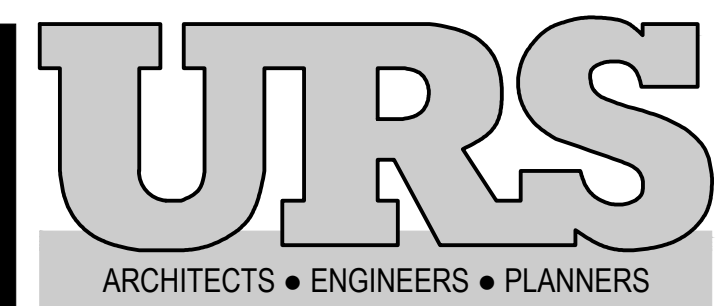
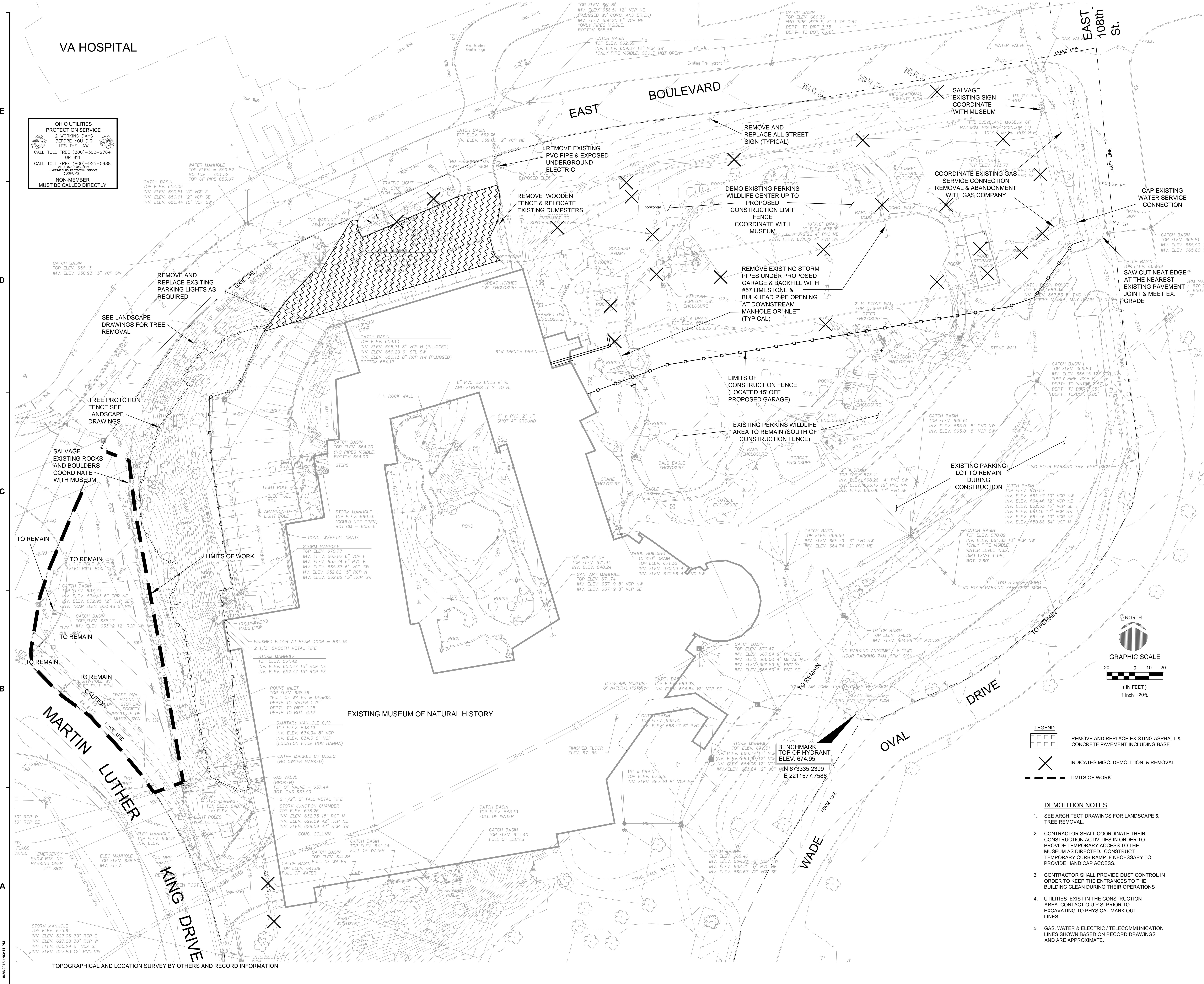


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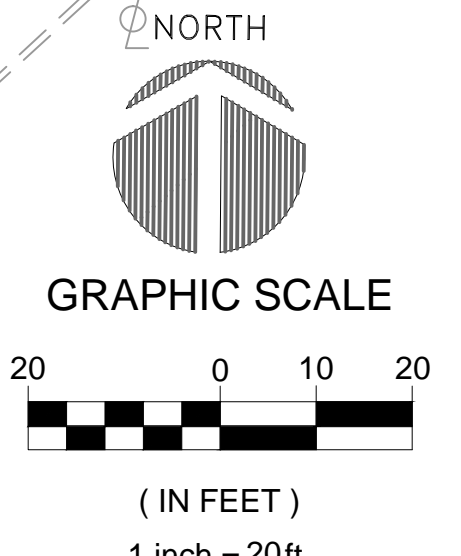


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KEY PLAN
WEST GARDEN
MUSEUM
WILDLIFE
GARAGE

SHEET ISSUE DATE: 08-01-2015
mark date description



- LEGEND
- [Hatched pattern] REMOVE AND REPLACE EXISTING ASPHALT & CONCRETE PAVEMENT INCLUDING BASE
 - [X symbol] INDICATES MISC. DEMOLITION & REMOVAL
 - [Dashed line] LIMITS OF WORK

DEMOLITION NOTES

- SEE ARCHITECT DRAWINGS FOR LANDSCAPE & TREE REMOVAL.
- CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES IN ORDER TO PROVIDE TEMPORARY ACCESS TO THE MUSEUM AS DIRECTED. CONSTRUCT TEMPORARY CURB RAMP IF NECESSARY TO PROVIDE HANDICAP ACCESS.
- CONTRACTOR SHALL PROVIDE DUST CONTROL IN ORDER TO KEEP THE ENTRANCES TO THE BUILDING CLEAN DURING THEIR OPERATIONS
- UTILITIES EXIST IN THE CONSTRUCTION AREA. CONTACT O.U.P.S. PRIOR TO EXCAVATING TO PHYSICAL MARK OUT LINES.
- GAS, WATER & ELECTRIC / TELECOMMUNICATION LINES SHOWN BASED ON RECORD DRAWINGS AND ARE APPROXIMATE.

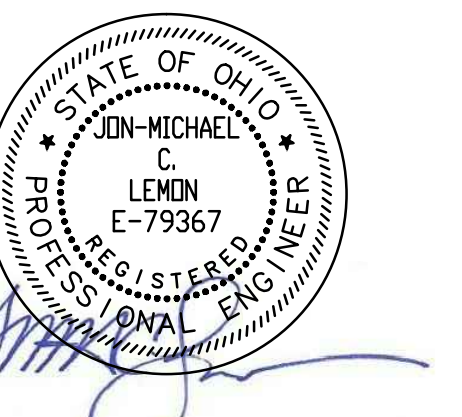
CLEVELAND MUSEUM OF NATURAL HISTORY

1 WADE OVAL DRIVE, UNIVERSITY CIRCLE
CLEVELAND, OHIO 44106
WEST GARDEN

Project Issue Date:
09-26-2017 ISSUED FOR BID / PERMIT
Checked by: JF
Designed by: JF
13877884 20140035.310

SITE DEMO PLAN

CD100
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KEY PLAN



SHEET REVISIONS

mark	date	description

SHEET ISSUE DATE: 08-01-2015

WEST GARDEN

GARAGE

MUSEUM

WILDLIFE

PROJECT NO. 20140035.310

CLEVELAND MUSEUM OF NATURAL HISTORY

1 WADE OVAL DRIVE,
UNIVERSITY CIRCLE
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WEST GARDEN

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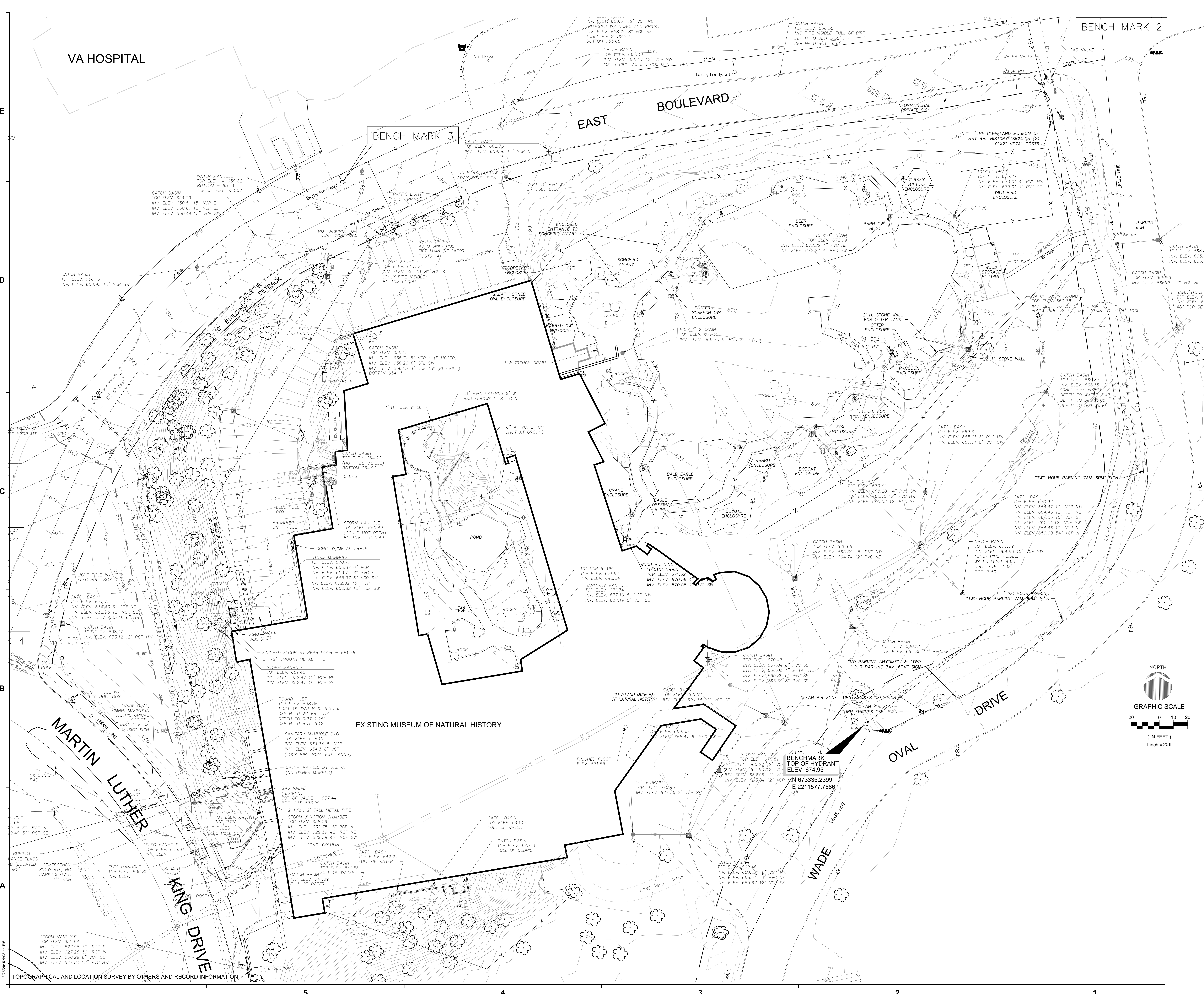
Drawn by	Checked by	Manager
CES	JF	JF

URSP project no. 20140035.310
13877884

EXISTING CONDITION PLAN

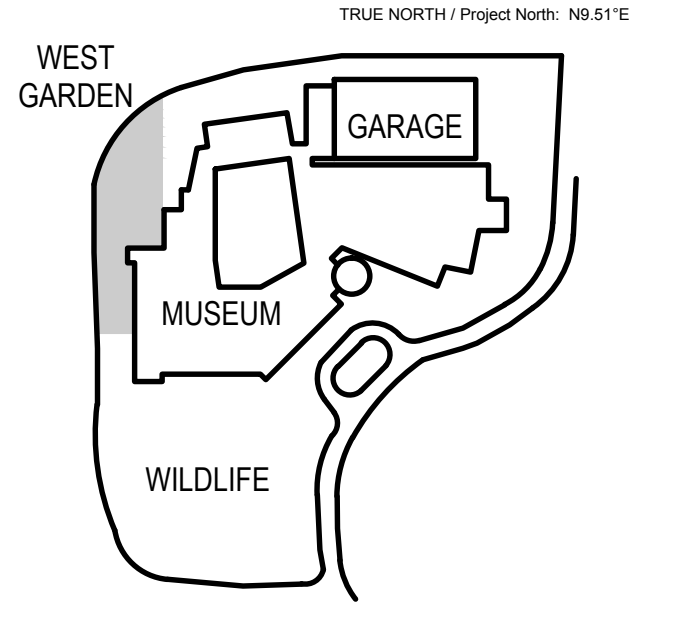
drawing scale:

