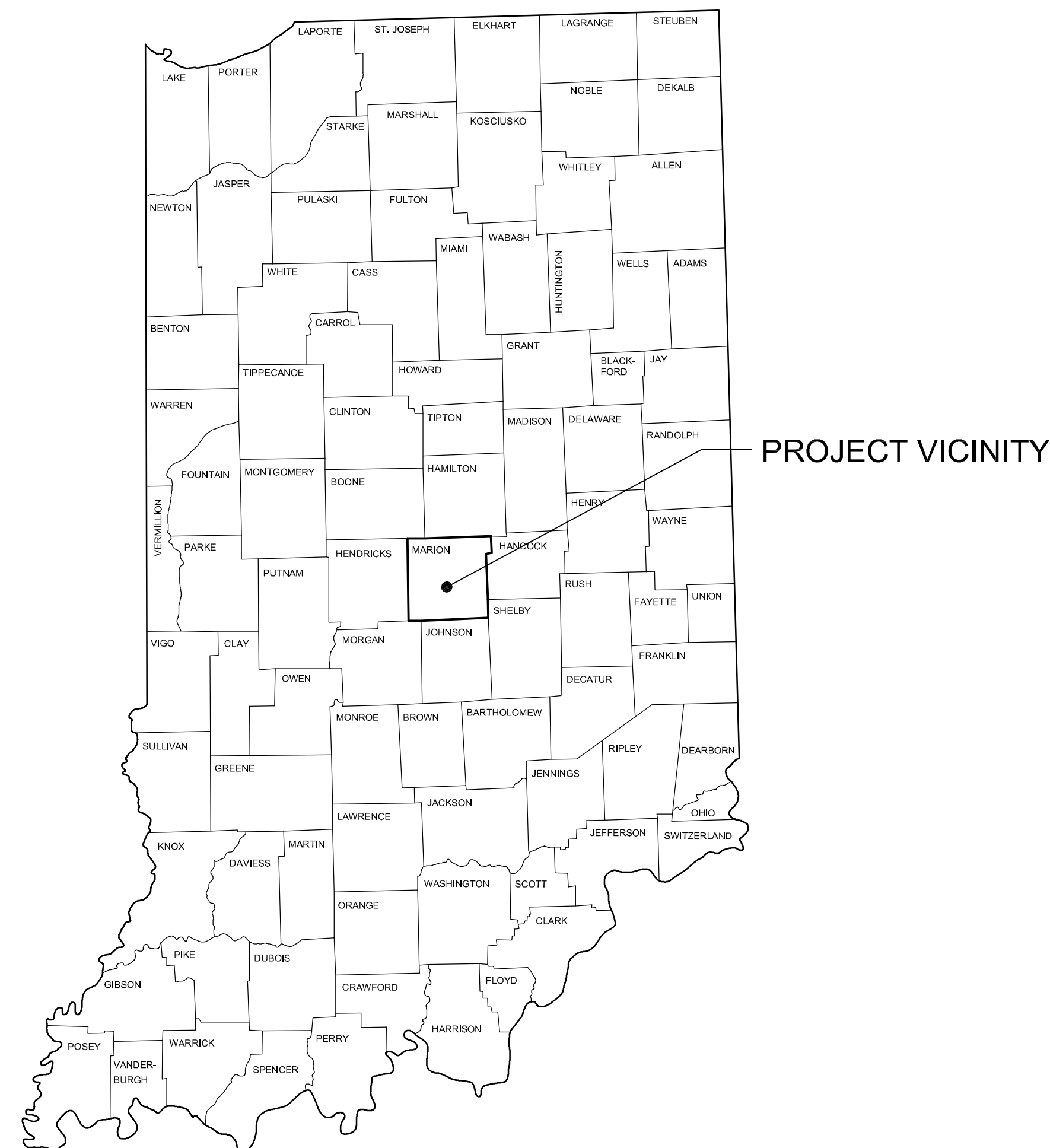


OHIO STREET PILOT GREEN INFRASTRUCTURE PROJECT

OHIO ST. BETWEEN PARK AVE. AND COLLEGE AVE.
INDIANAPOLIS, IN 46202

DPW PROJECT #: SD-00-042E
MAYOR: GREG BALLARD
