

GENERAL NOTES

1. For detailed requirements refer to the Design and Preservation Manual for Assets within Public Property by the City of Hamilton's Forestry and Horticulture Section.
2. The following design options should be applied to all trees within the Public Realm, and modified to suit site specific conditions.
3. Priority shall be given to Type 1 through 3 in sequential order.

TYPE 1A: SODDED BOULEVARD

- Road curb separation only
- All soil volume contained within sodded boulevard
- Soil cells used only to stabilize road or sidewalk, as needed
- Typically provided for suburban conditions or where sidewalk are being retrofitted

TYPE 1B: OPEN PLANTING BED

- 150mm curb height planter
- All soil volume provided within planting bed
- Decorative planter rail (optional)
- Flowering perennials (optional)
- Irrigation (optional)
- Typically provided for sidewalk retrofits

TYPE 1C: OPEN PLANTING BED

- Maximize surface area to provide soil volume in open planting bed. Outstanding balance of soil provided beneath paved surface using a continuous soil trench
- 150mm curb height planter
- Decorative planter rail (optional)
- Flowering perennials (optional)
- Irrigation (optional)

TYPE 1D: OPEN PLANTING BED

- Maximize surface area to provide soil volume in open planting bed. Outstanding balance of soil provided beneath paved surface using soil cells
- 150mm curb height planter
- Decorative planter rail (optional)
- Flowering perennials (optional)
- Irrigation (optional)

TYPE 2A: RAISED PLANTER

- 300-450mm height raised planter
- All required soil volume provided within raised planter
- Decorative planter rail (optional)
- Flowering perennials (optional)
- Irrigation (optional)

TYPE 2B: RAISED PLANTER

- 300-450mm height raised planter
- All required soil volume provided within raised planter
- Decorative planter rail (optional)
- Flowering perennials (optional)
- Irrigation (optional)
- Stormwater detention cells (provisional)

TYPE 3A: TREE GRATE

- All required soil volume provided beneath paved surface using a continuous soil trench*
- 500mm paved buffer between back of curb and tree grate

**Refer to City approved options for tree grates in the Forestry & Horticulture Design and Preservation Manual for Assets within Public Property.*

TYPE 3B: TREE GRATE

- All required soil volume provided beneath paved surface using a complete soil cell system*
- 500mm paved buffer between back of curb and tree grate

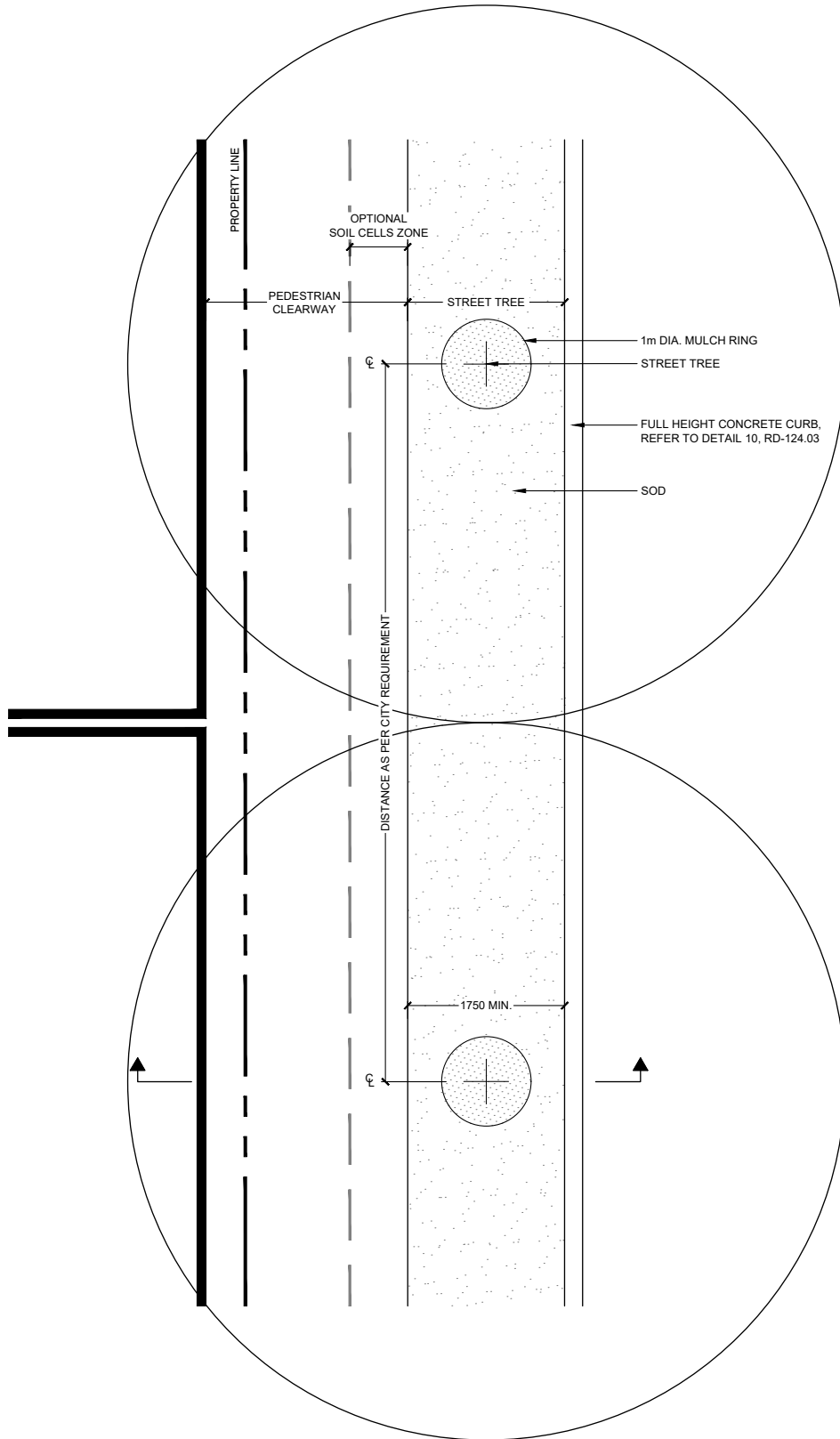
**Refer to City approved options for tree grates and soil cell systems in the Forestry & Horticulture Design and Preservation Manual for Assets within Public Property.*



Hamilton

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HARD SURFACE DETAIL HIERARCHY



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HARD SURFACE DETAIL - TYPE 1A
KEY PLAN

DIMENSIONS ARE SHOWN IN MILLIMETERS
UNLESS OTHERWISE NOTED (N.T.S.)