CI100





KEY PLAN



SHEET ISSUE DATE: 08-01-2015

mark	date	description
2	10-14-2015	BULLETIN #2



CLEVELAND MUSEUM OF NATURAL HISTORY

1 WADE OVAL DRIVE,
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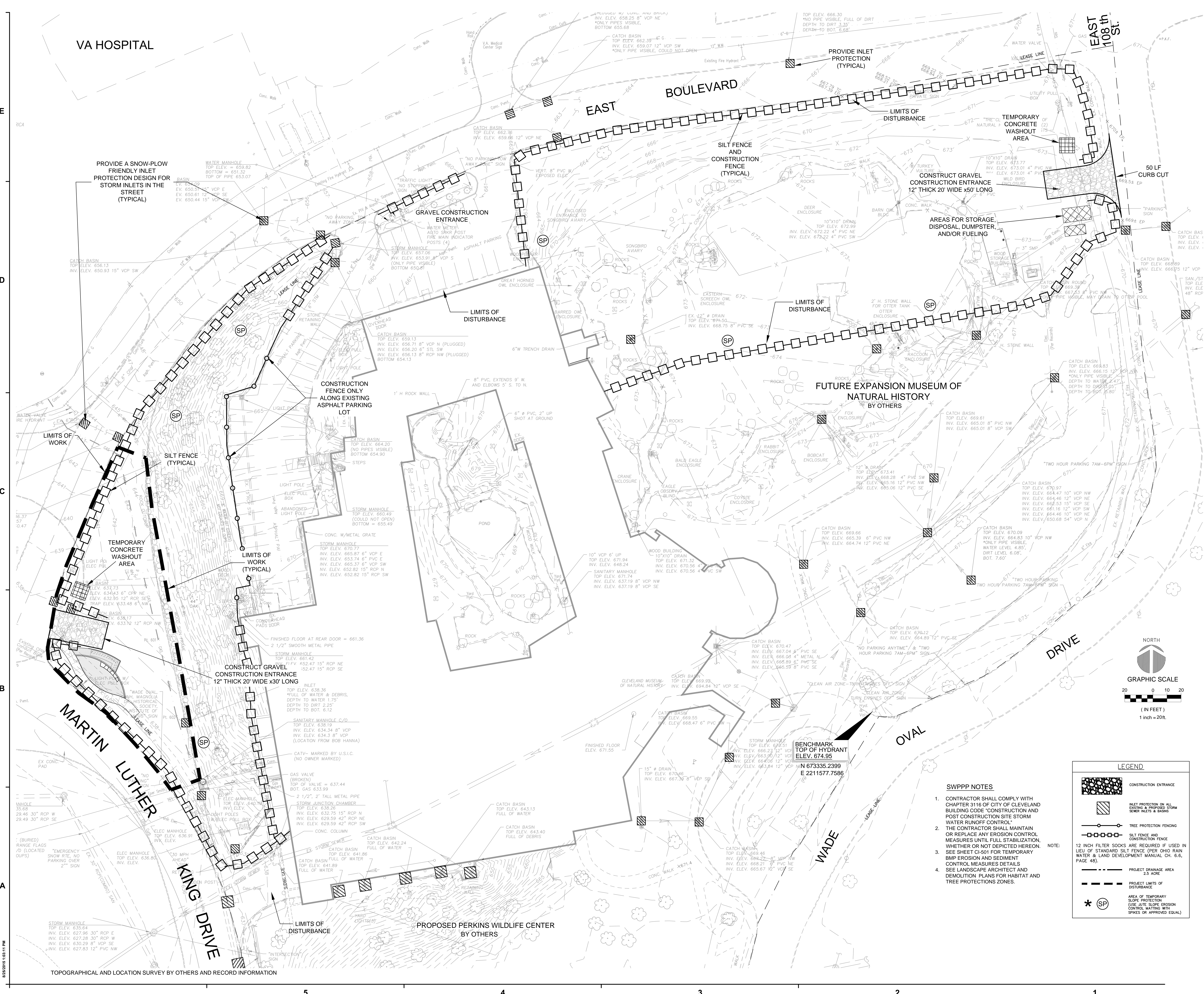
Project Issue Date:
09-26-2017 ISSUED FOR BID / PERMIT

Drawn by	Checked by	Manager
CES	JF	JF

13877684 20140035.310

INITIAL STORM WATER POLLUTION PREVENTION PLAN

drawing scale: **CI101**



LEGEND

- CONSTRUCTION ENTRANCE
- INLET PROTECTION ON ALL EXISTING & PROPOSED STORM SEWER INLETS & BASINS
- TREE PROTECTION FENCING
- SILT FENCE AND CONSTRUCTION FENCE
- 12 INCH FILTER SOCKS ARE REQUIRED IF USED IN LIEU OF STANDARD SILT FENCE (PER OHIO RAIN WATER & LAND DEVELOPMENT MANUAL CH. 6.6, PAGE 48).
- PROJECT LIMITS OF DISTURBANCE
- AREA OF TEMPORARY SLOPE PROTECTION (USE JUTE, SLOPE EROSION CONTROL MATTING WITH SPIKES OR APPROVED EQUAL)

- SWPPP NOTES**
- CONTRACTOR SHALL COMPLY WITH CHAPTER 3116 OF CITY OF CLEVELAND BUILDING CODE "CONSTRUCTION AND POST CONSTRUCTION SITE STORM WATER RUNOFF CONTROL".
 - THE CONTRACTOR SHALL MAINTAIN OR REPLACE ANY EROSION CONTROL MEASURES UNTIL FULL STABILIZATION, WHETHER OR NOT DEPICTED HEREON. SEE SHEET CI-501 FOR TEMPORARY BMP EROSION AND SEDIMENT CONTROL MEASURES DETAILS.
 - SEE LANDSCAPE ARCHITECT AND DEMOLITION PLANS FOR HABITAT AND TREE PROTECTIONS ZONES.

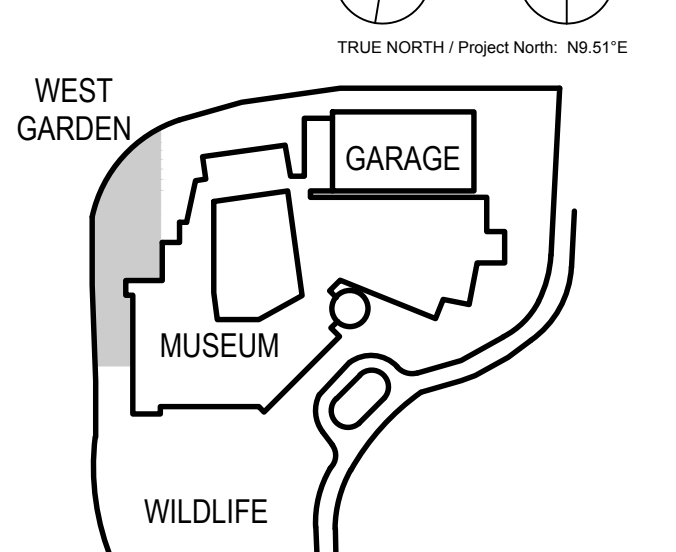
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TOPOGRAPHICAL AND LOCATION SURVEY BY OTHERS AND RECORD INFORMATION

08/20/15 10:11 PM



KEY PLAN



SHEET ISSUE DATE: 09-01-2015

mark	date	description
3	10-19-2015	BULLETIN #3
5	02-03-2016	BULLETIN #5
6	03-18-2015	BULLETIN #6
7	05-09-2016	BULLETIN #7



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WEST GARDEN

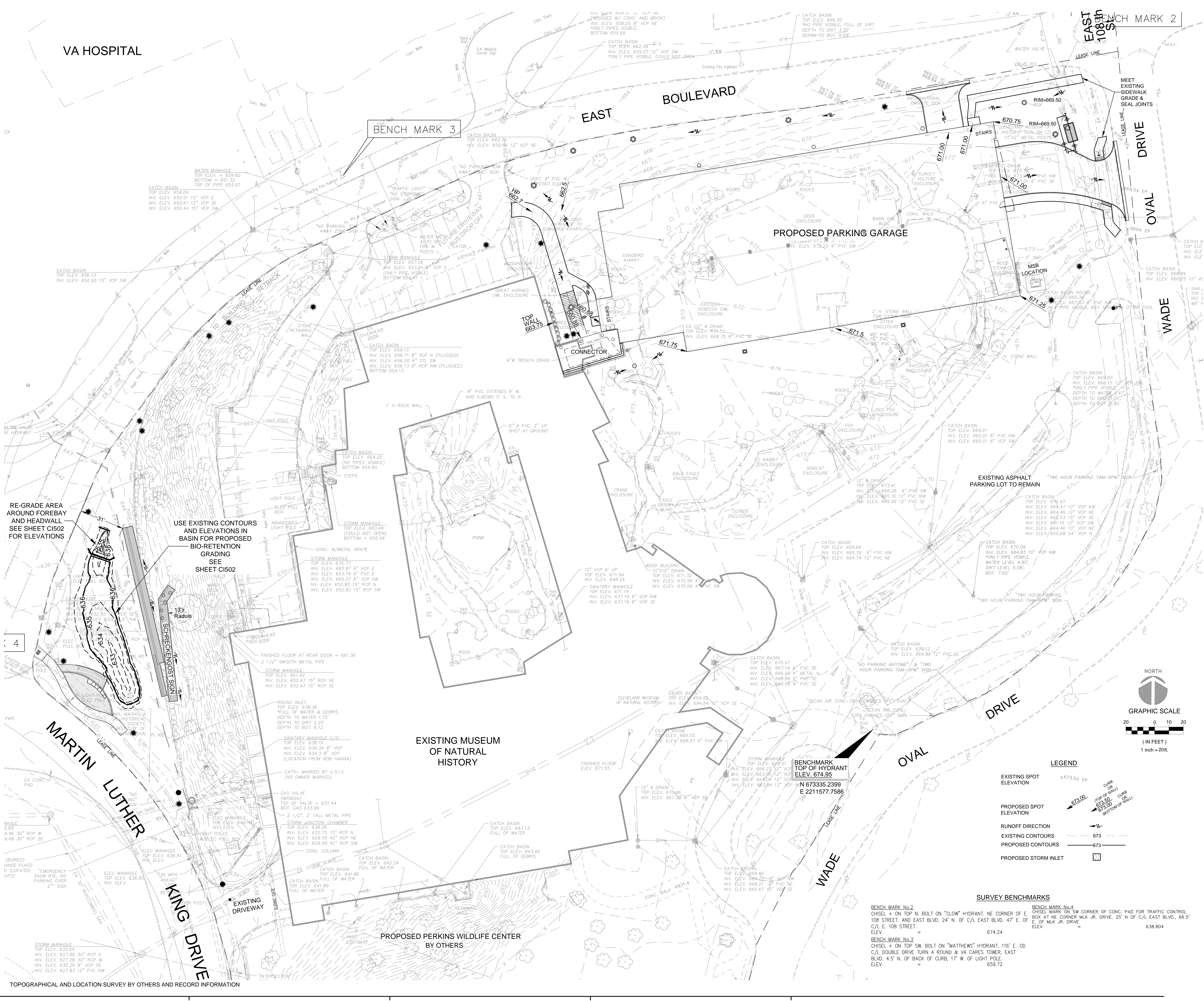
Project Issue Date:
09-26-2017 ISSUED FOR BID / PERMIT