DPW DIRECTOR: DAVID SHERMAN



CONSTRUCTION PLAN INDEX

C0.0	TITLE SHEET
C1.0	SITE DEMOLITION PLAN
C2.0	SITE LAYOUT PLAN
C3.0	DETAILS
C4.0	LANDSCAPE PLAN & DETAILS

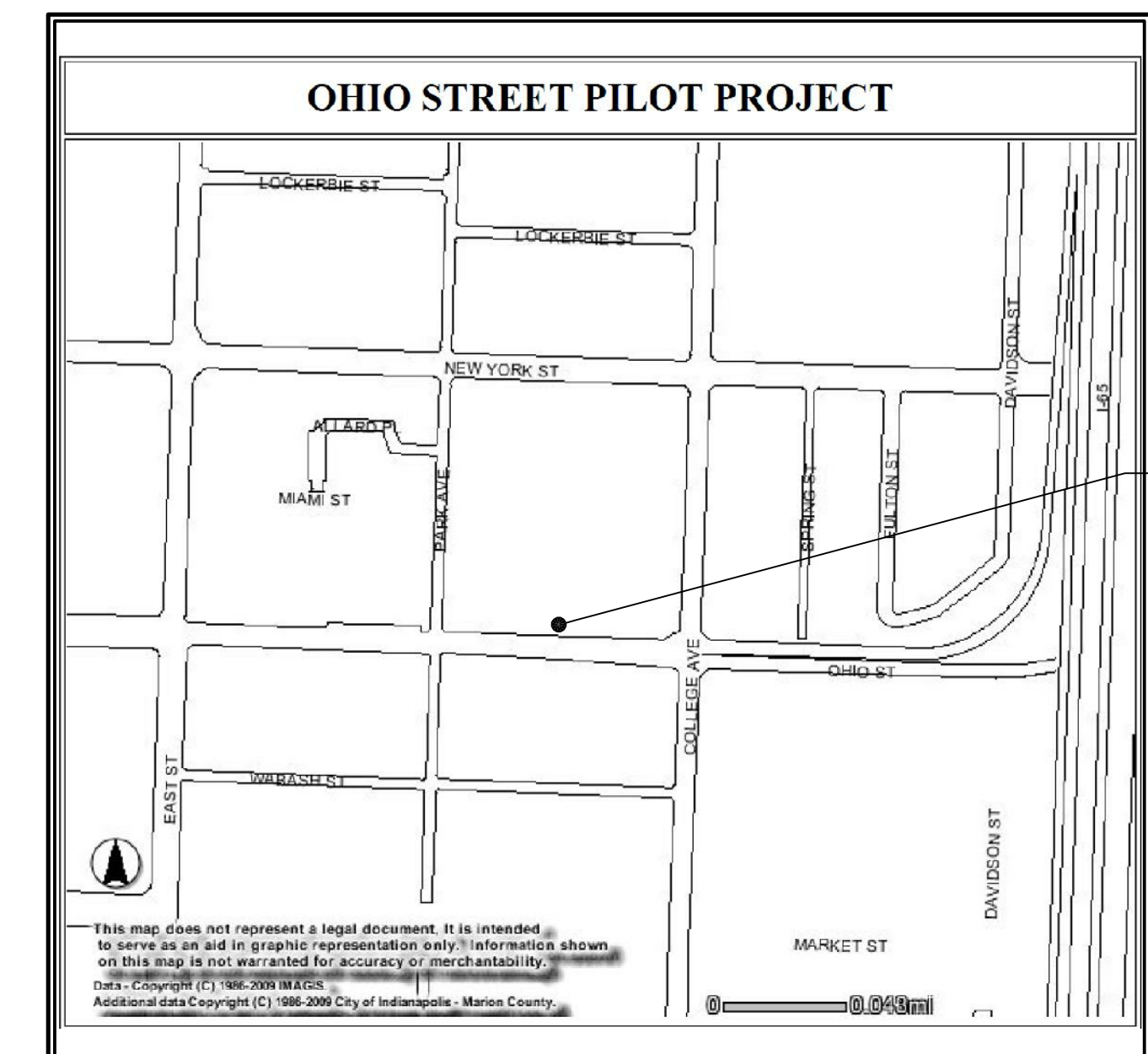
PROJECT DEVELOPER:

UNITED WATER INDIANAPOLIS
2700 SOUTH BELMONT AVENUE
INDIANAPOLIS, IN 46221
PHONE: (317) 639-7000

IN CONJUNCTION WITH:
INDIANAPOLIS DOWNTOWN INC.
111 MONUMENT CIRCLE
INDIANAPOLIS, IN 46204
PHONE: (317) 237-2211



919 NORTH EAST STREET
INDIANAPOLIS, INDIANA 46202
Ph: (317) 423-0690 Fax: (317) 423-0696



PROJECT VICINITY

VICINITY MAP

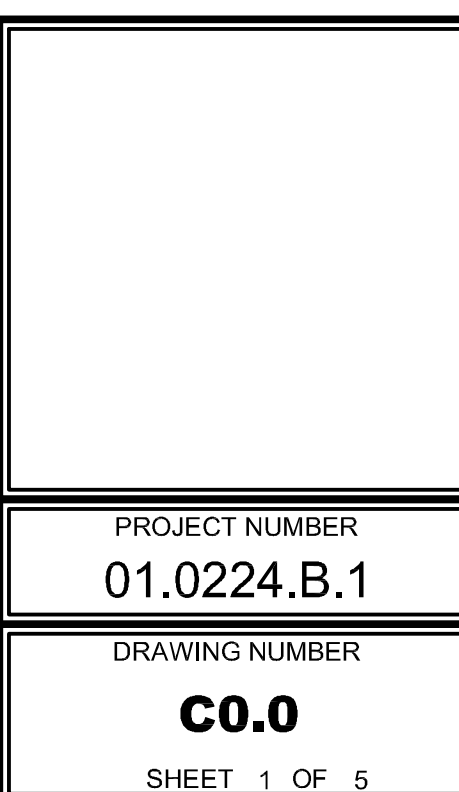
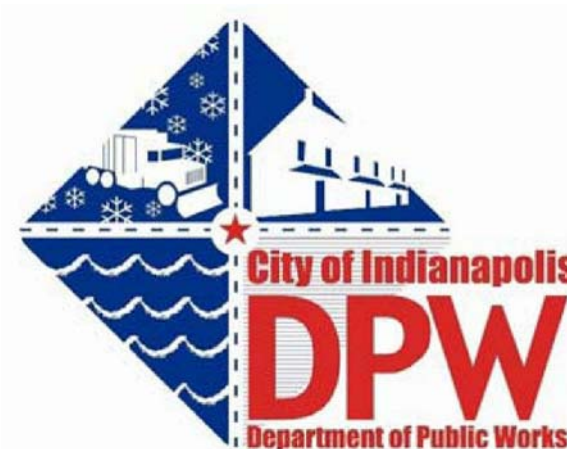
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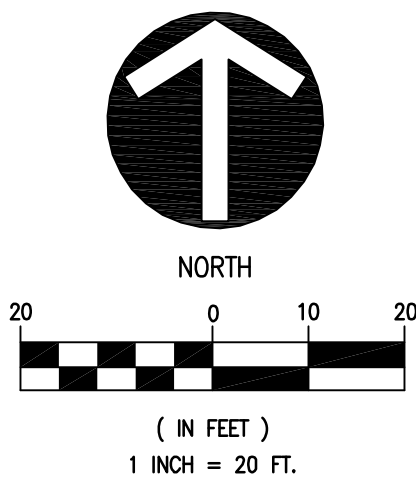
 NORTH

BENCHMARK DATA

USGS BENCHMARK - ELEV. = 719.44
BRONZE DISK IN THE NORTH FACE OF A STONE WALL AT THE UNITED STATES POST OFFICE BUILDING AT THE INTERSECTION OF EAST NEW YORK STREET & PENNSYLVANIA STREET 75' ± WEST OF THE NORTHEAST BUILDING CORNER & 13' ± SOUTH OF THE SOUTH CURB OF NEW YORK STREET STAMPED "E-266". (1947) (NGVD 1929)

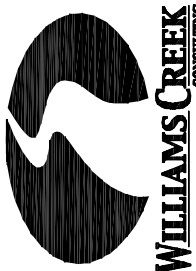
STANDARD SYMBOLS			
MB	MAIL BOX	■	BUSH
PWP	POWER POLE	■	EMH ELECTRIC MANHOLE
SIGN	STREET SIGN	▲	GM GAS METER
POT	POT	○	WM WATER METER
RWMKR	RW MARKER	■	GV GAS VALVE
POST	POST	■	WV WATER VALVE
SSMH	SANITARY SEWER	⊗	GMKR GAS MARKER
STMH	STORM SEWER	⊗	GATE GATE
TEL-PED	TELEPHONE PEDESTAL	■	GR BEEHIVE GRATE
TREE1	TREE (DEODUOUS)	☼	GW GUY WIRE
TREE2	TREE (CONIFEROUS)	☼	HH HAND HOLE
TRMH	TRAFFIC MANHOLE	●	INLET INLET
SCM	SECTION CORNER	▲	LP LIGHT POLE
CPT	CONTROL POINT	●	FA FLOW ARROW
CD	CLEAN OUT	○	FH FIRE HYDRANT
TBM	TEMP. BENCH MARKER	□	E-PED ELECTRIC PEDESTAL
MISC	MISCELLANEOUS	+	DS DOWN SPOUT
FG	FLAT GRATE	■	TMH TELEPHONE MANHOLE
YL	YARD LIGHT	✱	PI POINT OF INTERSECTION
PKNAL	PK NAIL, REBAR, RR SPIKE	•	IP IRON PIPE (SURVEY MON.)