DATE
NOV 2024

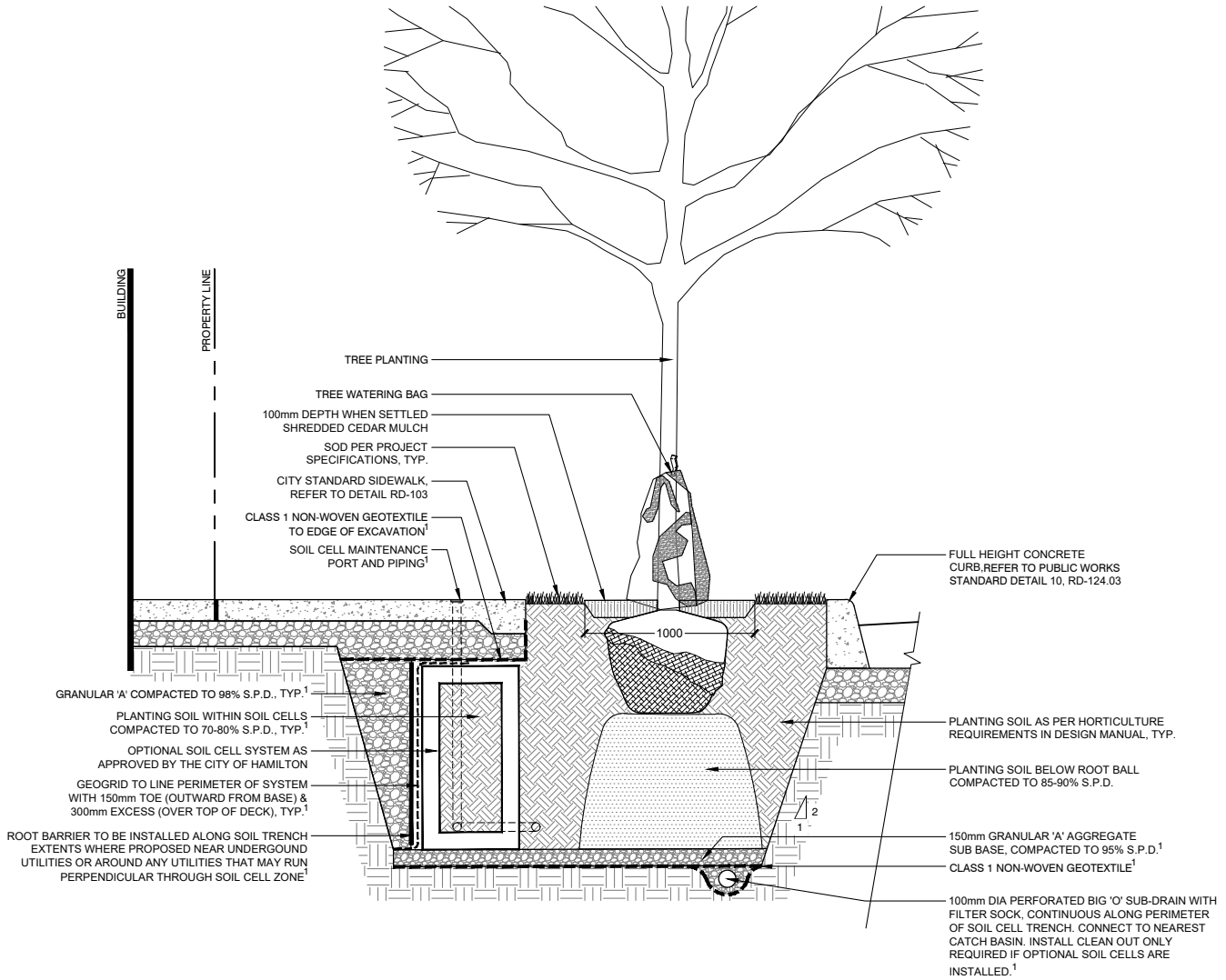
REV NO
1

FORMERLY:

HAMILTON STD No: FH 501

NOTES:

1. SOIL TESTING TO BE COMPLETED AS PER REQUIREMENTS OF THE CITY OF HAMILTON'S FORESTRY AND HORTICULTURE DESIGN AND PRESERVATION MANUAL FOR ASSETS WITHIN PUBLIC PROPERTY.
2. MINIMUM SOIL VOLUMES SHALL BE PROVIDED IN ACCORDANCE WITH THE CITY OF HAMILTON'S FORESTRY AND HORTICULTURE DESIGN AND PRESERVATION MANUAL FOR ASSETS WITHIN PUBLIC PROPERTY.
3. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



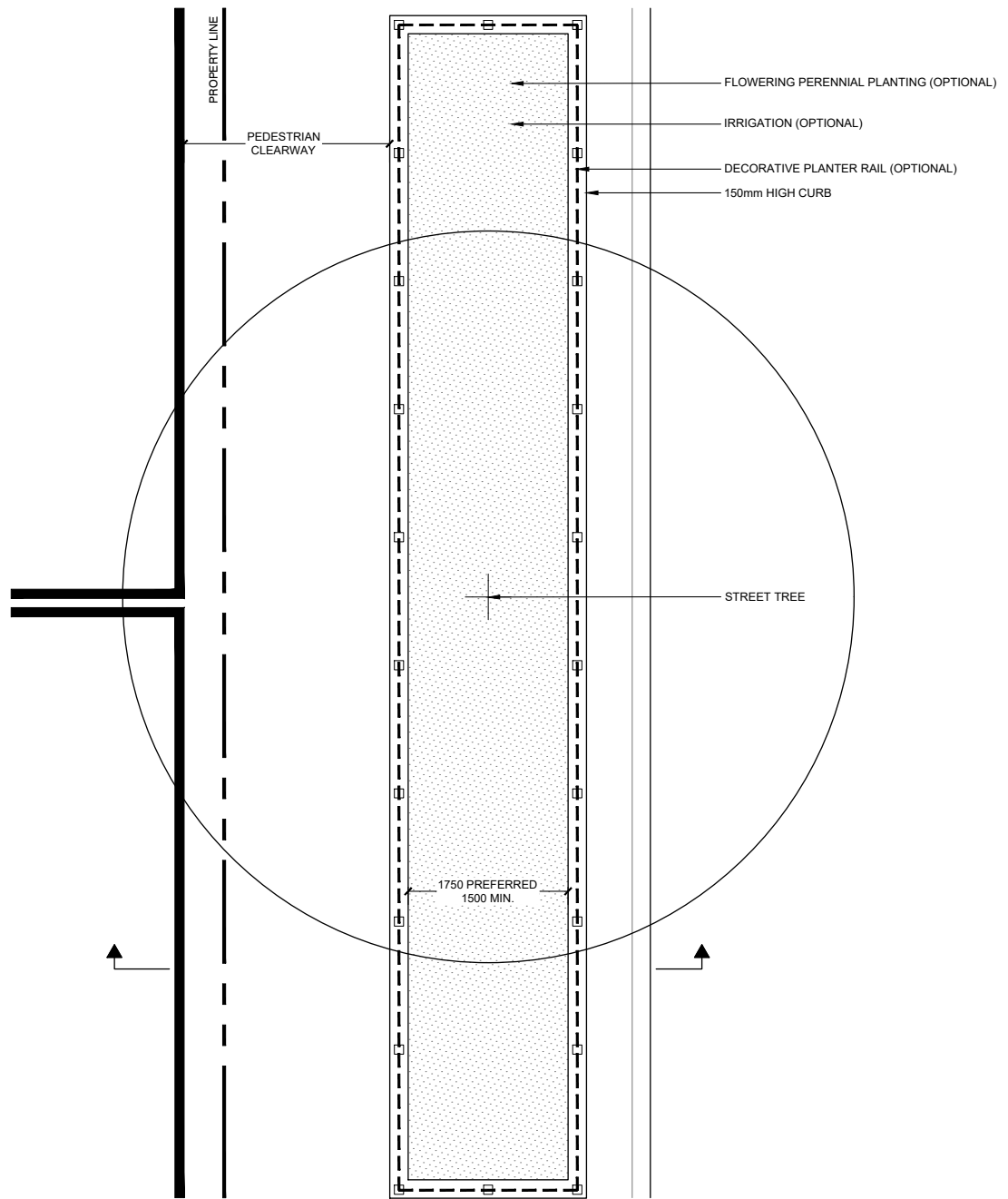
¹ ONLY APPLICABLE WHEN OPTIONAL SOIL CELLS ARE INSTALLED.



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HARD SURFACE DETAIL: TYPE 1A
SODDED BOULEVARD

DIMENSIONS ARE SHOWN IN MILLIMETERS UNLESS OTHERWISE NOTED (N.T.S.)	DATE NOV 2024	REV NO 1	FORMERLY:	HAMILTON STD No: FH 501.01
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Public Works Department