Author	Checked	Revised
CES	JF	JF

URS project no. 13817584 URS proposal no. 20140035.310

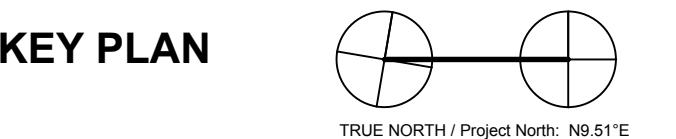
GRADING PLAN

CI105



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SHEET REVISIONS

mark	date	description
5	2-03-2016	BULLETIN #5



CLEVELAND MUSEUM OF NATURAL HISTORY
1 WADE OVAL DRIVE,
UNIVERSITY CIRCLE
CLEVELAND, OHIO 44106
WEST GARDEN

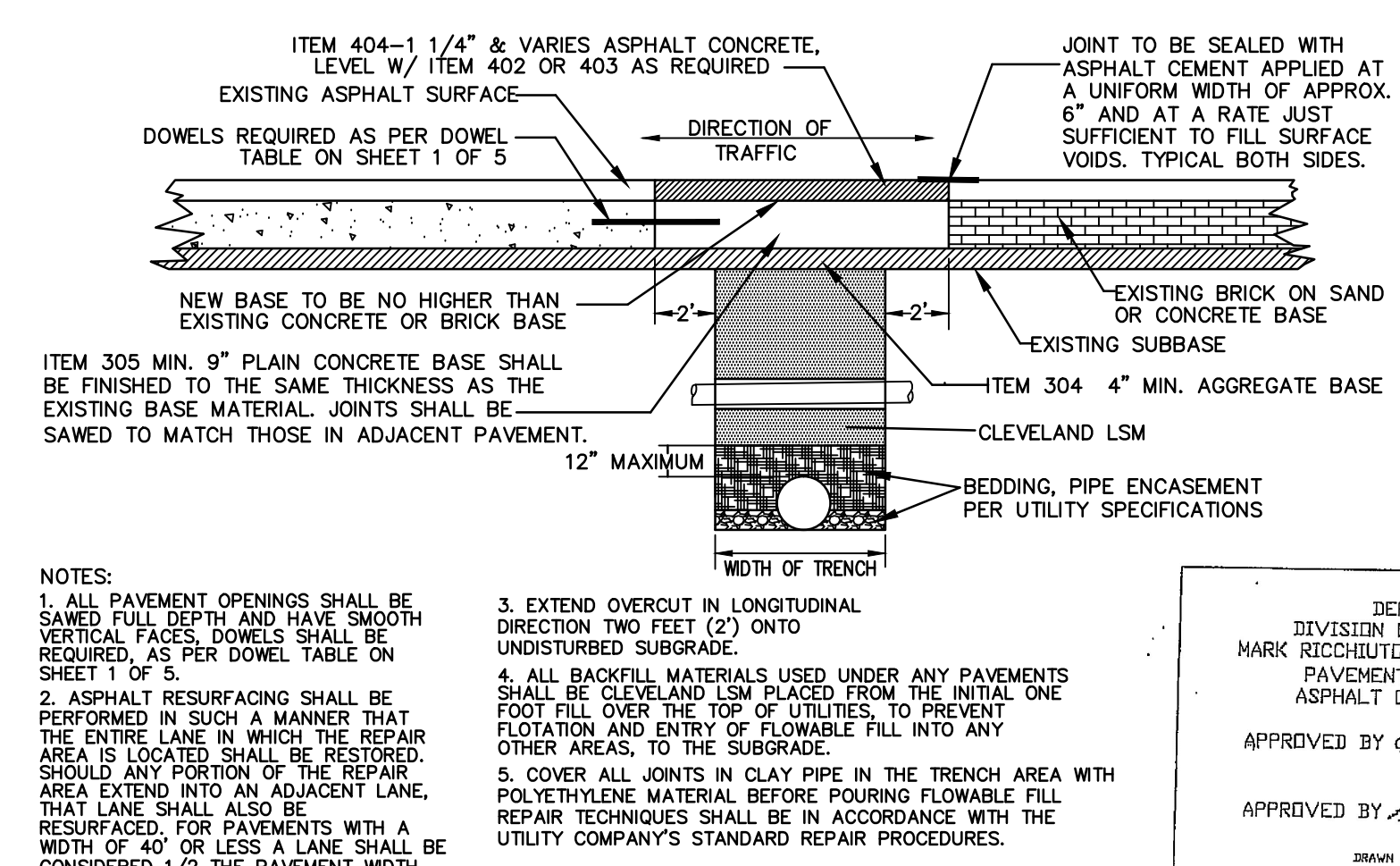
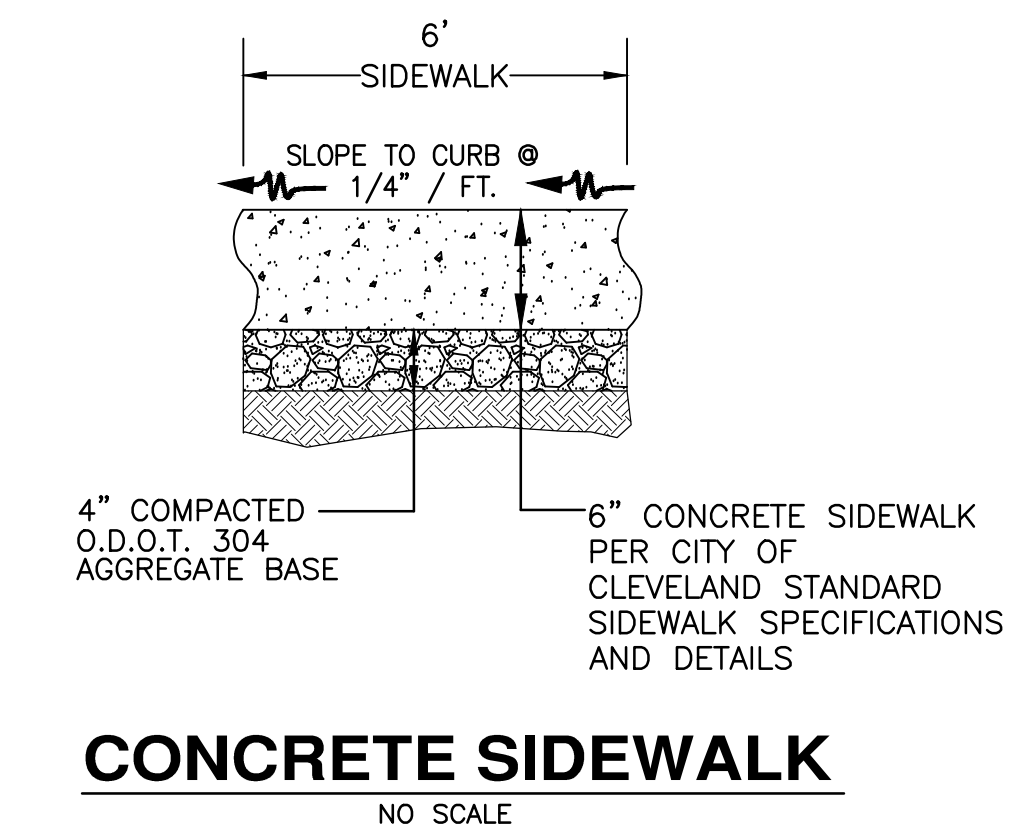
Project Issue Date: 09-26-2017 ISSUED FOR BID / PERMIT

