTERN - BASE BID  
SCALE: 1/2" = 1'-0"

Project: CITY OF LOWELL



HADLEY PARK  
1650 MIDDLESEX STREET,  
LOWELL, MA

**Weston & Sampson**

Weston & Sampson Engineers, Inc.  
85 Devonshire Street, 3rd Floor  
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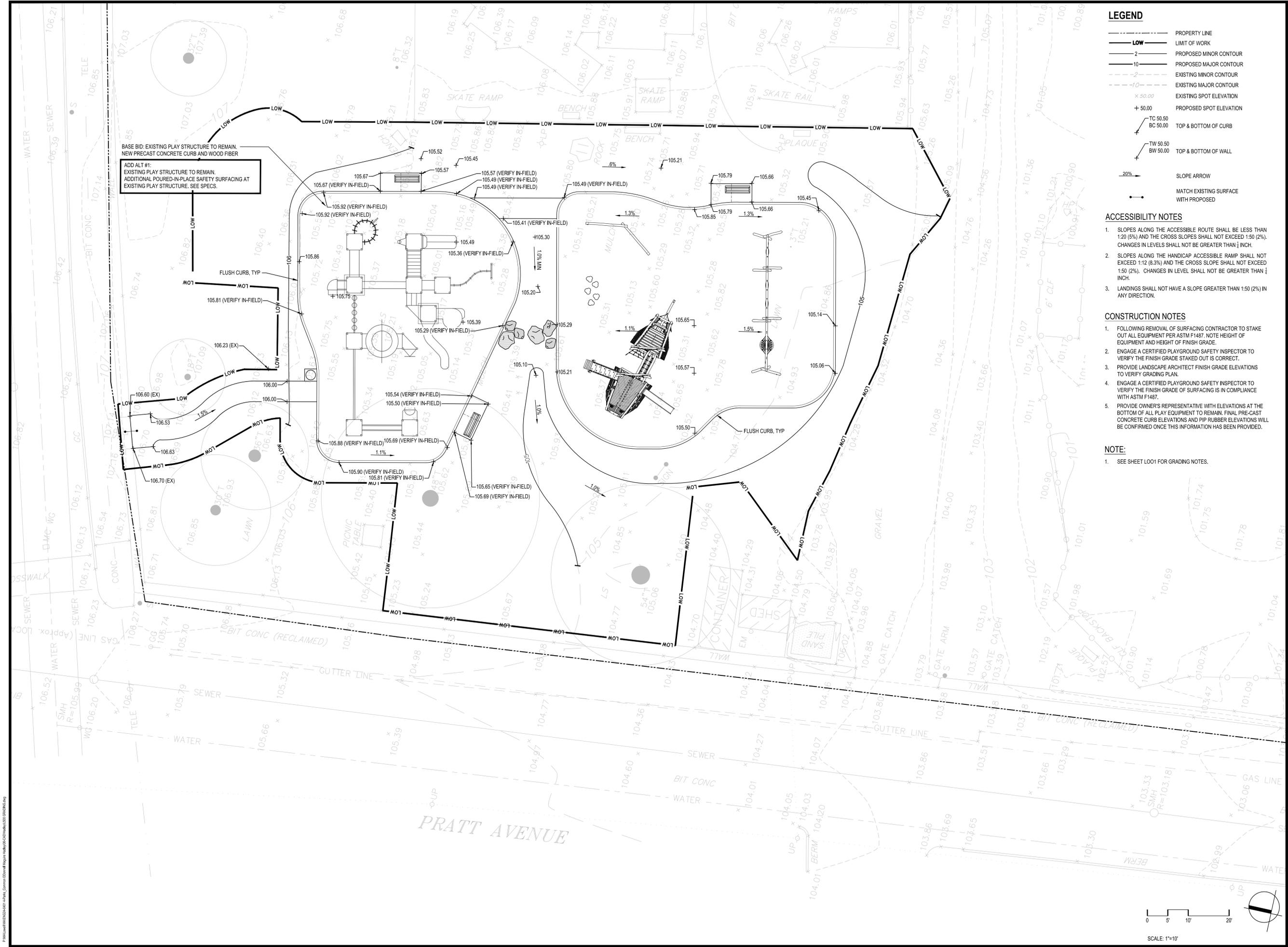
Date: SEPTEMBER 26, 2024  
 Drawn By: YW, EW, YZ  
 Reviewed By: JL/CR  
 Approved By: CR  
 W&S Project No.: ENG24-0401  
 W&S File No.: ---