HARD SURFACE DETAIL: TYPE 1B
KEY PLAN

DIMENSIONS ARE SHOWN IN MILLIMETERS
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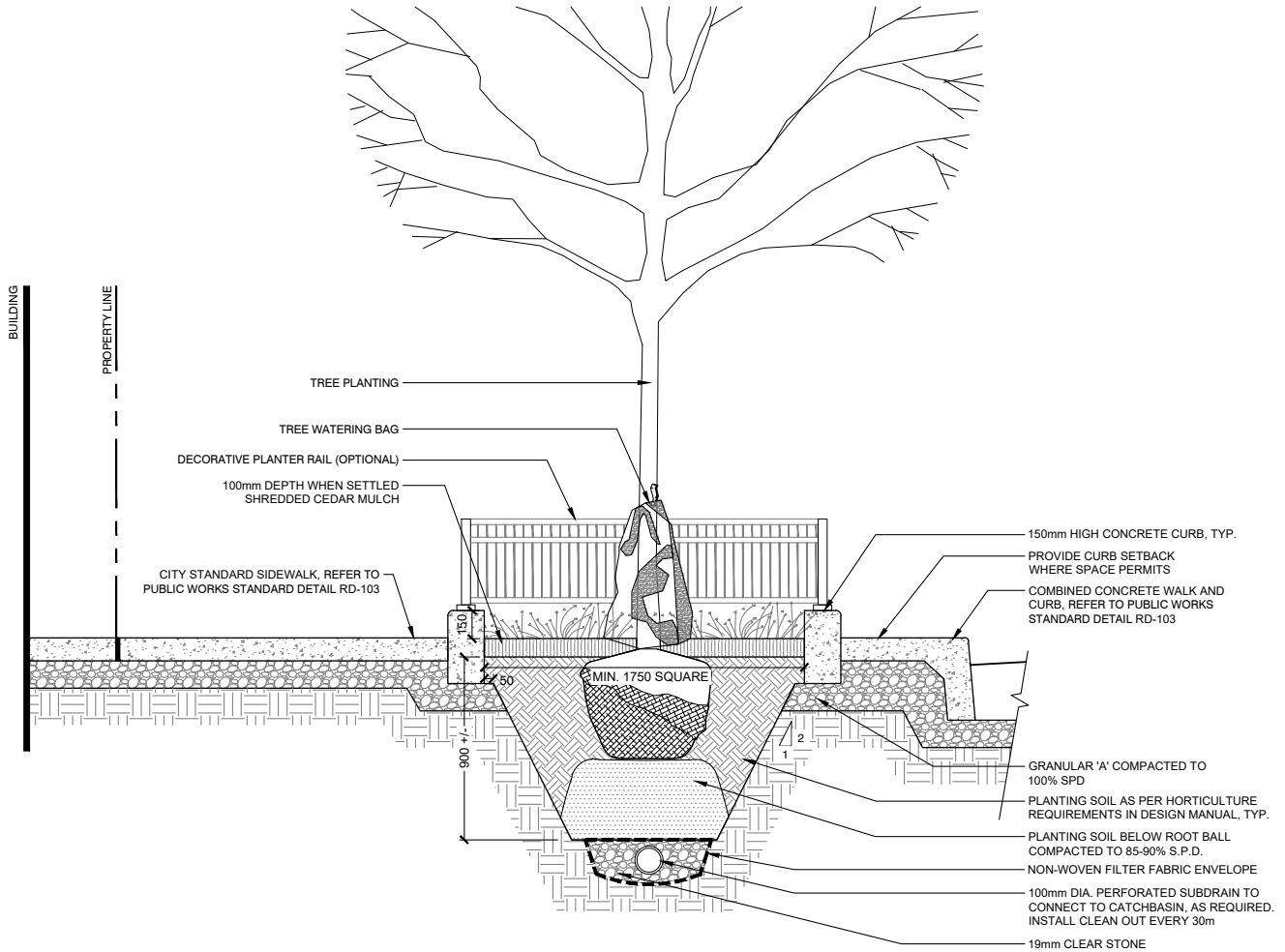
REV NO
1

FORMERLY:

HAMILTON STD No: FH 502

NOTES:

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4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR OPEN PLANTING BEDS.
5. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
6. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



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Public Works Department

HARD SURFACE DETAIL: TYPE 1B
OPEN PLANTING BED

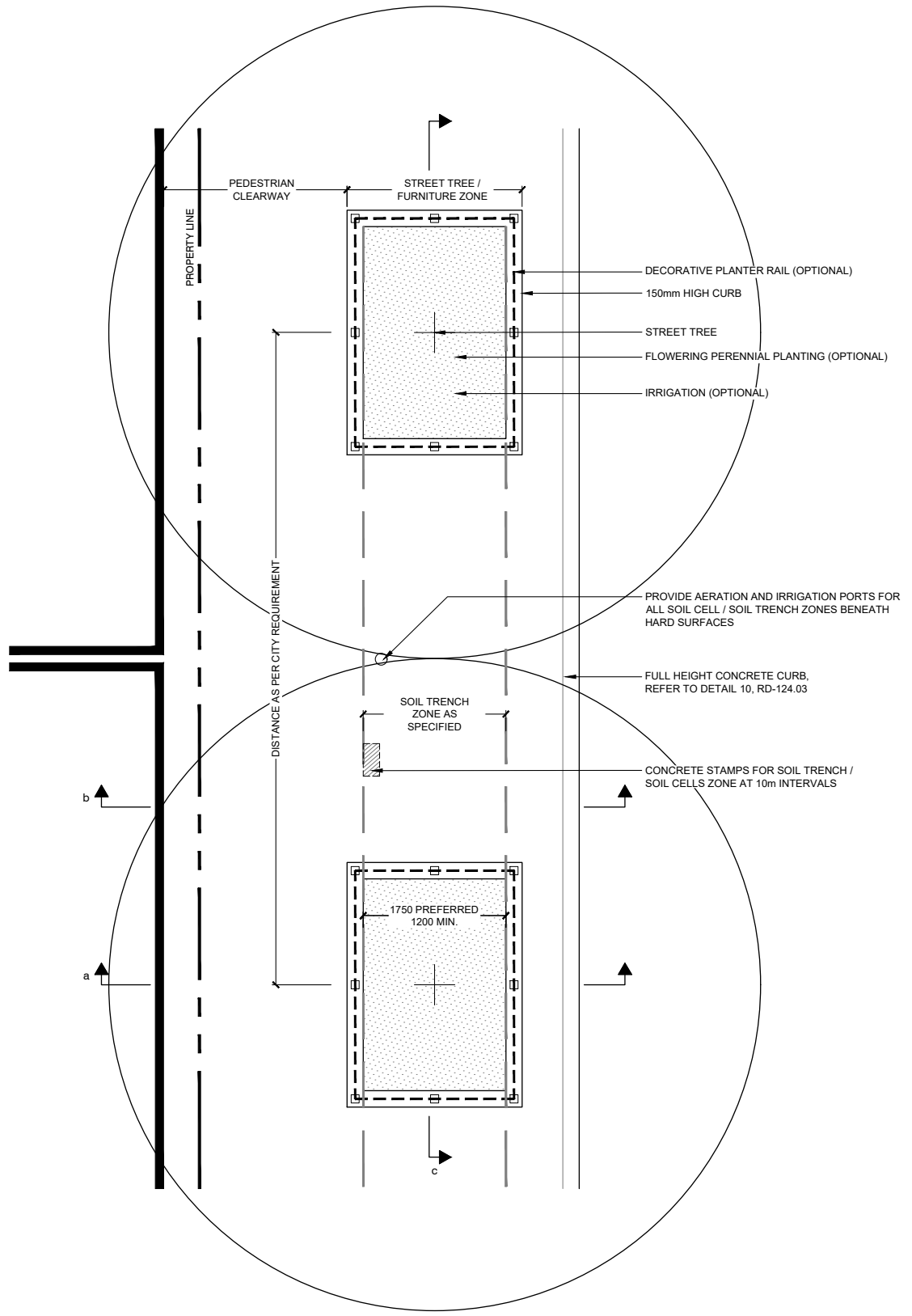
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FORMERLY:

HAMILTON STD No: FH 502.01



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HARD SURFACE DETAIL: TYPE 1C
KEY PLAN

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NOV 2024

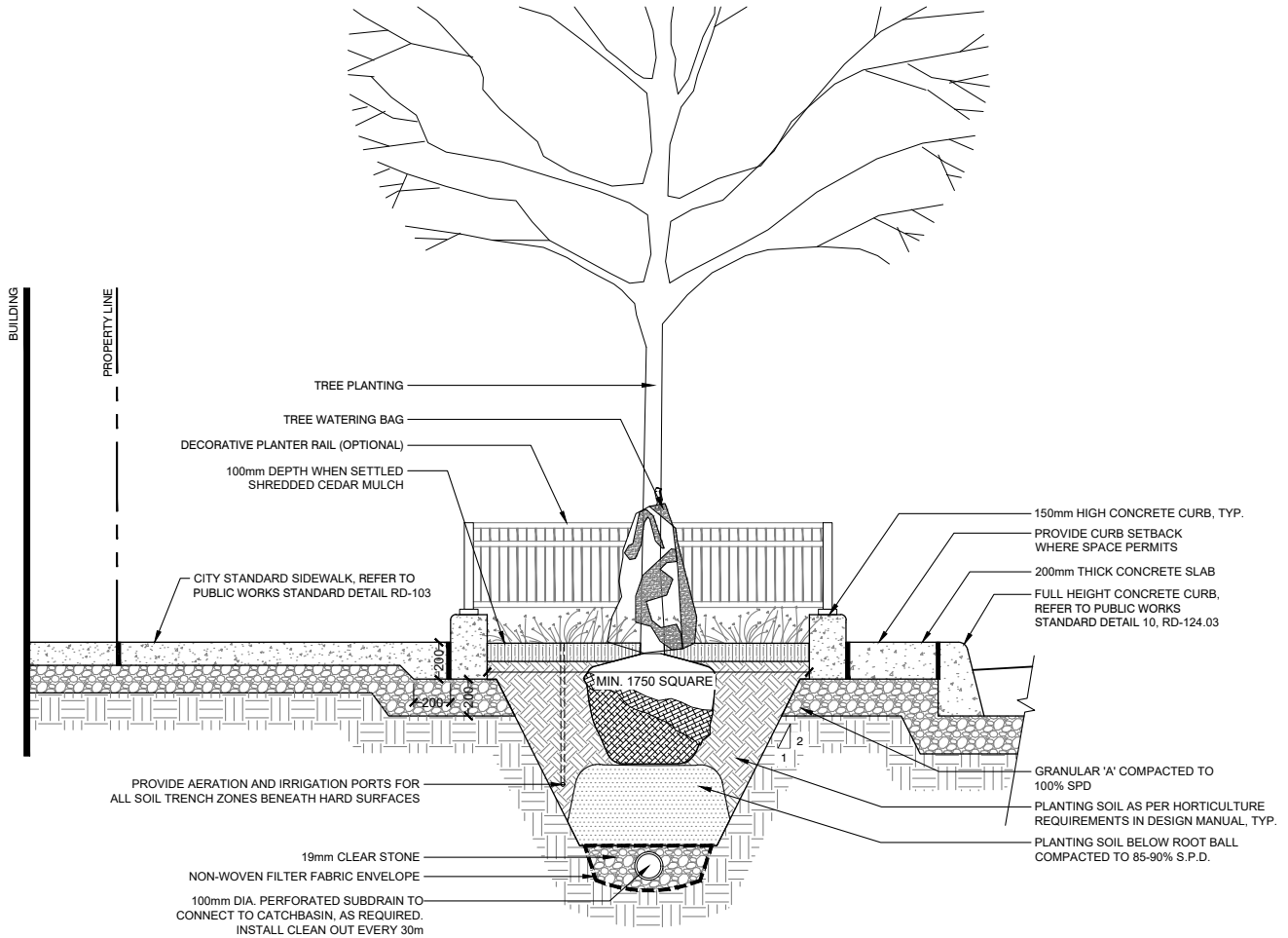
REV NO
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FORMERLY:

HAMILTON STD No: **FH 503**

NOTES:

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4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR OPEN PLANTING BEDS.
5. SUSPENDED CONCRETE SLAB TO BE STAMPED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.
6. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
7. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



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HARD SURFACE DETAIL: TYPE 1C - a
OPEN PLANTING BED (SOIL TRENCH)

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DATE
NOV 2024

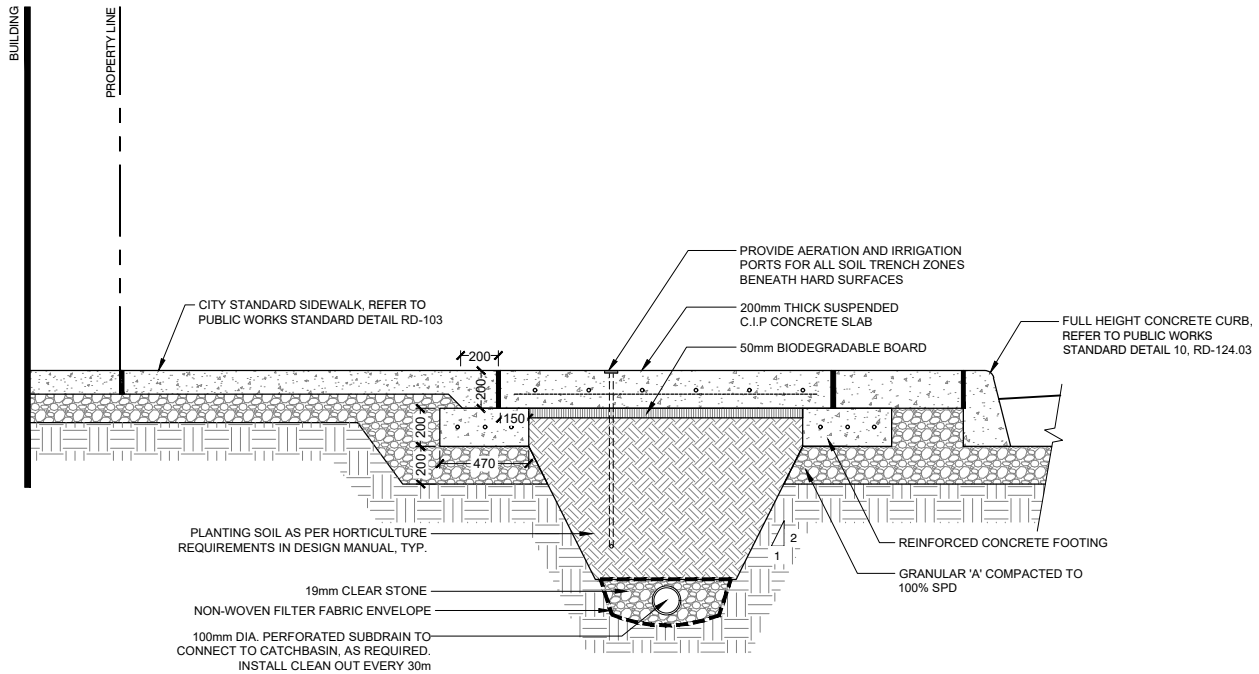
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FORMERLY:

HAMILTON STD No: FH 503.01

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5. SUSPENDED CONCRETE SLAB TO BE STAMPED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.
6. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
7. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



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HARD SURFACE DETAIL: TYPE 1C - b
OPEN PLANTING BED (SOIL TRENCH)

DIMENSIONS ARE SHOWN IN MILLIMETERS
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DATE
NOV 2024

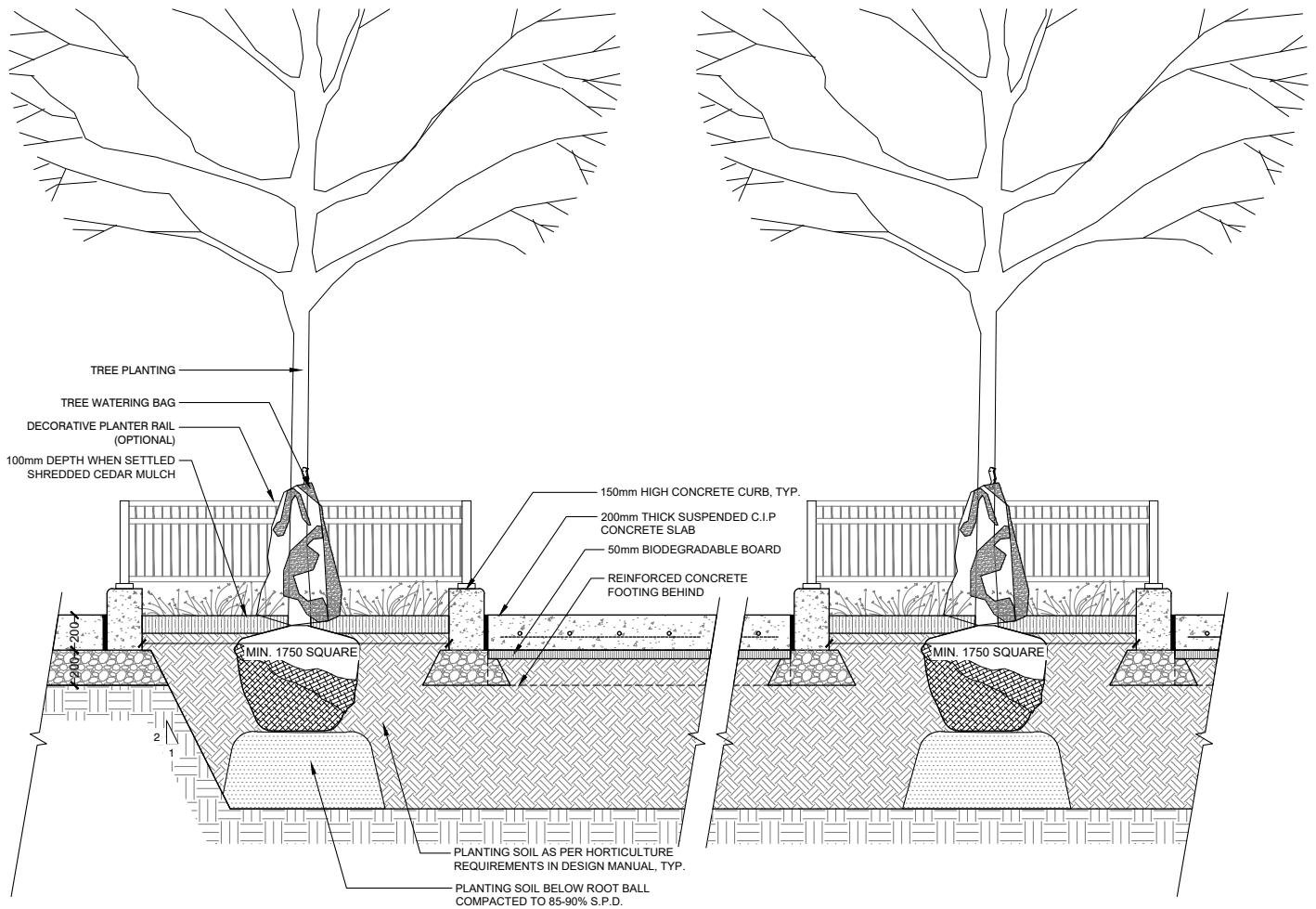
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FORMERLY:

HAMILTON STD No: FH 502.02

NOTES:

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4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR OPEN PLANTING BEDS.
5. SUSPENDED CONCRETE SLAB TO BE STAMPED BY A STRUCTURAL ENGINEER LICENSED TO PRACTICE IN THE PROVINCE OF ONTARIO.
6. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
7. SUBDRAINS MUST BE ADDED IN HIGH WATER TABLE AREAS.