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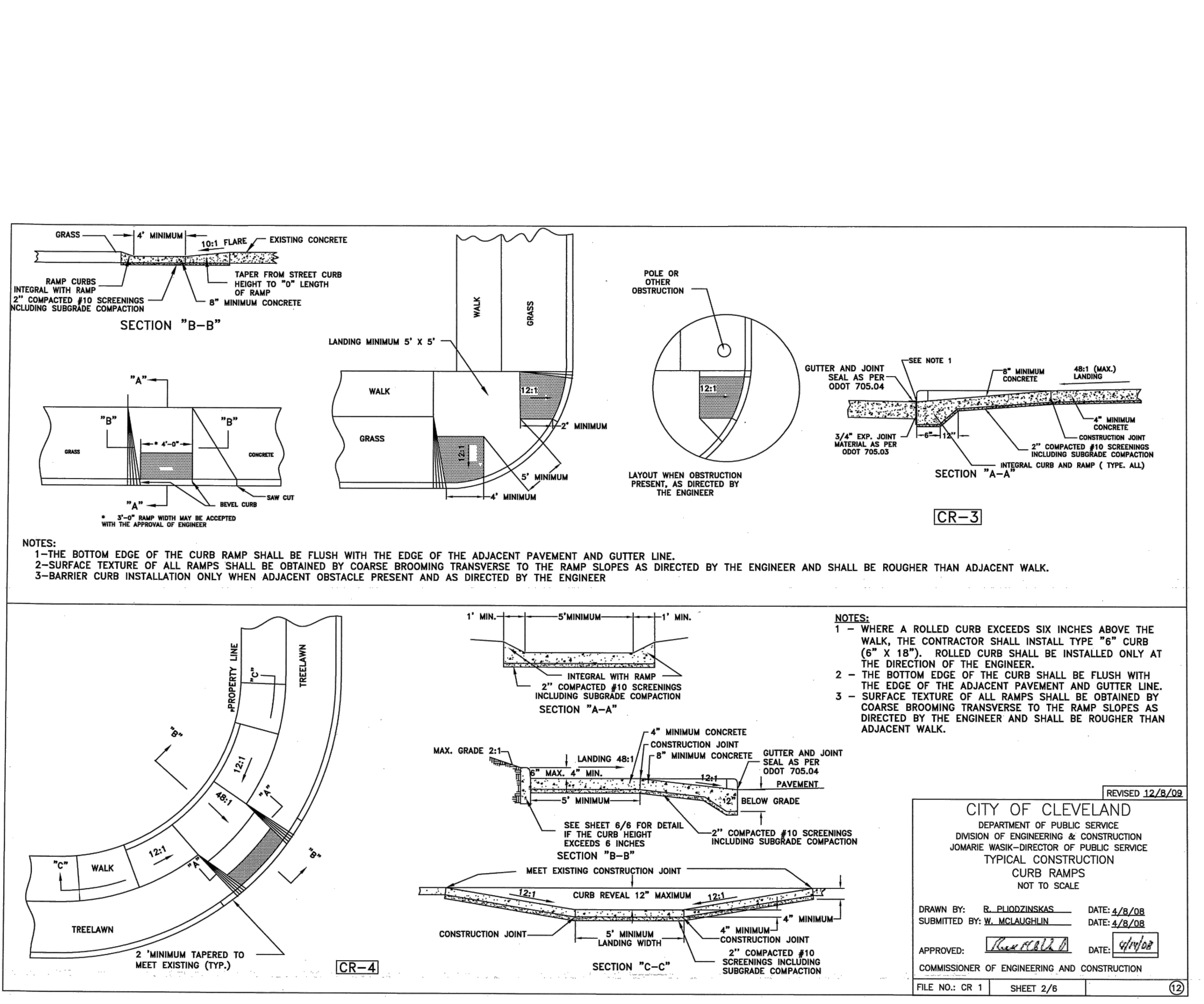
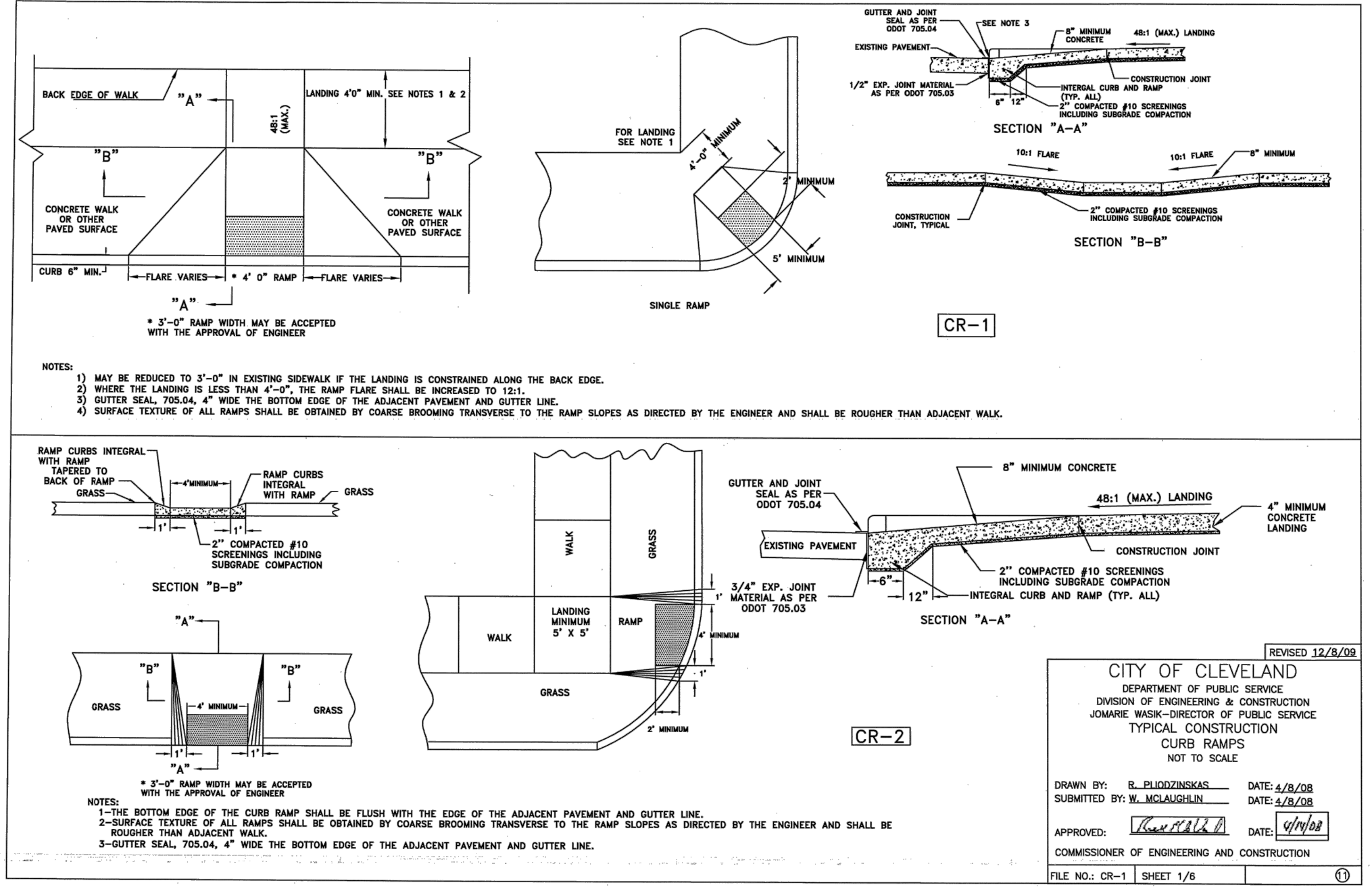
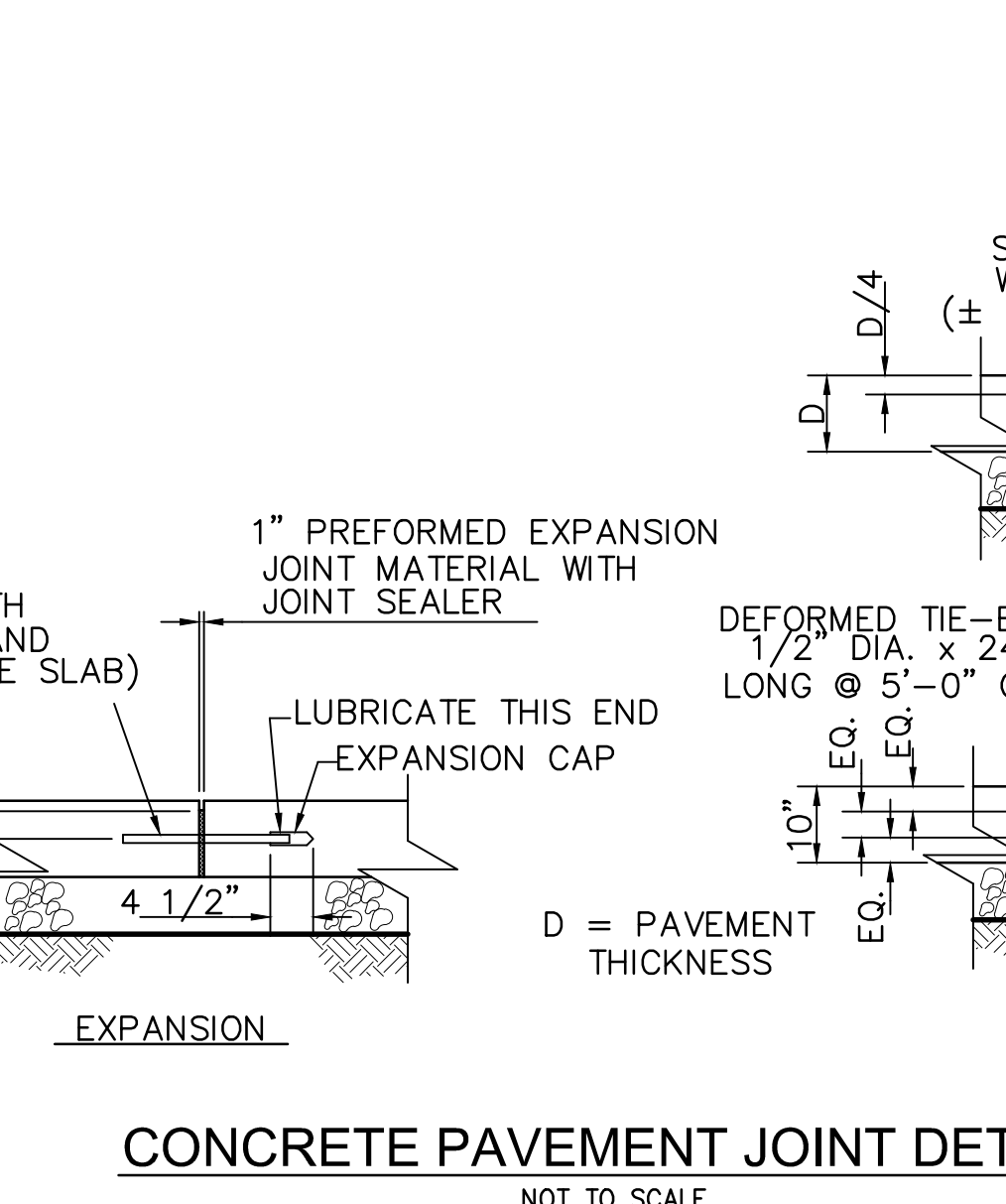
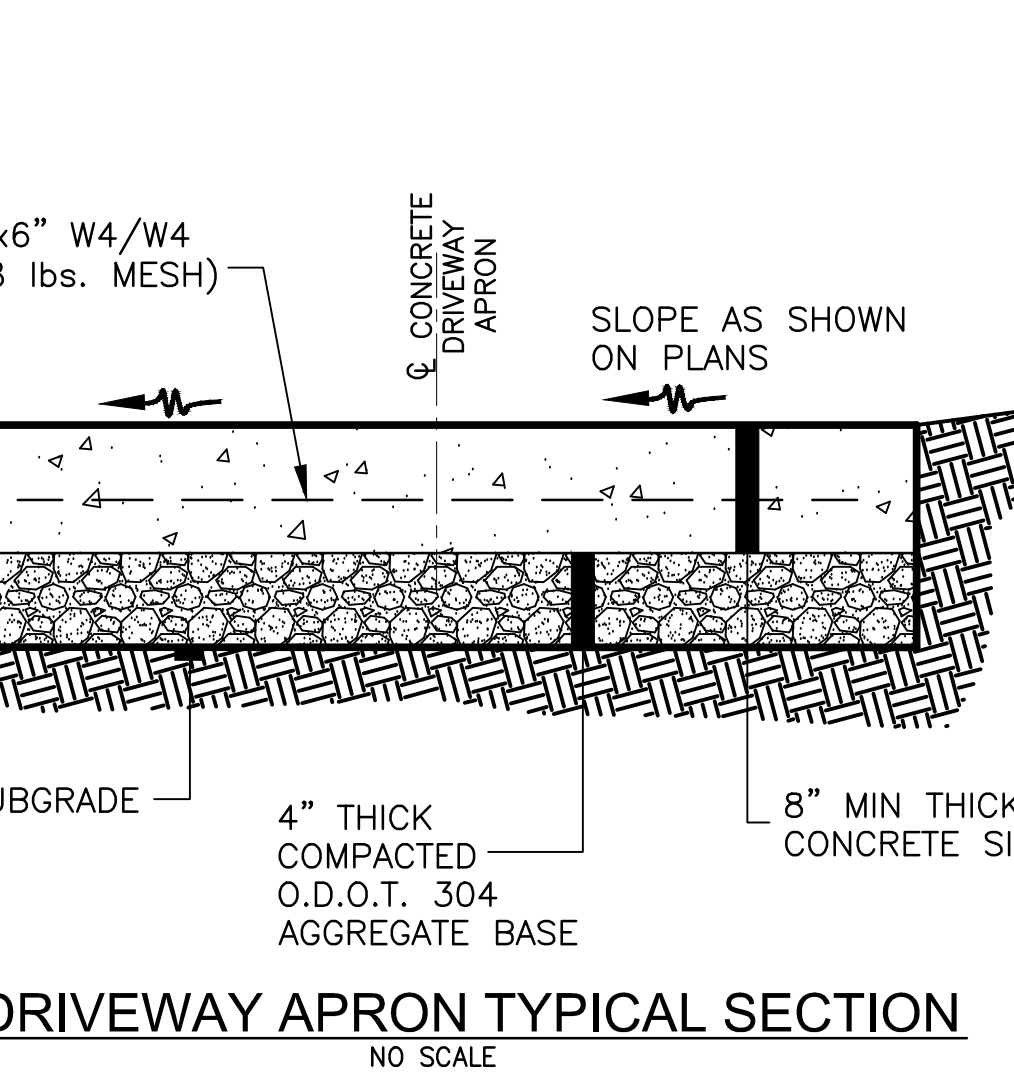
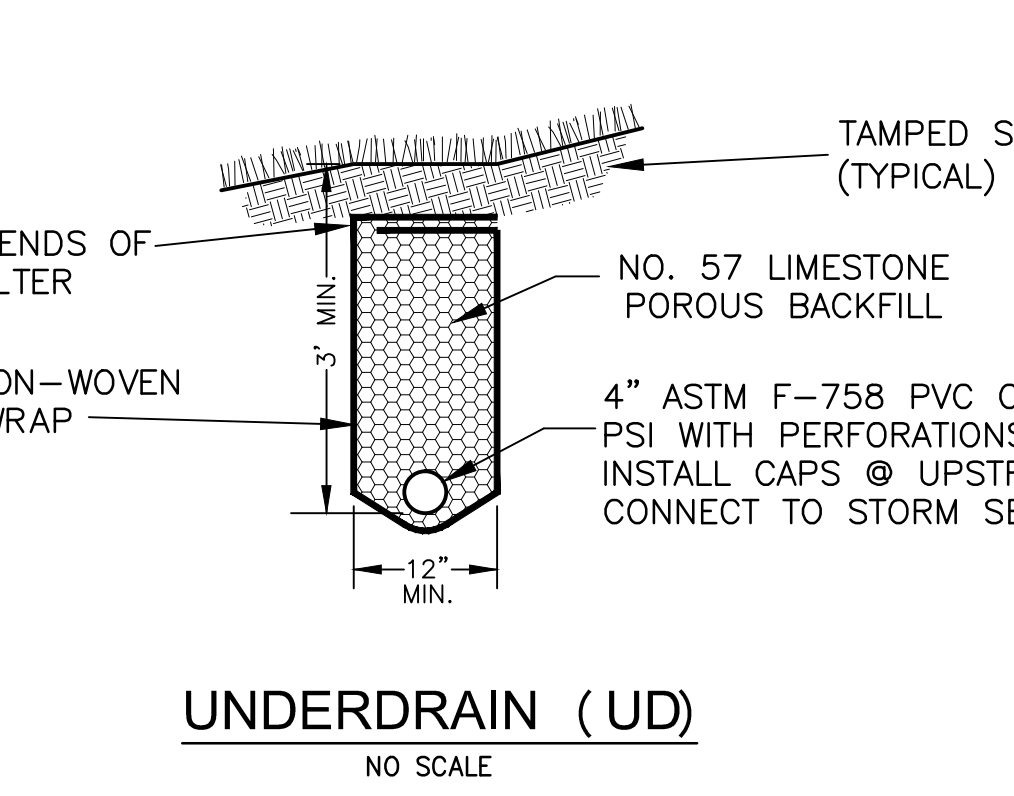
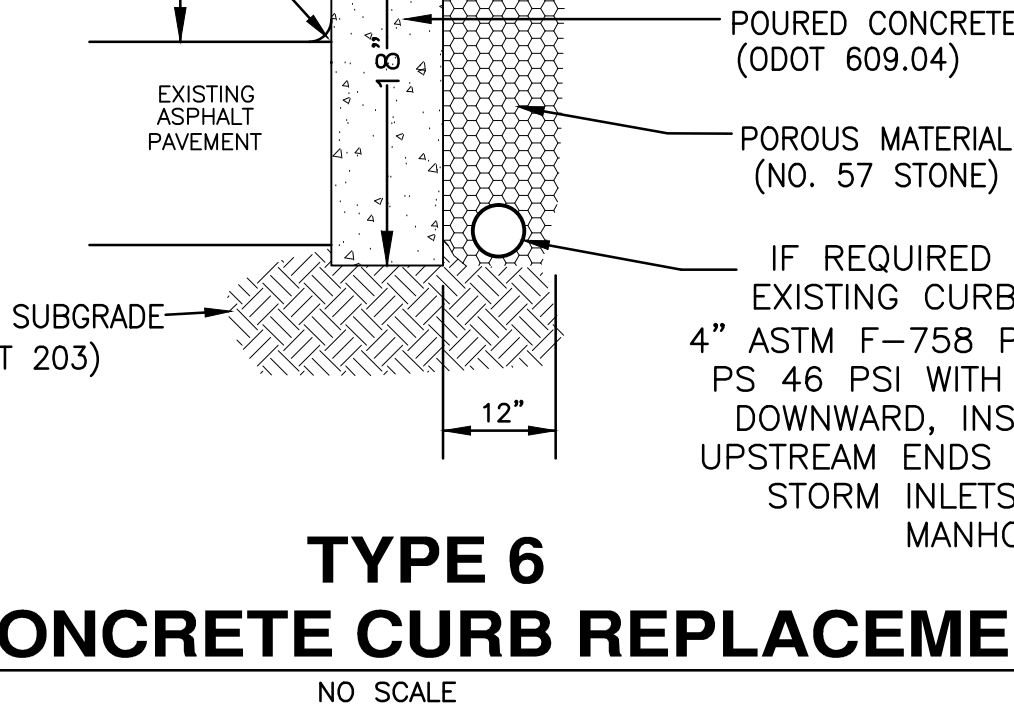
138177684 20140035.310

PAVEMENT SECTION & DETAILS

- NOTES**
- CONTRACTOR SHALL COMPLY WITH THE CITY OF CLEVELAND DRIVE APRON AND SIDEWALK STANDARDS.
 - CONSTRUCT TRANSVERSE EXPANSION JOINTS (705.03) AT INTERVALS OF NOT MORE THAN 25 TO 30 FEET. PLACE FILLER AT THE TRANSVERSE JOINTS FOR THE FULL DEPTH/WIDTH OF THE CONCRETE WALK AND TRULY NORMAL TO GRADE. TEXTURE THE FINAL SURFACE BY USE OF AN ACCEPTED BROOM TO PRODUCE A UNIFORM, GRITTY, TRANSVERSE TEXTURE.