Drawing Title:  
**SAFETY SURFACE  
PATTERN  
ENLARGEMENT PLAN  
BASE BID**

Sheet Number:  
**L301**







BASE BID: EXISTING PLAY STRUCTURE TO REMAIN.  
NEW PRECAST CONCRETE CURB AND WOOD FIBER

ADD ALT #1:  
EXISTING PLAY STRUCTURE TO REMAIN.  
ADDITIONAL POURED-IN-PLACE SAFETY SURFACING AT  
EXISTING PLAY STRUCTURE. SEE SPECS.

**LEGEND**

- PROPERTY LINE
- LIMIT OF WORK
- 2 --- PROPOSED MINOR CONTOUR
- 10 --- PROPOSED MAJOR CONTOUR
- - - EXISTING MINOR CONTOUR
- - - EXISTING MAJOR CONTOUR
- x 50.00 EXISTING SPOT ELEVATION
- + 50.00 PROPOSED SPOT ELEVATION
- TC 50.50  
BC 50.00 TOP & BOTTOM OF CURB
- TW 50.50  
BW 50.00 TOP & BOTTOM OF WALL
- 20% SLOPE ARROW
- MATCH EXISTING SURFACE  
WITH PROPOSED

**ACCESSIBILITY NOTES**

- SLOPES ALONG THE ACCESSIBLE ROUTE SHALL BE LESS THAN 1:20 (5%) AND THE CROSS SLOPES SHALL NOT EXCEED 1:50 (2%). CHANGES IN LEVELS SHALL NOT BE GREATER THAN 1/4 INCH.
- SLOPES ALONG THE HANDICAP ACCESSIBLE RAMP SHALL NOT EXCEED 1:12 (8.3%) AND THE CROSS SLOPE SHALL NOT EXCEED 1:50 (2%). CHANGES IN LEVEL SHALL NOT BE GREATER THAN 1/4 INCH.
- LANDINGS SHALL NOT HAVE A SLOPE GREATER THAN 1:50 (2%) IN ANY DIRECTION.

**CONSTRUCTION NOTES**

- FOLLOWING REMOVAL OF SURFACING CONTRACTOR TO STAKE OUT ALL EQUIPMENT PER ASTM F1487, NOTE HEIGHT OF EQUIPMENT AND HEIGHT OF FINISH GRADE.
- ENGAGE A CERTIFIED PLAYGROUND SAFETY INSPECTOR TO VERIFY THE FINISH GRADE STAKED OUT IS CORRECT.
- PROVIDE LANDSCAPE ARCHITECT FINISH GRADE ELEVATIONS TO VERIFY GRADING PLAN.
- ENGAGE A CERTIFIED PLAYGROUND SAFETY INSPECTOR TO VERIFY THE FINISH GRADE OF SURFACING IS IN COMPLIANCE WITH ASTM F1487.
- PROVIDE OWNER'S REPRESENTATIVE WITH ELEVATIONS AT THE BOTTOM OF ALL PLAY EQUIPMENT TO REMAIN. FINAL PRE-CAST CONCRETE CURB ELEVATIONS AND PIP RUBBER ELEVATIONS WILL BE CONFIRMED ONCE THIS INFORMATION HAS BEEN PROVIDED.

**NOTE:**

- SEE SHEET L001 FOR GRADING NOTES.