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HARD SURFACE DETAIL: TYPE 1C - c
OPEN PLANTING BED (SOIL TRENCH)

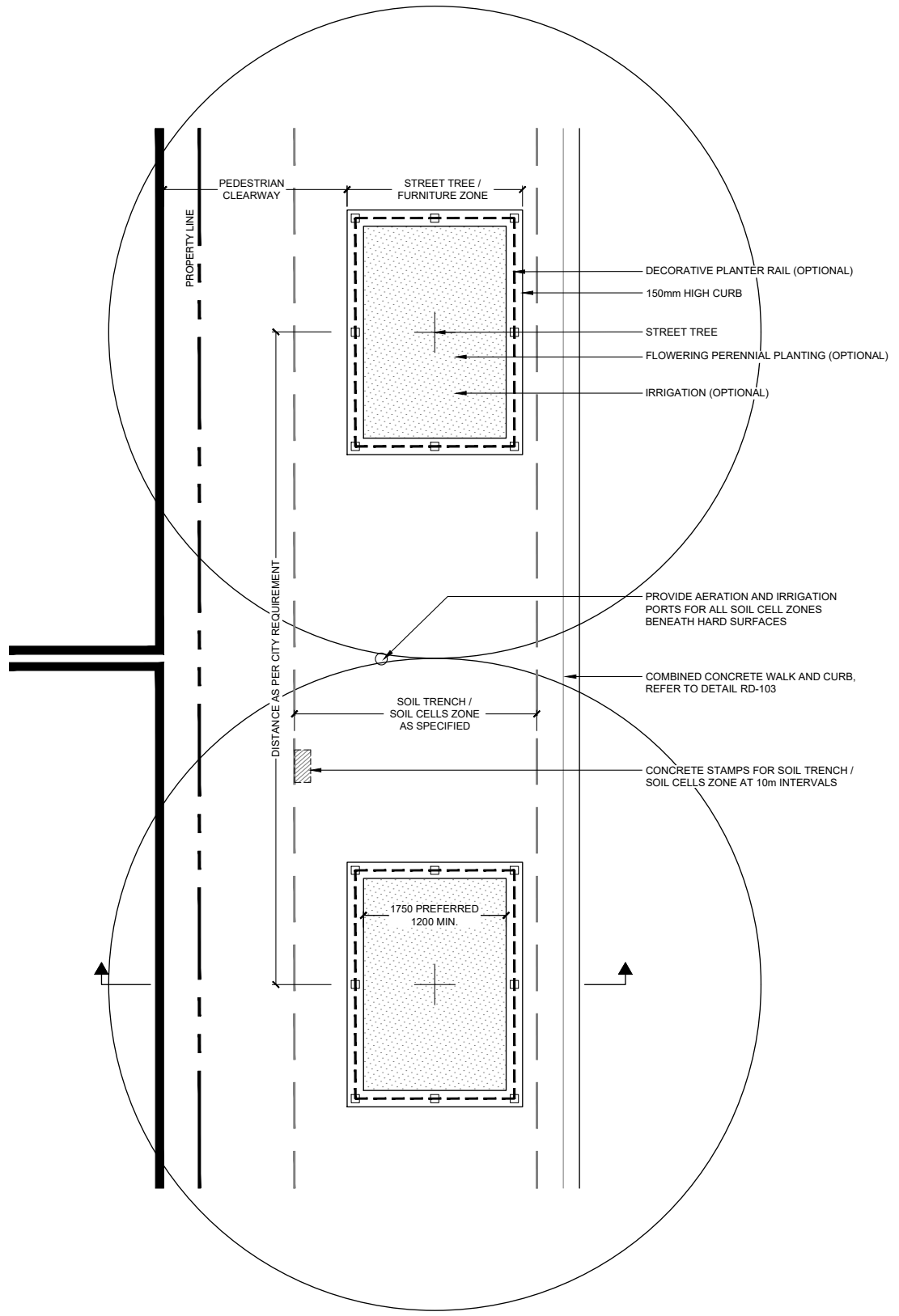
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FORMERLY:

HAMILTON STD No: **FH 502.03**



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HARD SURFACE DETAIL: TYPE 1D
KEY PLAN

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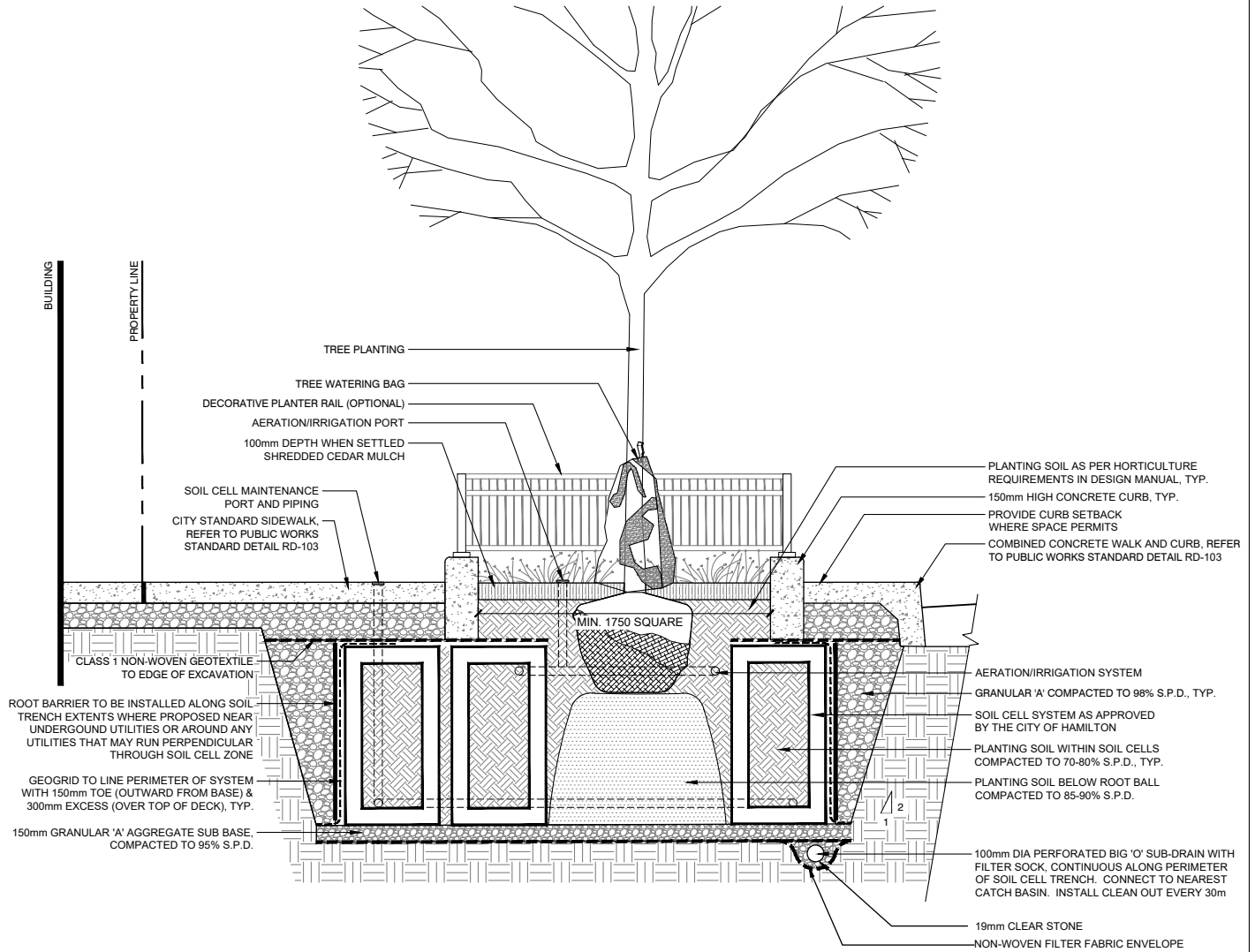
REV NO
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FORMERLY:

HAMILTON STD No: FH 504

NOTES:

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3. IRRIGATION SHALL ONLY BE CONSIDERED FOR APPLICATIONS THAT MEET THE CRITERIA FOR IRRIGATION AS OUTLINED IN THE DESIGN AND PRESERVATION MANUAL.
4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR OPEN PLANTING BEDS.
5. SOIL CELLS SHALL BE INSTALLED AS A COMPLETE SYSTEM IN ACCORDANCE WITH THE APPROVED MANUFACTURER'S DETAILS AND SPECIFICATIONS.
6. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
7. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.