- NOTES**
- ALL PAVEMENT OPENINGS SHALL BE SAVED FULL DEPTH AND HAVE SMOOTH VERTICAL FACES. DOWELS SHALL BE REQUIRED AS PER DOWEL TABLE ON SHEET 1 OF 5.
 - ASPHALT REPAIRS SHALL BE PERFORMED IN SUCH A MANNER THAT THE DRIVE LANE IS NOT IMPAIRED. REPAIR AREA IS LOCATED SHALL BE RESTORED. ADD EXTEND INTO AN ADJACENT DRIVE LANE SHALL ALSO BE RESTORED. FOR DRIVEWAYS WITH WIDTH OF 40' OR LESS A LANE SHALL BE CONSIDERED 1/2 THE PAVEMENT WIDTH.
 - EXTEND OVERLAP IN LONGITUDINAL DIRECTION TWO FEET (2') INTO UNDISTURBED SURFACE.
 - ALL BACKFILL MATERIALS USED UNDER ANY PAVEMENTS SHALL BE COMPACTED TO A MINIMUM OF 98% RELATIVE COMPACTION. ALL MATERIALS SHALL BE PLACED IN 4" LIFT THICKNESS. ALL MATERIALS SHALL BE PLACED IN 4" LIFT THICKNESS. ALL MATERIALS SHALL BE PLACED IN 4" LIFT THICKNESS.
 - COVER ALL JOINTS IN GUTTER AREA WITH POLYETHYLENE MATERIAL BEFORE POURING FLOWABLE FILL. REPAIR TECHNIQUES SHALL BE IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARD REPAIR PROCEDURES.



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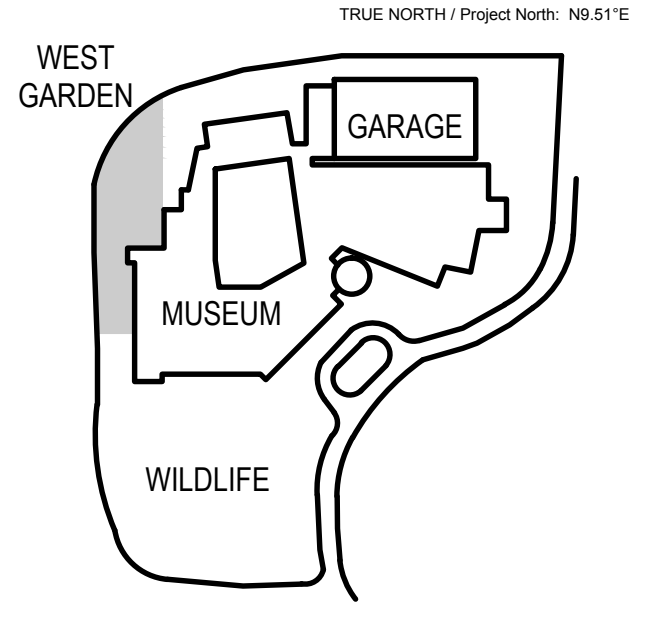
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KEY PLAN



SHEET REVISIONS

mark	date	description
2	10-14-2015	BULLETIN #2
2	12-17-2015	RFI 107 WG
5	02-09-2016	BULLETIN #5
6	03-18-2016	BULLETIN #6



CLEVELAND MUSEUM OF NATURAL HISTORY
1 WADE OVAL DRIVE,
UNIVERSITY CIRCLE
CLEVELAND, OHIO 44106
WEST GARDEN

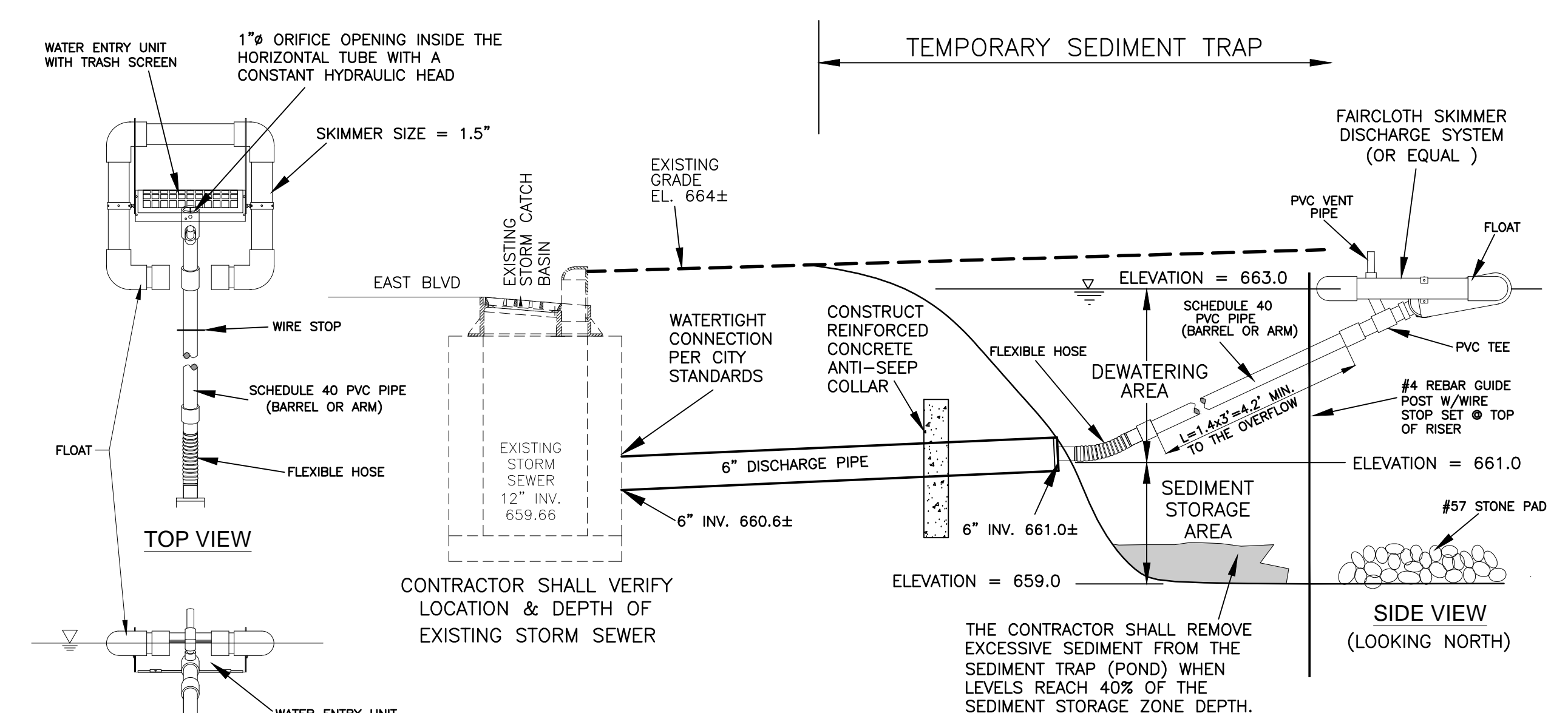
Project Issue Dates

Issue	Date	Issued For
01	09-26-2017	ISSUED FOR BID / PERMIT
02		
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Drawn by: CES, Checked by: JF, Rechecked by: JF

URS project no: 138177684, client project no: 20140035.310

SWPPP DETAILS



PARKING GARAGE SEDIMENT TRAP WITH FAIRCLOTH SKIMMER DISCHARGE SYSTEM (OR EQUAL)
NO SCALE

- SEDIMENT TRAP NOTES:**
- 1.) THE CONTRACTOR SHALL TEMPORARILY DIVERT ALL UPSTREAM RUNOFF TO THE TEMPORARY SEDIMENT TRAPS.
 - 2.) EMBANKMENT/SPILLWAY MUST BE COMPACTED.
 - 3.) EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT / SPILLWAY.
 - 4.) THIS DEVICE IS DESIGNED TO TEMPORARILY STORE RUNOFF FOR UP TO 48 HOURS, PROVIDING SUFFICIENT TIME FOR SEDIMENT TO SETTLE OUT.
 - 5.) INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
 - 6.) REMOVE TEMPORARY SKIMMER DEVICE UPON 100% STABILIZATION OF THE SITE AND THE UPSTREAM WATERSHED, AND REESTABLISH EXISTING STORM SEWER WITH WATER TIGHT CONNECTIONS.
 - 7.) UPON COMPLETION OF CONSTRUCTION AND INSTALLATION OF PERMANENT SEEDING, THE CONTRACTOR SHALL REMOVE AND HAUL-AWAY OFFSITE ALL ACCUMULATED SEDIMENT TO RE-ESTABLISH NATIVE SOIL'S INFILTRATION RATES.