INDIANAPOLIS DOWNTOWN INC.
111 MONUMENT CIRCLE
INDIANAPOLIS, IN 46204

WILLIAMS CREEK CONSULTING, INC.
919 NORTH EAST STREET
INDIANAPOLIS, INDIANA 46202
Ph: (317) 423-0690 Fax: (317) 423-0696



LEGEND

- "BUMP-IN" GREEN STREET RAIN GARDEN
798 SOFT (717 SOFT BUCHANAN + 81 SOFT NW CORNER OF COLLEGE & OHIO STREETS)
- TRADITIONAL LANDSCAPING AREA
241 SOFT
- SIDEWALK REMOVAL & REPLACEMENT (PERVIOUS CONCRETE) 220 LF (1090 SQFT)
- PERVIOUS CONCRETE CURB AND GUTTER
418 LF
- PERVIOUS CONCRETE CROSSWALK
251 SF
- PROPOSED RAIN GARDEN SIGN
SEE DETAIL 02/C3.0
- IMPERMEABLE LINER, SEE DETAIL SW-GS-11 ON SHEET C3.0
- FLOW ARROW
- 6" UNDERDRAIN, SEE DETAIL SW-O-4.9.3b ON SHEET C3.0

GENERAL LAYOUT NOTES

- THE UTILITIES INDICATED ON THESE PLANS AND ON THE SURVEY MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THE SITE. THE LOCATION AND SIZE OF THESE UTILITIES MAY BE APPROXIMATE. THE ENGINEER SHALL NOT BE HELD LIABLE FOR ANY INACCURATE UTILITY INFORMATION INDICATED, IMPLIED, OR NOT INDICATED ON THESE PLANS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND MAINTAIN IN SERVICE ALL EXISTING UTILITIES ENCOUNTERED DURING CONSTRUCTION UNLESS OTHERWISE INDICATED IN THE DRAWINGS. ANY PIPING, WHICH CAN BE REMOVED DURING CONSTRUCTION WITHOUT UNDUE INTERRUPTION OF SERVICE MAY BE REMOVED AND REPLACED BY THE CONTRACTOR, AT HIS EXPENSE WITH THE PERMISSION OF THE OWNER.
- BEFORE WORKING WITH OR AROUND EXISTING UTILITIES, THE APPLICABLE UTILITY COMPANY SHALL BE CONTACTED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL PRESERVE AND PROTECT PROPERTY MARKERS, SECTION CORNERS, SURVEY MARKS AND CITY BENCH MARKS, SUCH AS STONES, PIPES, OR OTHER MONUMENTS ENCOUNTERED. IF THE CONTRACTOR MUST RELOCATE THE PROPERTY MARKERS OR MONUMENTS, THEIR LOCATION SHALL BE REFERENCED BY A REGISTERED LAND SURVEYOR AND THE OWNER NOTIFIED BEFORE MOVING. ALL PROPERTY MARKERS AND MONUMENTS RELOCATED DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED, SPILLED OR WIND BLOWN FROM THE SITE ON TO OTHER SITES, RIGHT-OF-WAYS, PUBLIC OR PRIVATE STREETS, DRIVEWAYS, YARDS, OR SIDEWALKS. THE CONTRACTOR MUST CLEAN DAILY IF NECESSARY. WATER MAY BE USED AS A REDUCER.
- ROADWAY SURFACING AND BASE MATERIALS, OR ANY OTHER PROPERTY REMOVED OR DAMAGED, SHALL BE REPLACED OR REPAIRED AS PROVIDED FOR IN THE SPECIFICATIONS OR OTHER CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY THE FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR TO PROVIDE FOR ACCESS TO THE RESIDENCES ACROSS THE WORK AREA.
- INFORMATION ON DETAIL DRAWINGS TAKES PRIORITY OVER ALL GENERAL DRAWINGS AND SCHEDULES. CONFLICTS SHALL BE RESOLVED ACCORDINGLY.
- WHEN CONNECTIONS ARE TO BE MADE TO EXISTING PIPING AND STRUCTURES OR WHERE CONSTRUCTION IS IN THE VICINITY OF EXISTING PIPING THE LOCATION AND ELEVATION OF THE EXISTING PIPING SHALL BE FIELD VERIFIED AND NOTIFICATION GIVEN TO THE OWNER IF THE EXISTING PIPING IS FOUND TO BE DIFFERENT THAN THAT SHOWN ON THE DRAWINGS.
- FOR CLARITY OF THESE DRAWINGS, PIPES MAY NOT BE DRAWN TO SCALE OR EXACTLY LOCATED.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES MENTIONED ABOVE UNLESS OTHERWISE NOTED IN THE CONTRACT OR SPECIFICATIONS. ALL ASSOCIATED BONDING REQUIREMENTS AND COSTS ARE INCIDENTAL TO THE CONTRACT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND ELEVATIONS DURING THE ENTIRE CONSTRUCTION SCHEDULE. IF ANY DISCREPANCIES ARE FOUND IN THESE ENGINEERING PLANS FROM ACTUAL FIELD DIMENSIONS, THE CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
- ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- ALL WORK SHALL BE COMPLETED WITHIN RIGHT OF WAY.
- TRAFFIC SIGNAL POLE SHALL REMAIN OPERATIONAL AND STABILIZED AT ALL TIMES.