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HARD SURFACE DETAIL: TYPE 1D
OPEN PLANTING BED (SOIL CELLS)

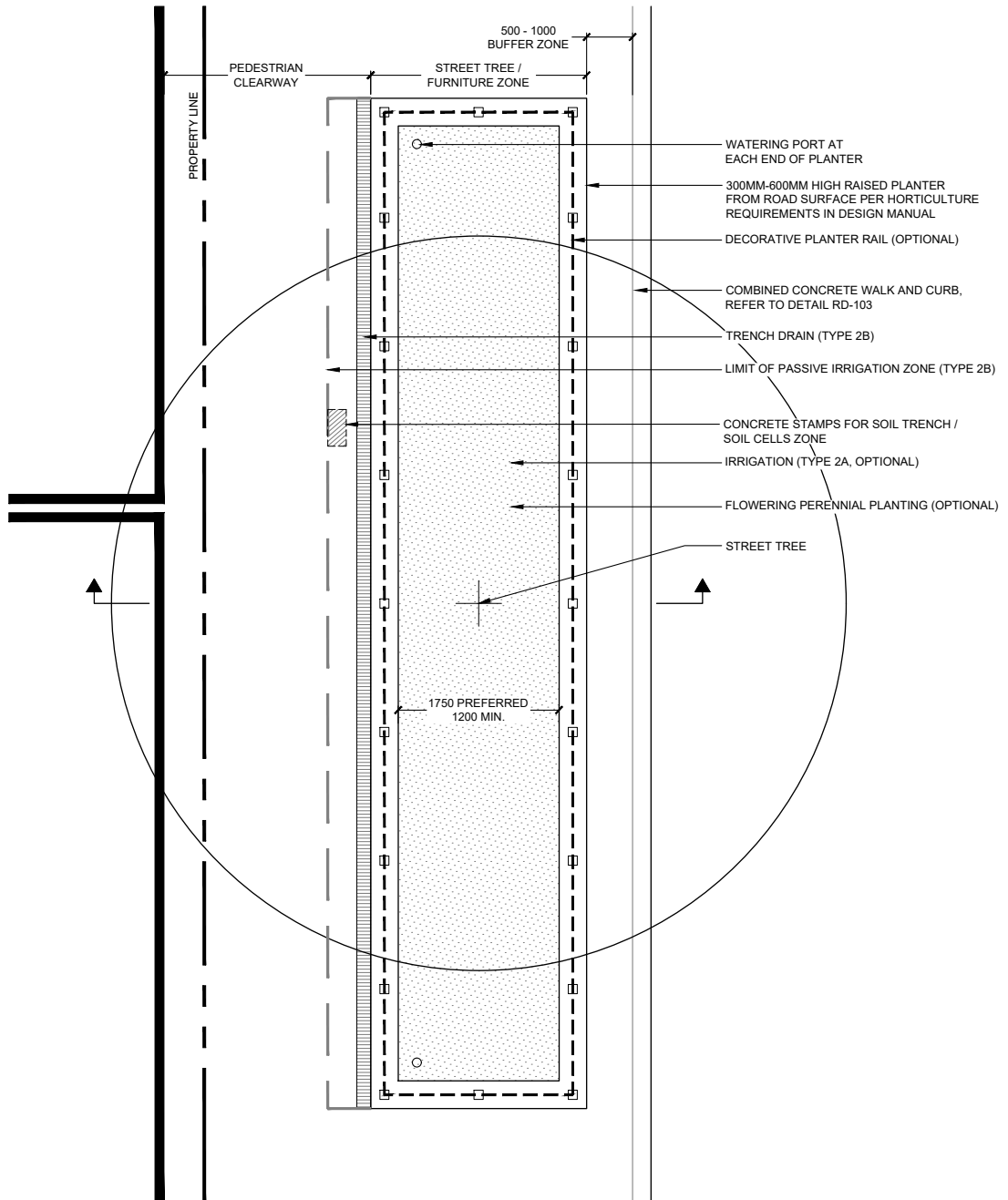
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DATE
NOV 2024

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FORMERLY:

HAMILTON STD No: FH 504.01



City of Hamilton
Public Works Department

HARD SURFACE DETAIL: TYPE 2
KEY PLAN

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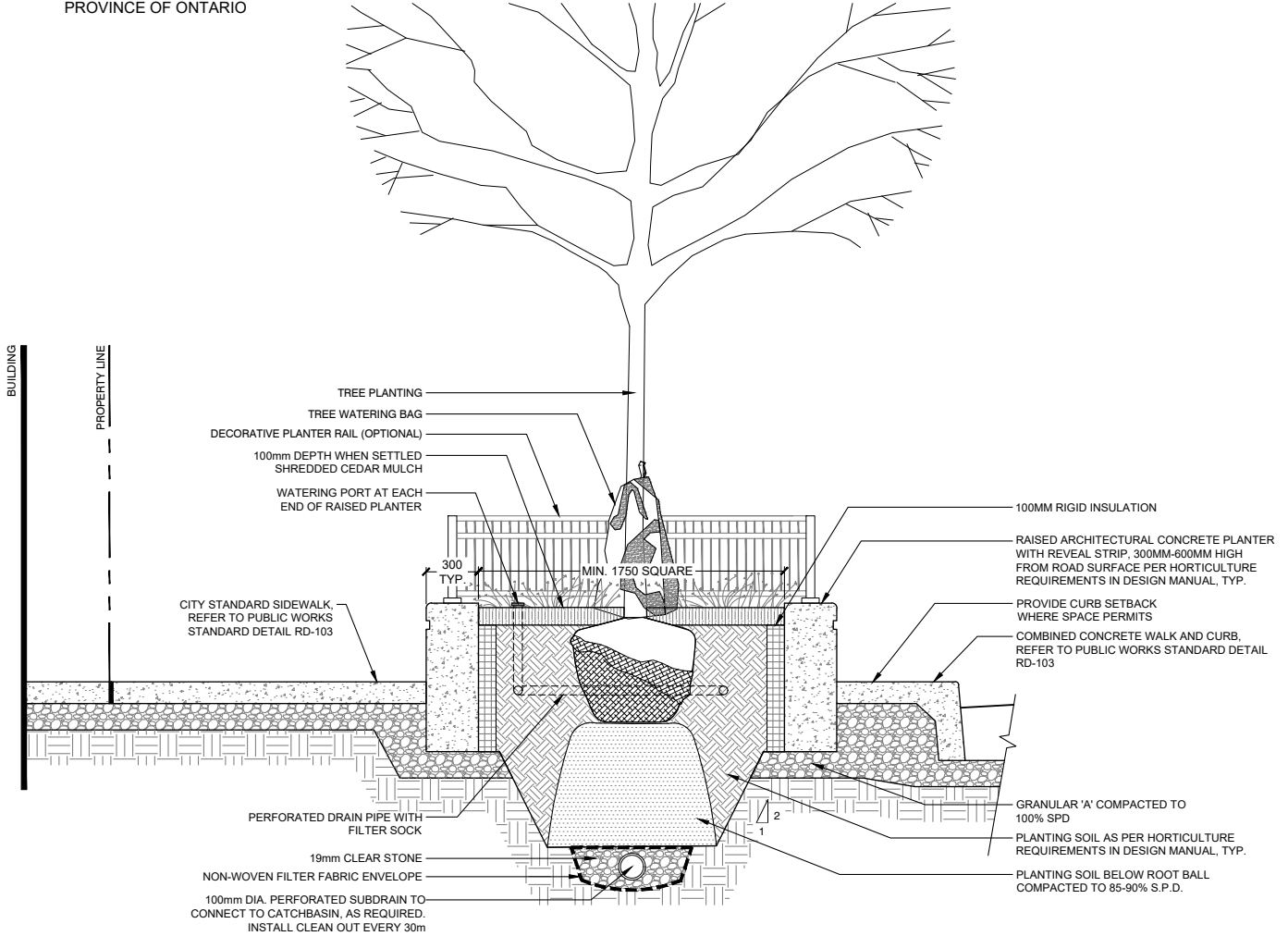
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FORMERLY:

HAMILTON STD No: FH 505

NOTE:

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4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR RAISED PLANTERS.
5. ENSURE POSITIVE DRAINAGE AWAY FROM PLANTER.
6. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