INFILTRATION BASIN SEDIMENT TRAP WITH FAIRCLOTH SKIMMER DISCHARGE SYSTEM (OR EQUAL)
NO SCALE

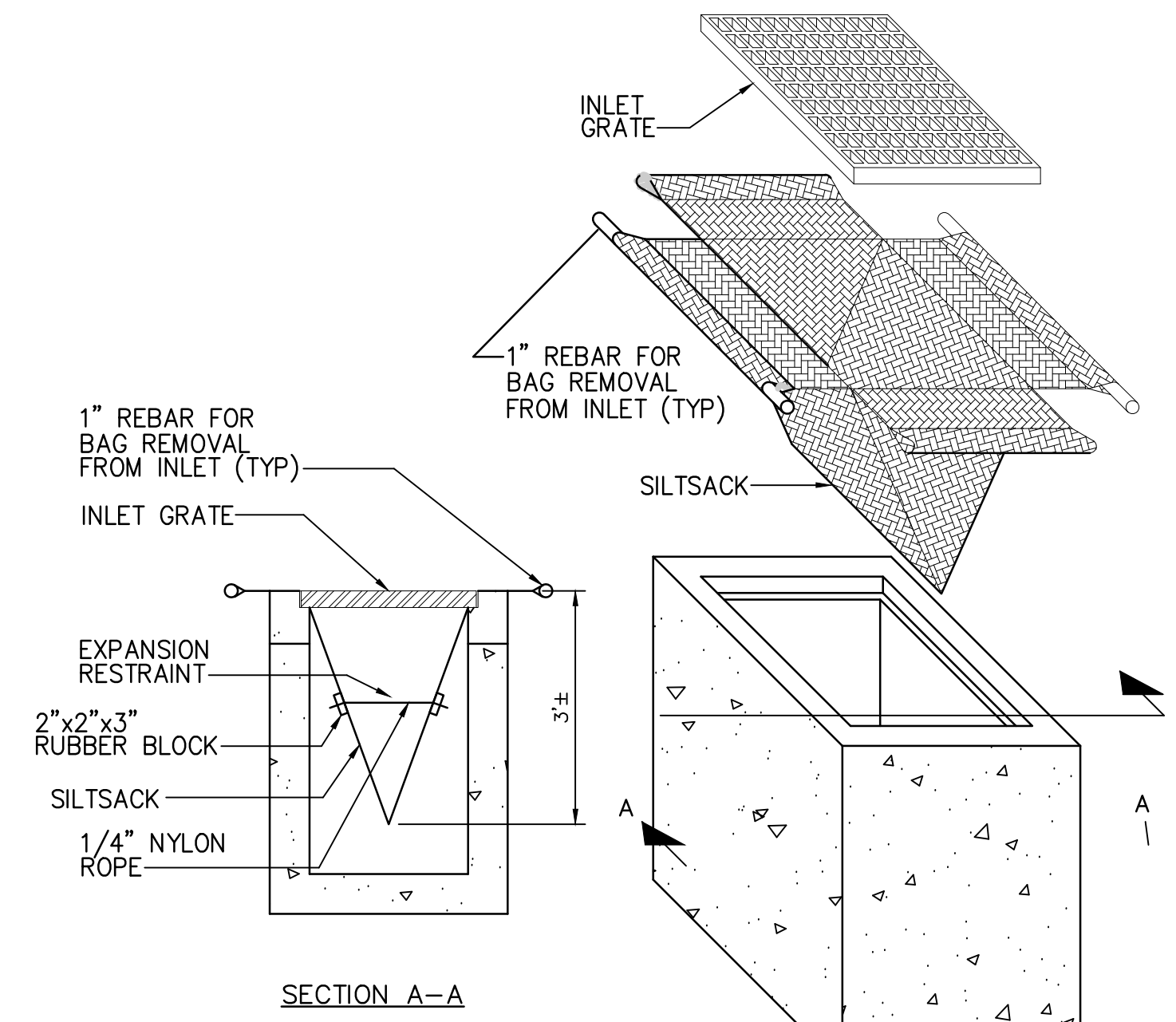
- Specifications for Sediment Traps**
1. Work shall consist of the installation, maintenance and removal of all sediment traps at the locations designated on the drawings.
 2. Sediment traps shall be constructed to the dimensions specified on the drawings and operational prior to upstate land disturbance.
 3. The area beneath the embankment shall be cleared, grubbed and stripped of vegetation to a minimum depth of six (6) inches. The pool shall be cleared as needed to facilitate sediment cleanup.
 4. Fill used for the embankment shall be evaluated to assure its suitability and it must be free of roots or other woody materials. Fill material shall be placed in six (6) inch lifts and shall be compacted by tamping with a shop-vac or other approved compaction equipment. Fill height shall be increased five (5) percent to allow for structure/foundation settlement. Construction shall not be permitted if either the earthfill or compaction surface is frozen.
 5. The maximum height of embankment shall be five (5) feet. All out and fill slopes shall be 2:1 (H:V) or flatter.
 6. A minimum storage volume below the crest of the outlet of 67 yd³ for every acre of contributing drainage area shall be achieved at each location noted on the drawings with additional sediment storage volume provided below this elevation.
 7. Temporary seeding shall be established and maintained over the useful life of the practice.
 8. The outlet for the sediment trap structure shall be constructed to the dimensions shown on the drawings.
 9. The outlet shall be constructed using the materials specified on the drawings. Where geotextile is used, all overlaps shall be a minimum of two (2) feet or as specified by the manufacturer, whichever is greater. All overlaps shall be made with the upper most layer placed last. Geotextile shall be keyed in at least 6" on the upstream side of the outlet.
 10. Warning signs and safety fence shall be placed around the traps and maintained over the life of the practice.
 11. After all sediment-producing areas have been permanently stabilized, the structure and all associated sediment shall be removed. Stable earth materials shall be placed in the sediment trap area and compacted. The area shall be graded to blend in with adjoining land surfaces and have positive drainage. The area shall be immediately seeded.

Specifications for Silt Fence

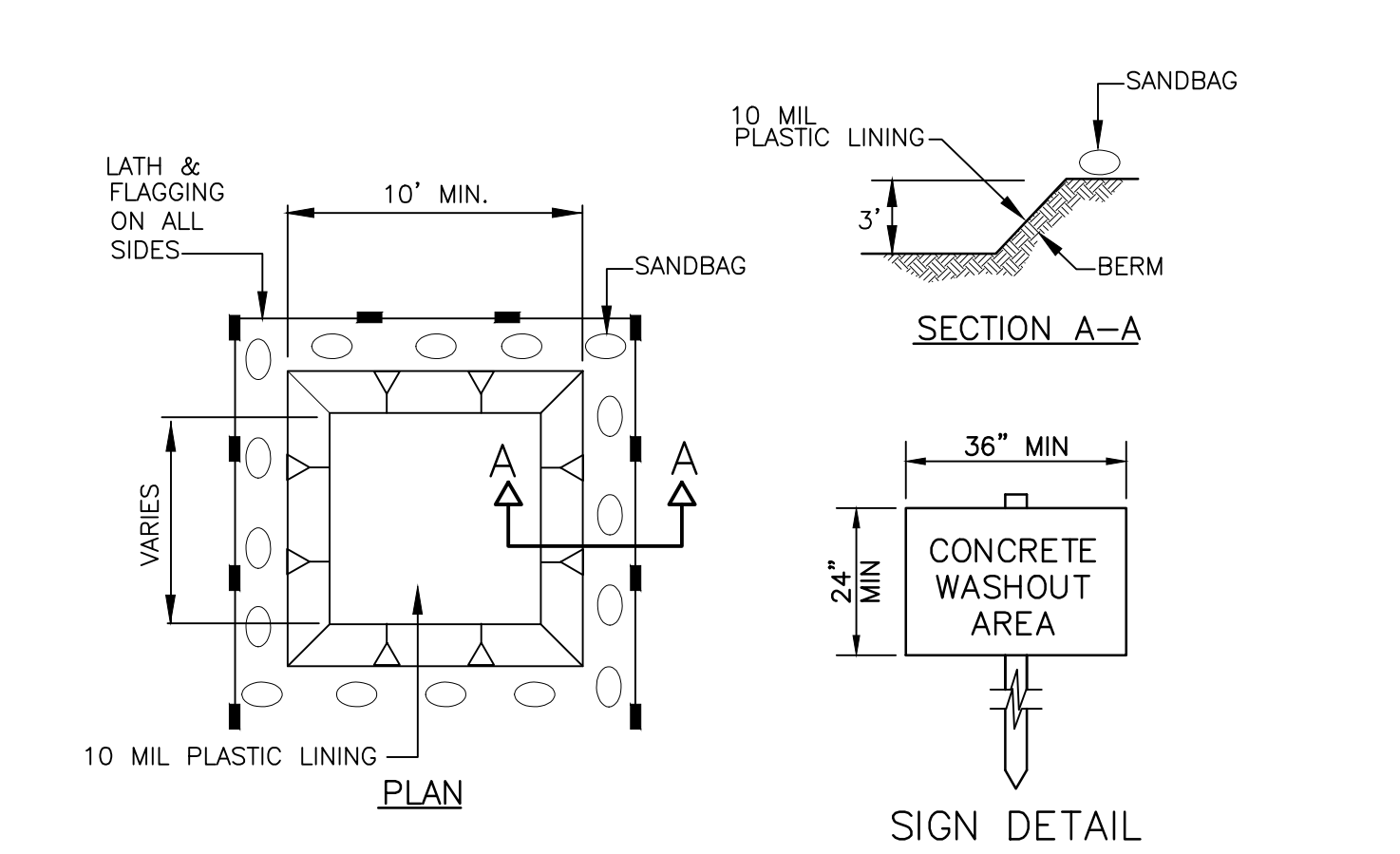
1. Silt fence shall be constructed before upstate land disturbance begins.
 2. All silt fence shall be placed on close to the contour as possible so that water will not concentrate at low points in the fence and so that small swales or depressions that may carry small concentrated flows to the silt fence are disrupted along its length.
 3. Ends of the silt fence shall be brought upstate slightly so that water ponded by the silt fence will be prevented from flowing around the ends.
 4. Silt fence shall be placed on the flattest area available.
 5. Where possible, vegetation shall be preserved for 5 feet (or as much as possible) upstate from the silt fence. If vegetation is removed, it shall be reestablished within 7 days from the installation of the silt fence.
 6. The height of the silt fence shall be a minimum of 16 inches above the original ground surface.
 7. The silt fence shall be placed in an excavated or sliced trench cut a minimum of 6 inches deep. The trench shall be made with a trencher, cable laying machine, string machine, or other suitable device that will ensure an adequately uniform trench depth.
 8. The silt fence shall be placed with the stakes on the downstate side of the geotextile. A minimum of 8 inches of geotextile must be driven a minimum 10 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to administrative loading.
 9. Seams between sections of silt fence shall be spliced together only at a support post with a minimum 6-in. overlap prior to driving into the ground, use details.
 10. Maintenance—Silt fence shall allow runoff to pass only as effluent flow through the geotextile. If runoff over-tops the silt fence, flow under the fabric or around the fence ends, or in any other way allows a concentrated flow discharge, one of the following shall be performed, as appropriate: 1) the layout of the silt fence shall be changed; 2) accumulated sediment shall be removed; or 3) other practices shall be installed.
- Sediment deposits shall be routinely removed when the deposit reaches approximately one-half of the height of the silt fence.
- Silt fences shall be inspected after each rainfall and at least daily during a prolonged rainfall. The location of existing silt fence shall be reviewed daily to ensure its proper location and effectiveness. If damaged, the silt fence shall be repaired immediately.
- Criteria for silt fence materials**
1. Fence post - The length shall be a minimum of 32 inches. Wood posts will be 2x4x2 in. nominal dimensioned hardwood of sound quality. They shall be free of knots, splits and other visible imperfections, that will weaken the posts. The maximum spacing between posts shall be 10 ft. Posts shall be driven a minimum 10 inches into the ground, where possible. If not possible, the posts shall be adequately secured to prevent overturning of the fence due to administrative loading.
 2. Silt fence fabric - See chart below.

Table 6.3.2 Minimum criteria for Silt Fence Fabric (0001, 2000)

FABRIC PROPERTIES	VALUES	TEST METHOD
Minimum Tensile Strength	120 lbs. (55N)	ASTM D 4832
Maximum Creep (at 60 lbs)	50%	ASTM D 4832
Minimum Puncture Strength	50 lbs (220 N)	ASTM D 4833
Minimum Tear Strength	40 lbs (180 N)	ASTM D 4833
Aperture Opening Size	≤ 0.084 mm	ASTM D 4751
Minimum Infiltration	130.2 gals/ft ²	ASTM D 4461
UV Exposure Strength Retention	70%	ASTM D 4355



- NOTES:**
1. EXACT DIMENSIONS TO BE DETERMINED IN FIELD BASED ON ACTUAL INLET DIMENSIONS. SILTSACK BY ATLANTIC CONSTRUCTION FABRICS, INC. OR APPROVED EQUAL.
 2. SEDIMENT MUST BE REMOVED AFTER EACH STORM EVENT.



- ALTERNATE: APPROVED FABRIC WASHOUT BAGS. TEMPORARY CONCRETE WASHOUT FACILITY**
NOT TO SCALE
- A CONCRETE WASHOUT AREA SHALL BE DESIGNATED TO CLEAN CONCRETE TRUCKS AND TOOLS. AT NO TIME SHALL CONCRETE PRODUCTS BE ALLOWED TO ENTER STREAMS OR BAYS.
- TEMPORARY CONCRETE WASHOUT FACILITIES (TYPE BELOW GRADE) SHOULD BE CONSTRUCTED AS SHOWN ON THE DETAIL WITH A RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT. THE QUANTITY AND VOLUME SHOULD BE SUFFICIENT TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS.
- LATH AND FLAGGING SHOULD BE COMMERCIAL TYPE.
- PLASTIC LINING MATERIAL SHOULD BE A MINIMUM 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL BELOW GRADE.

Specifications for Dust Control

1. Vegetative Cover and mulch - Apply temporary or permanent seeding and mulch to areas that will remain idle for over 21 days. Saving existing trees and large shrubs will also reduce soil and air movement across disturbed areas. See Temporary Seeding, Permanent Seeding, Mulching Practices, and Tree and Natural Area Protection practices.
2. Watering - Spray site with water until the surface is wet before and during grading and repeat as needed, especially on hard roads and other heavy traffic routes. Watering shall be done at a rate that prevents dust but does not cause soil erosion. Wetting agents shall be utilized according to manufacturers instructions.
3. Spray-On Adhesives - Apply adhesive according to the following table or manufacturers' instructions.
4. Stone - Graded roadways and other suitable areas will be stabilized using crushed stone or coarse gravel as soon as practicable after reaching an interim or final grade. Crushed stone or coarse gravel can be used as a permanent cover to provide control of soil emissions.
5. Barriers - Existing windbreak vegetation shall be marked and preserved. Snow fencing or other suitable barrier may be placed perpendicular to prevailing air currents at intervals of about 15 times the barrier height to control air currents and blowing soil.
6. Calcium Chloride - This chemical may be applied by mechanical spreader as loose, dry granules or flakes at a rate that keeps the surface moist but not so high as to cause water pollution or plant damage. Application rates should be strictly in accordance with suppliers' specified rates.
7. Operation and Maintenance - When Temporary Dust Control measures are used, repetitive treatment should be applied as needed to accomplish control.