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Scale: 1"=10'

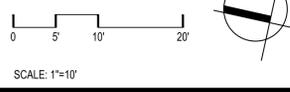
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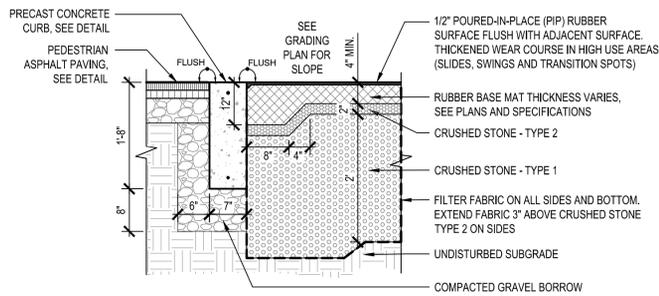
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**GRADING PLAN**

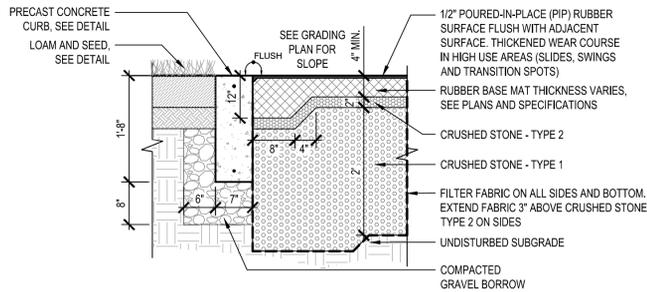
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**L500**





TYPE A: PIP SURFACE AT PEDESTRIAN ASPHALT PAVING

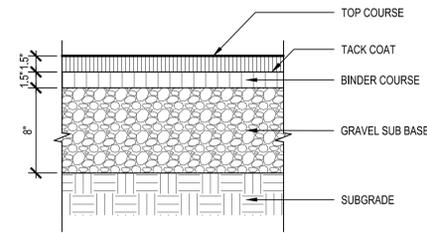


TYPE B: PIP SURFACE AT SEEDED LAWN

- NOTES:
1. INSTALL POURED-IN-PLACE RUBBER SURFACE SYSTEM PER MANUFACTURER'S RECOMMENDATIONS
  2. POURED-IN-PLACE SYSTEM TO MEET ALL APPLICABLE ASTM STANDARDS FOR FALL PROTECTION AND PLAYGROUND SAFETY. COORDINATE WITH PLAYGROUND EQUIPMENT MANUFACTURER TO CONFIRM EQUIPMENT SAFETY REQUIREMENTS.
  3. PREVENT HEAVY EQUIPMENT FROM INCREASING COMPACTION OVER AND ABOVE NATIVE DENSITY.

**1** POURED-IN-PLACE (PIP) RUBBER SAFETY SURFACING

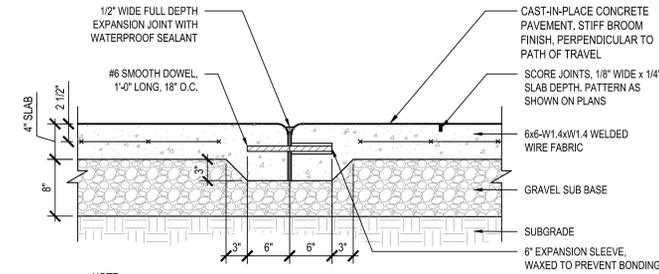
NOT TO SCALE



- NOTE:
1. CONTRACTOR TO SAW-CUT, TACK COAT AND PROVIDE SMOOTH TRANSITION WHERE EXISTING PAVEMENT ABUTS NEW PAVEMENT.
  2. ALL EDGES TO BE NEATLY TAMPED.

**2** PEDESTRIAN ASPHALT PAVING

NOT TO SCALE

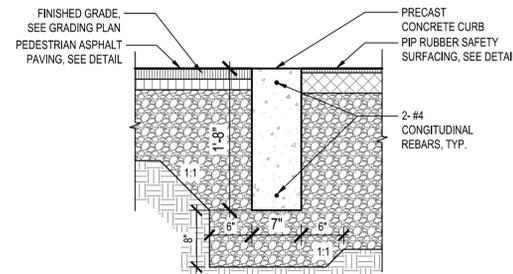


- NOTE:
1. EXPANSION JOINT MAX. 25'-0" O.C., UNLESS SHOWN OTHERWISE.
  2. SCORE JOINTS MAX. 5'-0" O.C., UNLESS SHOWN OTHERWISE.
  3. DOWEL IS TYPICAL AT ALL EXPANSION JOINTS (18" O.C.) WITHIN CONCRETE PAVING, BETWEEN NEW CONCRETE PAVING AND EXISTING CONCRETE, AND BUILDING FOUNDATIONS.
  4. ALL SCORE JOINTS SHALL BE SAW CUT.