City of Hamilton
Public Works Department

HARD SURFACE DETAIL: TYPE 2A
RAISED PLANTER

DIMENSIONS ARE SHOWN IN MILLIMETERS
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DATE
NOV 2024

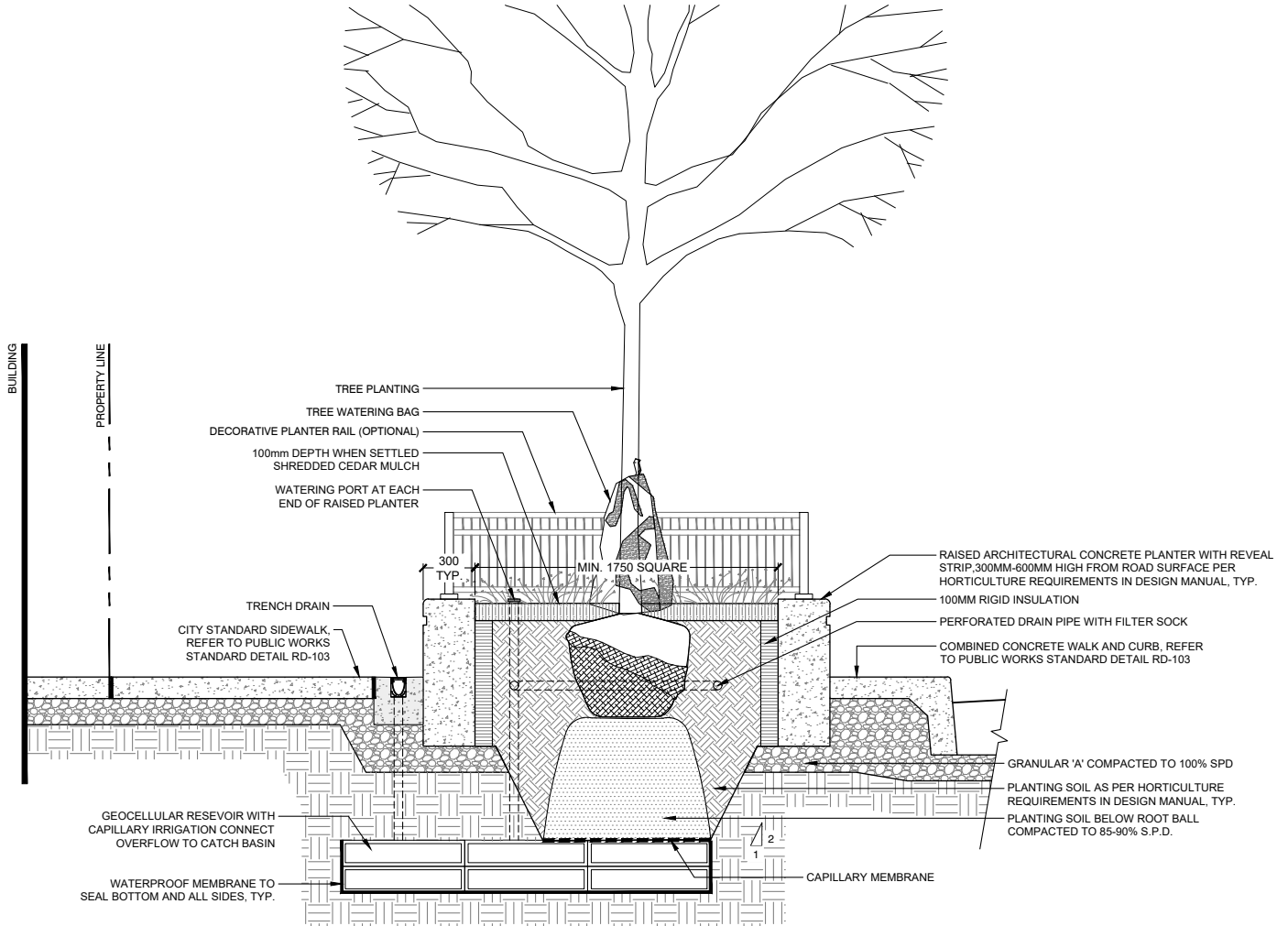
REV NO
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FORMERLY:

HAMILTON STD No: FH 505.01

NOTES:

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4. CONSIDERATION SHALL BE GIVEN TO DECORATIVE PLANTER RAILS FOR RAISED PLANTERS.



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HARD SURFACE DETAIL: TYPE 2B
RAISED PLANTER (STORMWATER DETENTION CELLS)

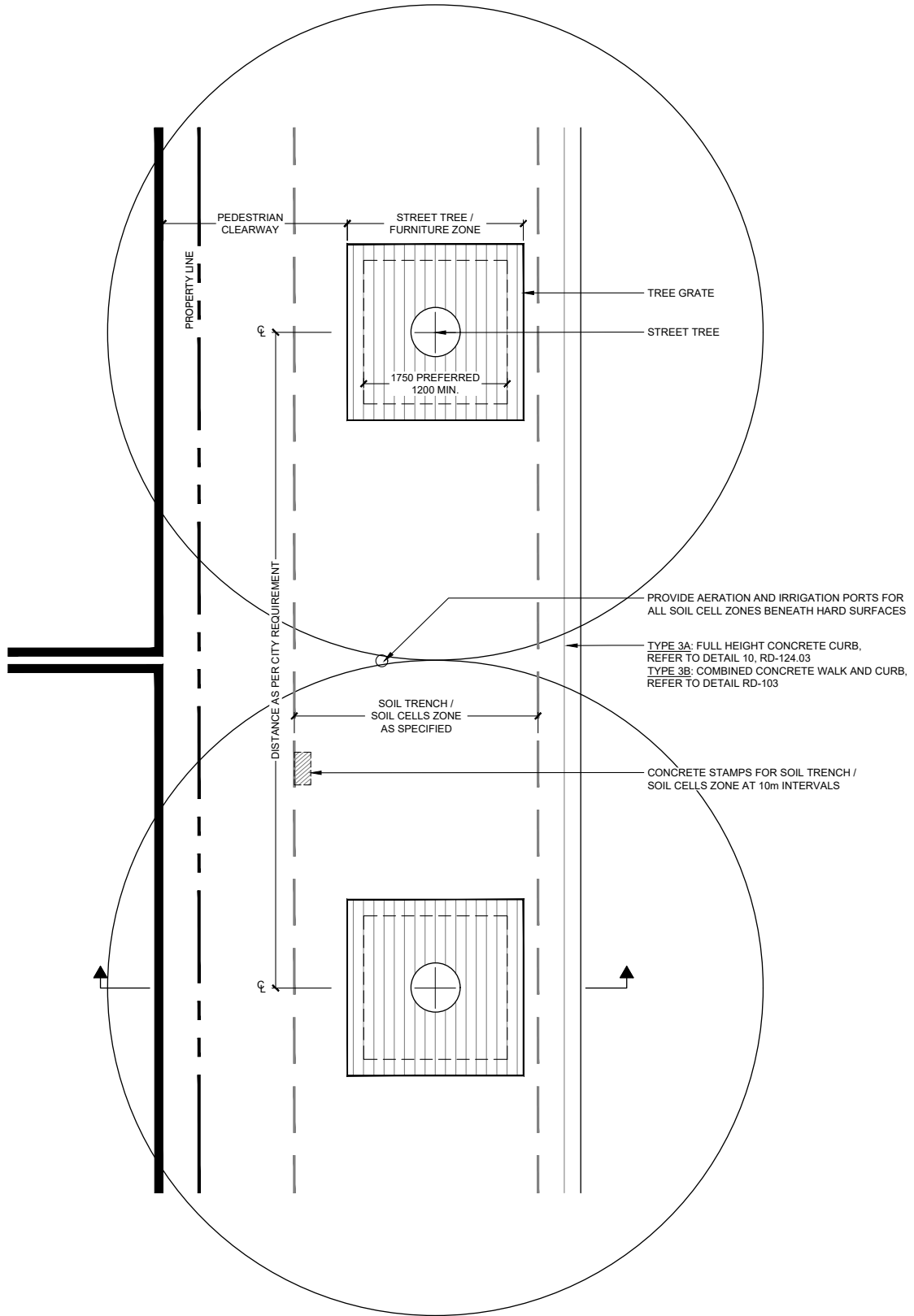
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DATE
NOV 2024

REV NO
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FORMERLY:

HAMILTON STD No: FH 505.02



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Public Works Department

HARD SURFACE DETAIL: TYPE 3
KEY PLAN

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DATE
NOV 2024

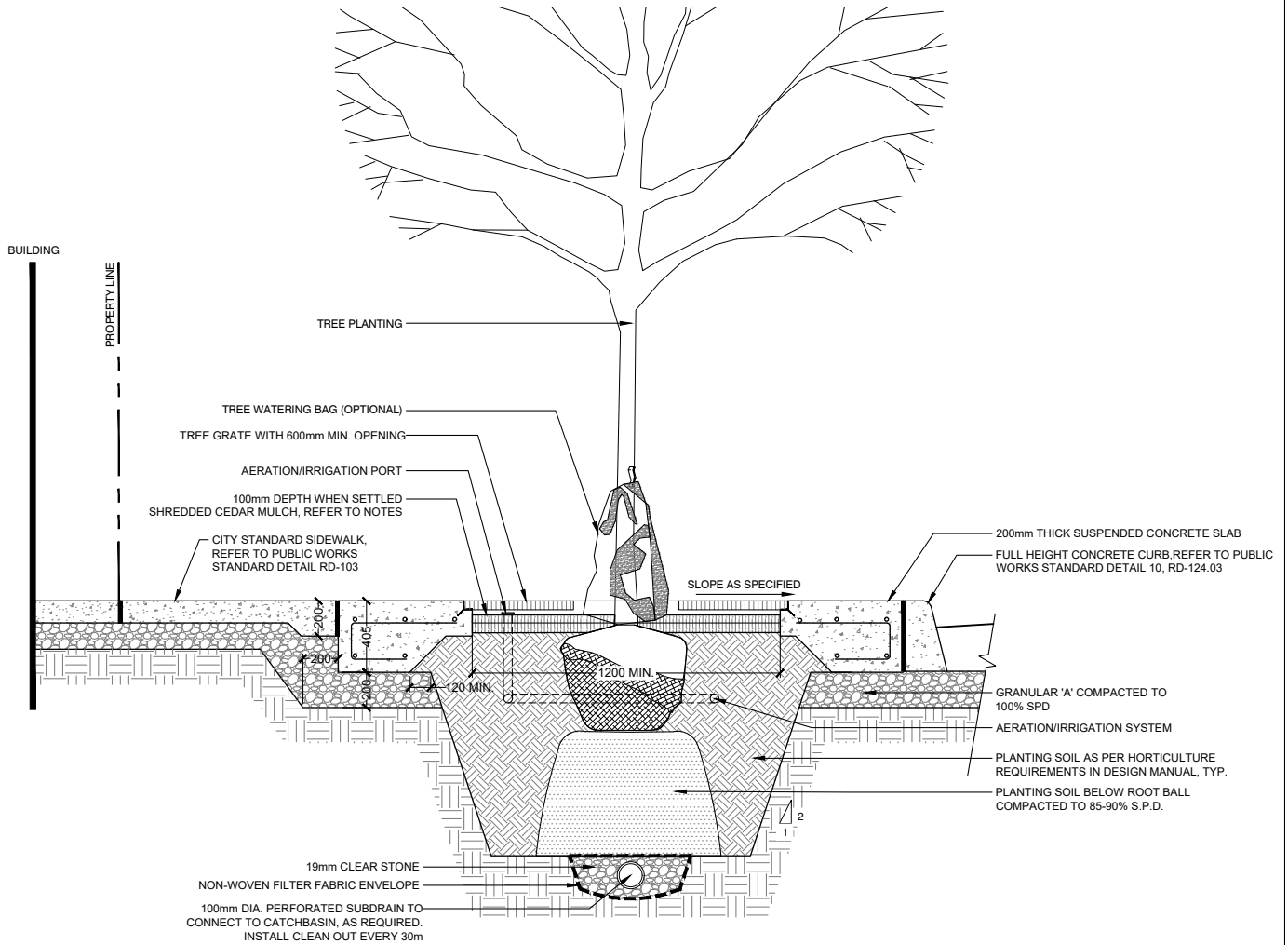
REV NO
1

FORMERLY:

HAMILTON STD No: FH 506

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4. SUSPENDED CONCRETE SLAB TO BE STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO.
5. INSTALL SUBDRAIN WHERE SOIL INFILTRATION RATES ARE LESS THAN 15mm/hr, WHEN TREE TRENCH IS MEMBRANE LINED OR WHEN RECOMMENDED BY A PROFESSIONAL ENGINEER LICENSED IN THE PROVINCE OF ONTARIO



Hamilton

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Public Works Department

**HARD SURFACE DETAIL: TYPE 3A
TREE GRATE (SOIL TRENCH)**

DIMENSIONS ARE SHOWN IN MILLIMETERS
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DATE
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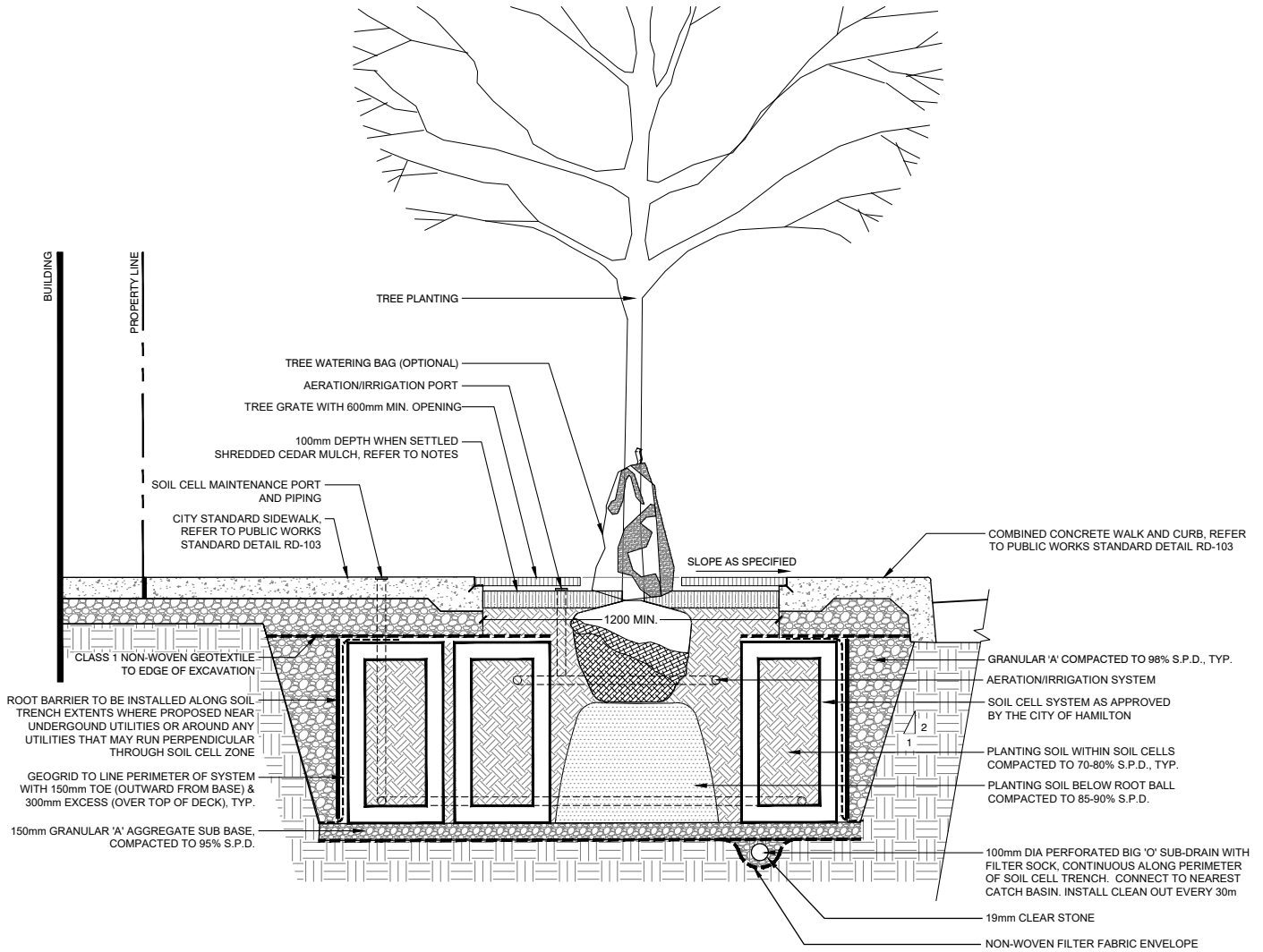
REV NO
1

FORMERLY:

HAMILTON STD No: **FH 506.01**

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City of Hamilton
Public Works Department

HARD SURFACE DETAIL: TYPE 3B
TREE GRATE (SOIL CELLS)

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NOV 2024

REV NO
1

FORMERLY:

HAMILTON STD No: FH 506.02