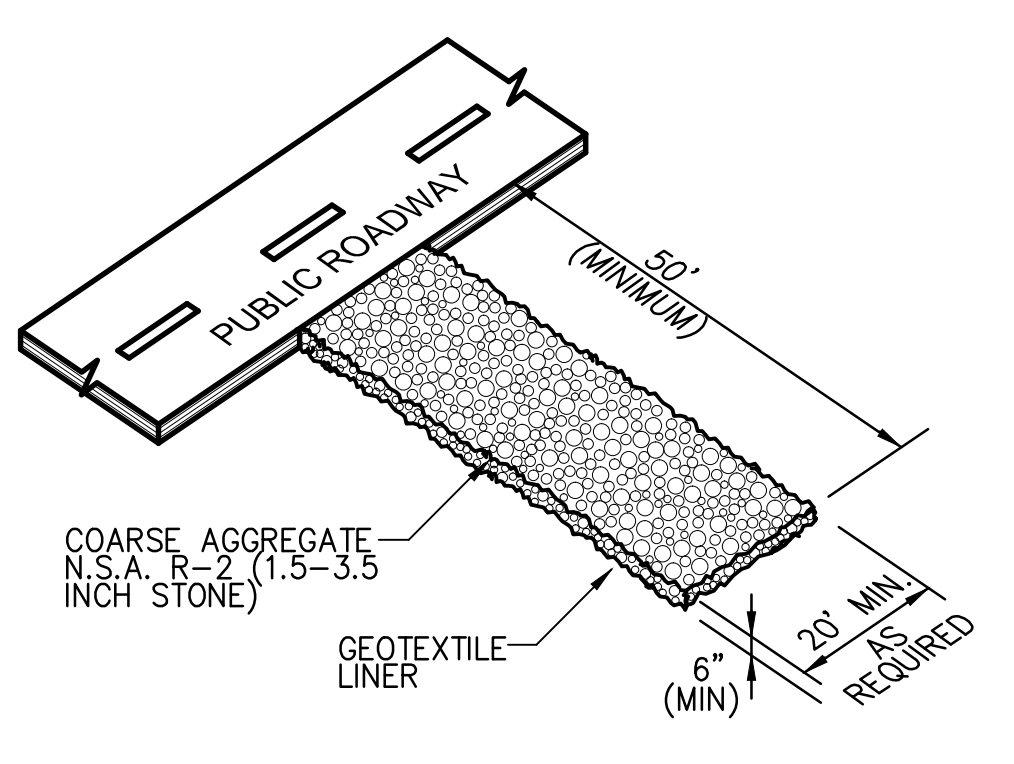
Table 7.5.1 Adhesives for Dust Control

Adhesive	Water Ratio (Adhesive: Water)	Mesh Type	Application Rate Gal./Ac.
Latex Emulsion	12.5:1	Fine	235
Resin in Water	4:1	Fine	300
Acrylic Emulsion (No-traffic)			
Acrylic Emulsion (No-traffic)	7:1	Coarse	450
Acrylic Emulsion (Traffic)	3.5:1	Coarse	350

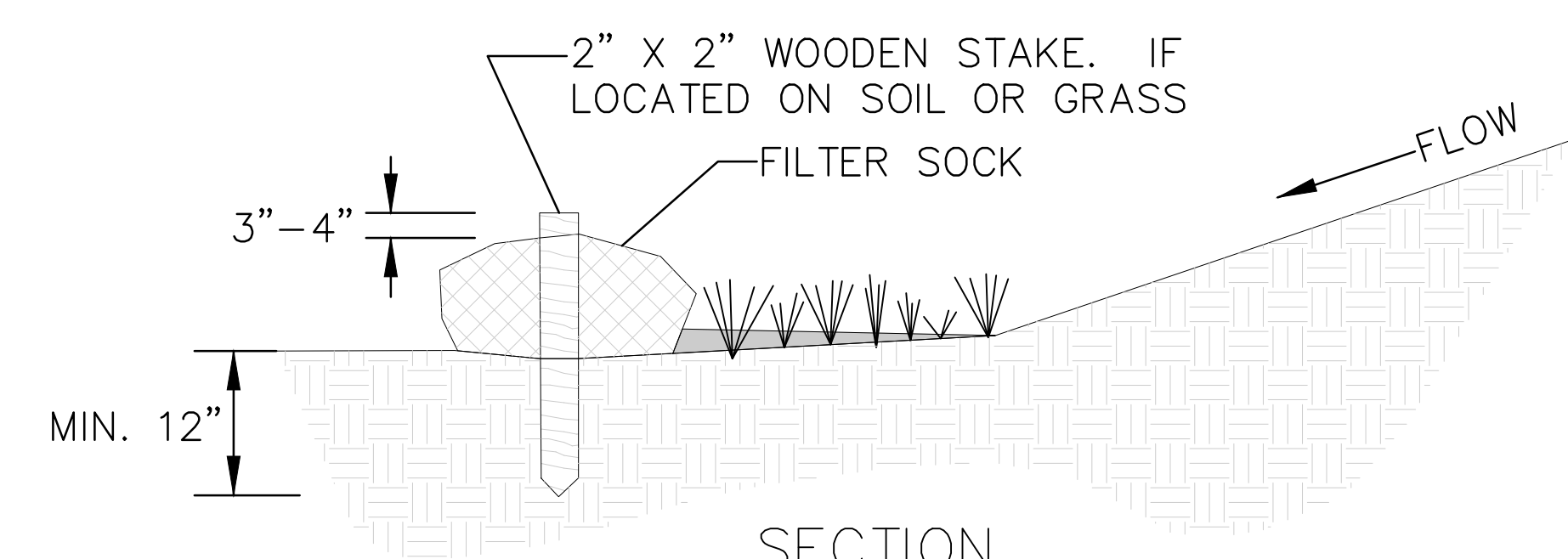
DUST CONTROL
NO SCALE

NOTES:

1. THE CONSTRUCTION DRIVE AS SHOWN ON PLANS WILL BE LOCATED WHERE VEHICULAR TRAFFIC WILL BE LEAVING THE SITE ONTO A PUBLIC RIGHT-OF-WAY STREET, ROADWAY, OR PARKING AREA.
2. PAD WIDTH - 20" OF MINIMUM BUT NOT LESS THAN FULL WIDTH OF ALL POINTS OF VEHICULAR EGRESS. PAD LENGTH - 50'-0" MINIMUM.
3. MAINTAIN THE EXIT TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHT-OF-WAY. PROVIDE PERIODIC TOP DRESSING WITH 1.5-3.5" STONE, AS CONDITIONS DEMAND. IMMEDIATELY REMOVE ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO ROADWAY, INTO STORM DRAINS OR DITCHES.
4. CLEAN WHEELS TO REMOVE MUD PRIOR TO EXITING CONSTRUCTION SITE. WHEN WASHING IS REQUIRED, DO SO ON AREAS STABILIZED WITH CRUSHED STONE DRAINING INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. PROTECT OR REMOVE AND REPLACE ANY CURB THAT MAY EXIST.



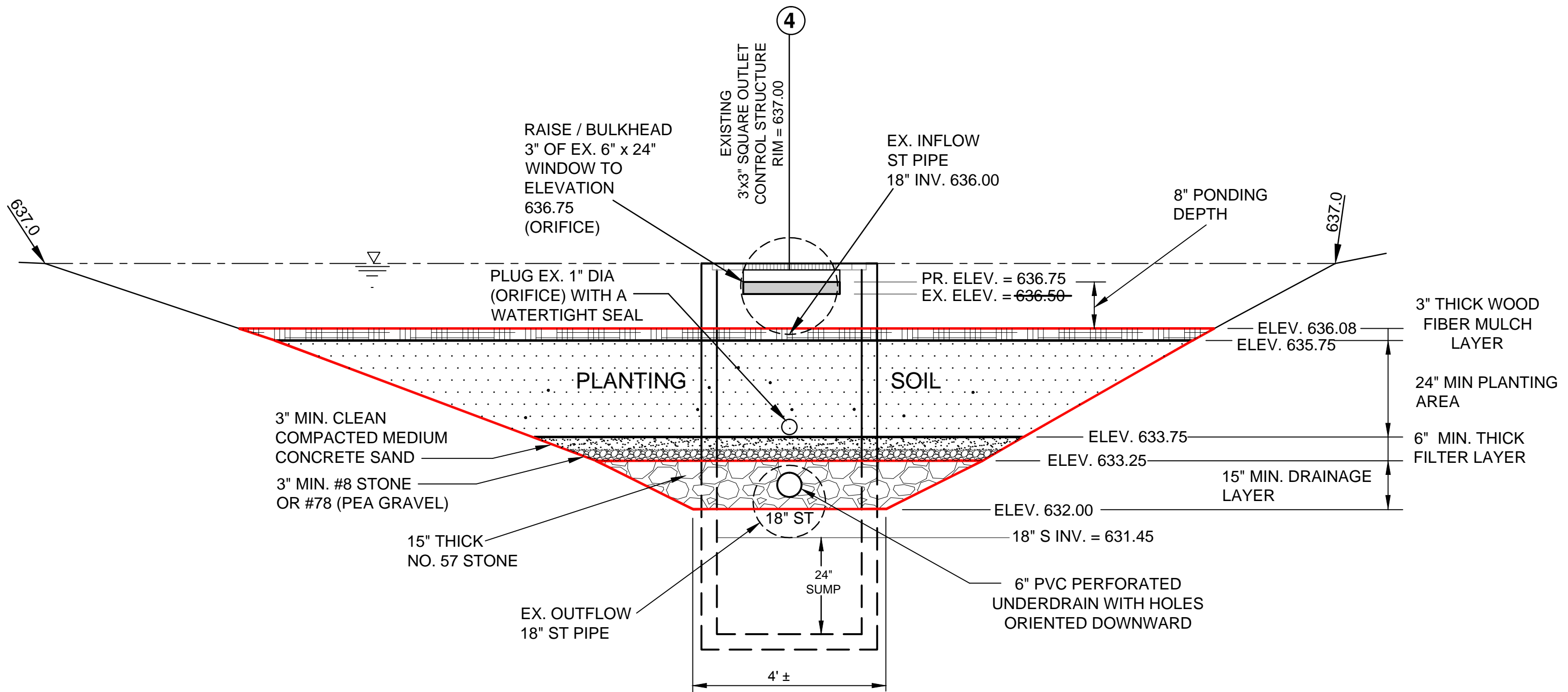
EROSION CONTROL DETAILS CONSTRUCTION DRIVE
NOT TO SCALE



1. MATERIALS - COMPOST USED FOR FILTER SOCKS SHALL BE WEED, PATHOGEN AND INSECT FREE AND FREE OF ANY REFUSE, CONTAMINANTS OR OTHER MATERIALS TOXIC TO PLANT GROWTH. THEY SHALL BE DERIVED FROM A WELL-COMPOSED SOURCE OF ORGANIC MATTER AND CONSIST OF A PARTICLE RANGING FROM 3/8" TO 2".
 2. FILTER SOCKS SHALL BE 3 OR 5 MIL CONTINUOUS, TUBULAR, HDPE 3/8" KNITTED MESH NETTING MATERIAL, FILLED WITH COMPOST PASSING THE ABOVE SPECIFICATIONS FOR COMPOST PRODUCTS.
 3. FILTER SOCKS WILL BE PLACED ON A LEVEL LINE ACROSS SLOPES, GENERALLY PARALLEL TO THE BASE OF THE SLOPE OR OTHER AFFECTED AREA. ON SLOPES APPROACHING 2:1, ADDITIONAL SOCKS SHALL BE PROVIDED AT THE TOP AND AS NEEDED MID-SLOPE.
 4. FILTER SOCKS INTENDED TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, SHALL BE SEEDED AT THE TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION.
 5. FILTER SOCKS ARE NOT TO BE USED IN CONCENTRATED FLOW SITUATIONS OR IN RUNOFF CHANNELS.
- MAINTENANCE:**
6. ROUTINELY INSPECT FILTER SOCKS AFTER EACH SIGNIFICANT RAIN, MAINTAINING FILTER SOCKS IN A FUNCTIONAL CONDITION AT ALL TIMES.
 7. REMOVE SEDIMENTS COLLECTED AT THE BASE OF THE FILTER SOCKS WHEN THEY REACH 1/3 OF THE EXPOSED HEIGHT OFF THE PRACTICE.
 8. WHERE THE FILTER SOCK DETERIORATES OR FAILS, IT WILL BE REPAIRED OR REPLACED WITH A MORE EFFECTIVE ALTERNATIVE.
 9. REMOVAL - FILTER SOCKS WILL BE DISPERSED ON SITE WHEN NO LONGER REQUIRED IN SUCH A WAY AS TO FACILITATE AND NOT OBSTRUCT SEEDINGS.