**3** CONCRETE PAVING

NOT TO SCALE

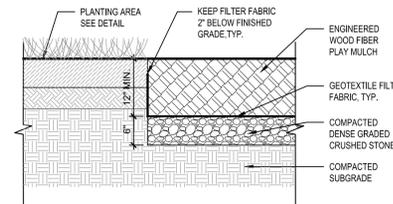
MA-LO-HAD-33



- NOTE:
1. REFER TO DETAIL 1/L600 AND L300 MATERIALS PLAN FOR SPECIFIC ABUTTING MATERIALS AND INSTALLATION DETAILS.

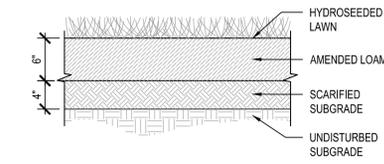
**4** PRECAST CONCRETE CURB

NOT TO SCALE



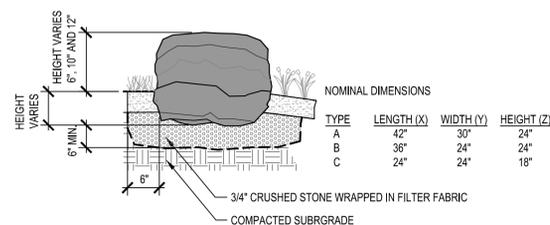
**5** WOOD MULCH SURFACING

NOT TO SCALE



**6** LOAM AND SEED, TYP.

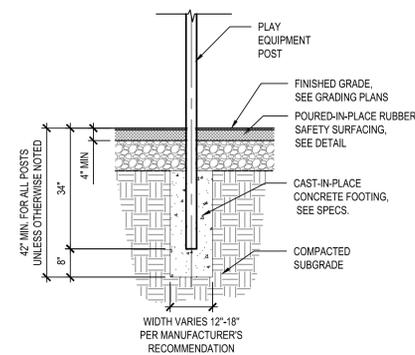
NOT TO SCALE



- NOTES:
1. BOULDERS TO BE SELECTED BY THE LANDSCAPE ARCHITECT FROM A STOCKPILE AT A SINGLE LOCATION.

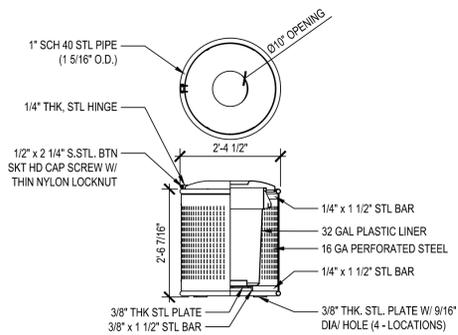
**7** LANDSCAPE BOULDER

NOT TO SCALE



**8** PLAY EQUIPMENT POST FOOTING, TYP.

NOT TO SCALE

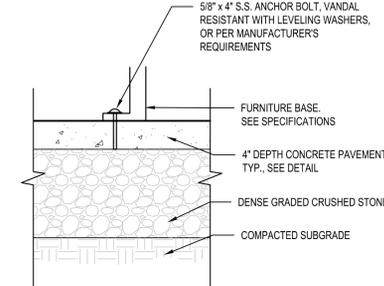


- NOTES:
1. ALL STL MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
  2. 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED

**9** TRASH RECEPTACLE, TYP.

NOT TO SCALE

MA-LO-HAD-95



**10** FURNITURE SURFACE MOUNT

NOT TO SCALE

MA-LO-HAD-45

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**LANDSCAPE DETAILS**

Sheet Number:  
**L600**