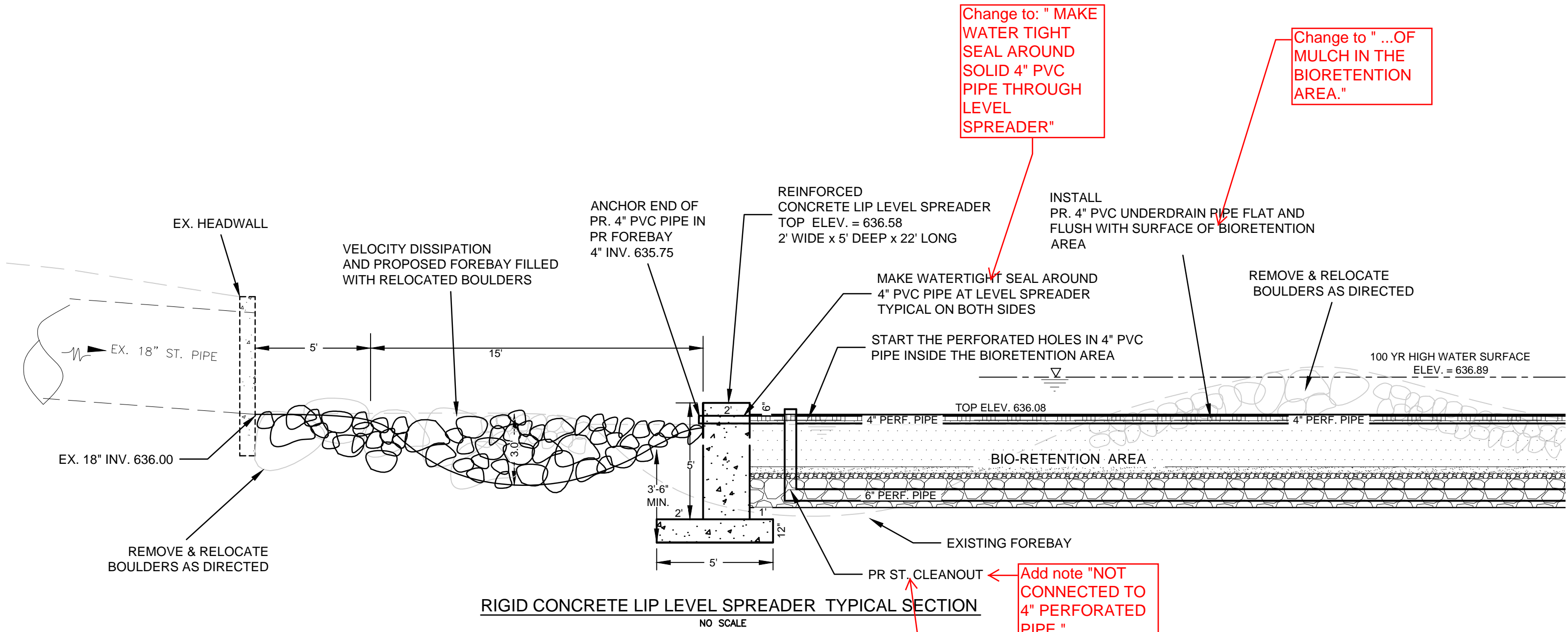
FILTER SOCK DETAIL
NOT TO SCALE

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CMNH SEARS GARDEN DETENTION BASIN
OUTLET CONTROL STRUCTURE / BIO-RETENTION TYPICAL SECTION

SCALE: 1" = 2'



Change to: " MAKE WATER TIGHT SEAL AROUND SOLID 4\"/>

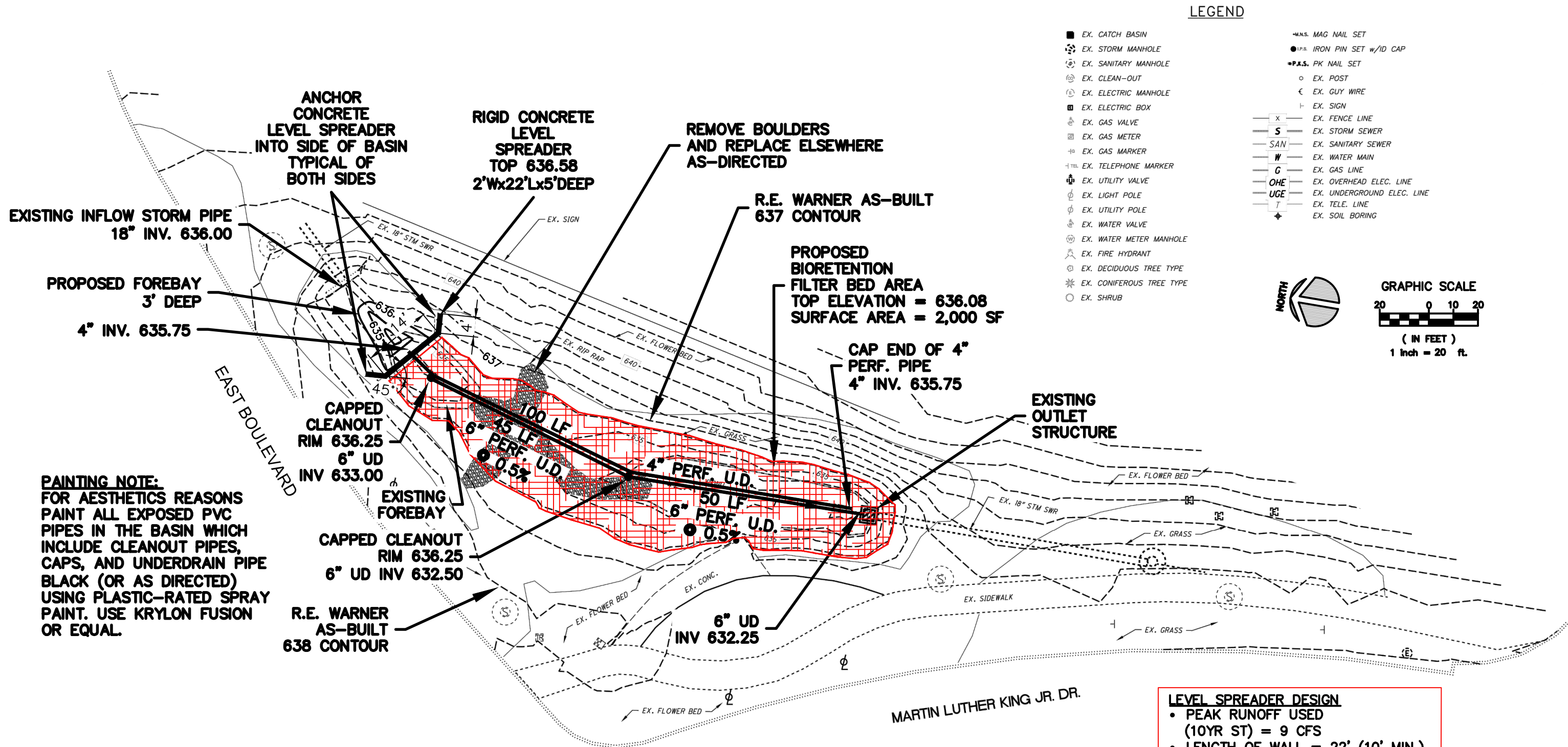
Change to " ...OF MULCH IN THE BIORETENTION AREA."

RIGID CONCRETE LIP LEVEL SPREADER TYPICAL SECTION

NO SCALE

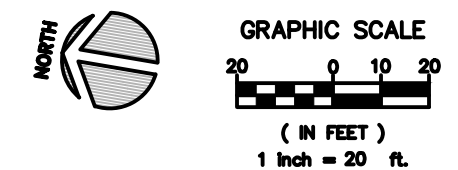
Add note "NOT CONNECTED TO 4\"/>

Add "SOLID PIPE"



LEGEND

- | | |
|----------------------------|--------------------------------|
| ■ EX. CATCH BASIN | ⊙ M.N.S. MAG NAIL SET |
| ⊙ EX. STORM MANHOLE | ● I.P.S. IRON PIN SET w/ID CAP |
| ⊙ EX. SANITARY MANHOLE | ⊙ P.S.S. PK NAIL SET |
| ⊙ EX. CLEAN-OUT | ○ EX. POST |
| ⊙ EX. ELECTRIC MANHOLE | ⊙ EX. GUY WIRE |
| ⊙ EX. ELECTRIC BOX | ⊙ EX. SIGN |
| ⊙ EX. GAS VALVE | ⊙ EX. FENCE LINE |
| ⊙ EX. GAS METER | ⊙ EX. STORM SEWER |
| ⊙ EX. GAS MARKER | ⊙ EX. SANITARY SEWER |
| ⊙ EX. TELEPHONE MARKER | ⊙ EX. WATER MAIN |
| ⊙ EX. UTILITY VALVE | ⊙ EX. GAS LINE |
| ⊙ EX. LIGHT POLE | ⊙ EX. OVERHEAD ELEC. LINE |
| ⊙ EX. UTILITY POLE | ⊙ EX. UNDERGROUND ELEC. LINE |
| ⊙ EX. WATER VALVE | ⊙ EX. TELE. LINE |
| ⊙ EX. WATER METER MANHOLE | ⊙ EX. SOIL BORING |
| ⊙ EX. FIRE HYDRANT | |
| ⊙ EX. DECIDUOUS TREE TYPE | |
| ⊙ EX. CONIFEROUS TREE TYPE | |
| ○ EX. SHRUB | |

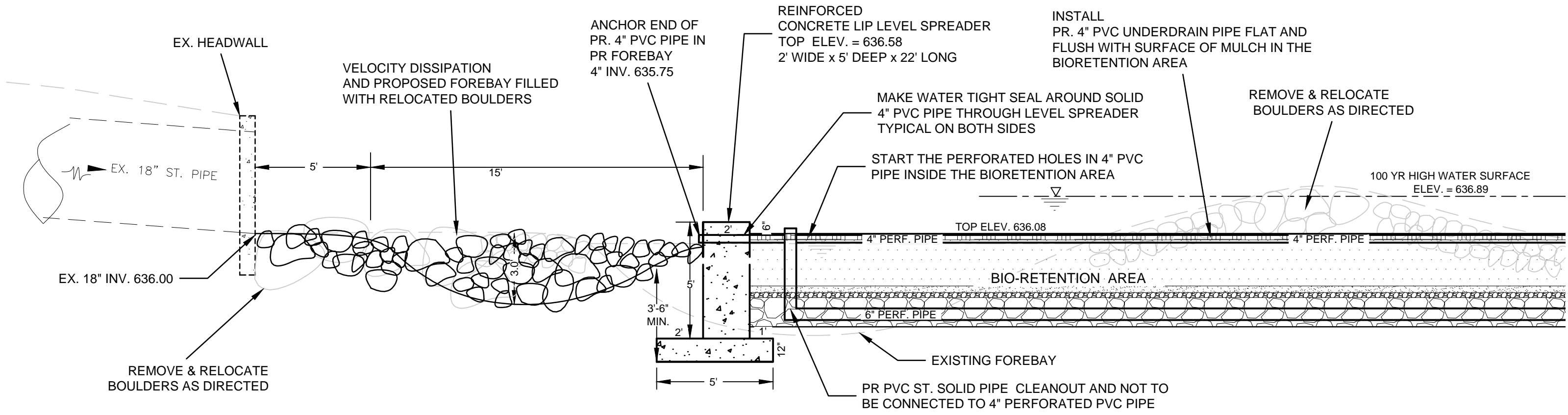


PAINTING NOTE:
FOR AESTHETICS REASONS
PAINT ALL EXPOSED PVC
PIPES IN THE BASIN WHICH
INCLUDE CLEANOUT PIPES,
CAPS, AND UNDERDRAIN PIPE
BLACK (OR AS DIRECTED)
USING PLASTIC-RATED SPRAY
PAINT. USE KRYLON FUSION
OR EQUAL.

LEVEL SPREADER DESIGN

- PEAK RUNOFF USED (10YR ST) = 9 CFS
- LENGTH OF WALL = 22' (10' MIN.)
- WIDTH OF WALL = 2' (2' MIN.)
- DEEP OF WALL = 5'
- DEPTH OF FOREBAY = 3' (6" MIN.)
- LENGTH OF FOREBAY = 15'
THE MIN. LENGTH OF FOREBAY IS 1/2 DISTANT FROM ST. INLET TO WALL (10')

**CMNH SEARS GARDEN AS-BUILT DETENTION BASIN PLAN
WITH BIO-RETENTION AREA**



RIGID CONCRETE LIP LEVEL SPREADER TYPICAL SECTION

NO SCALE