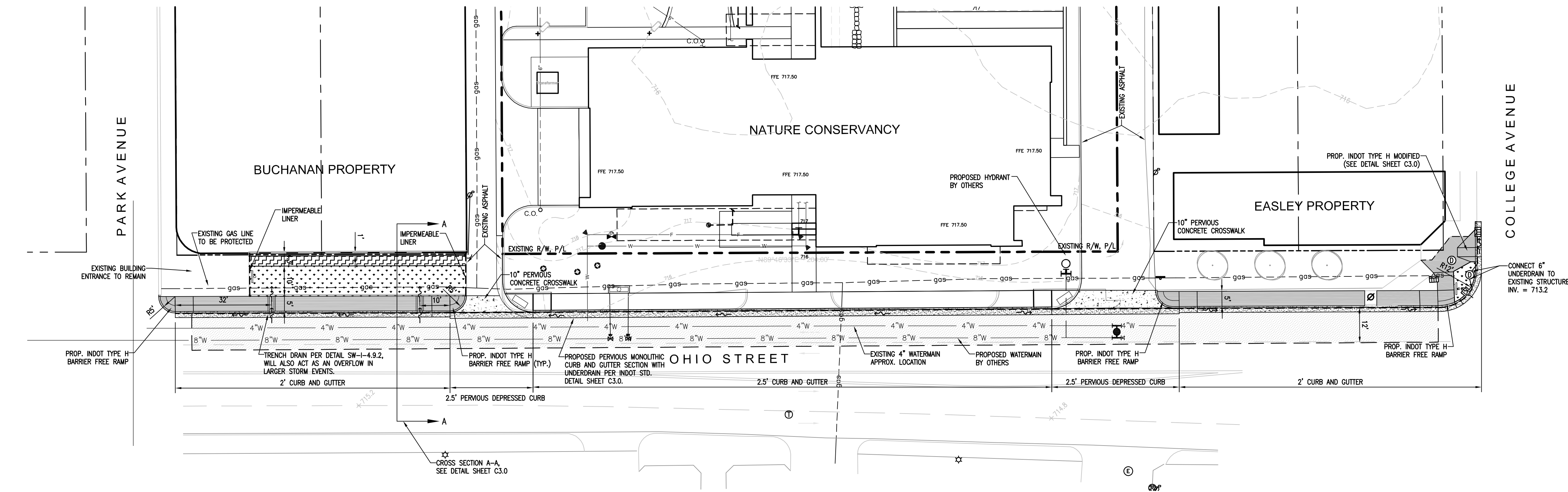
OHIO STREET PILOT PROJECT
OHIO ST. BETWEEN PARK AVE. AND COLLEGE AVE.
INDIANAPOLIS, IN 46202

SITE LAYOUT PLAN

PROJECT NUMBER
01.224.B.1

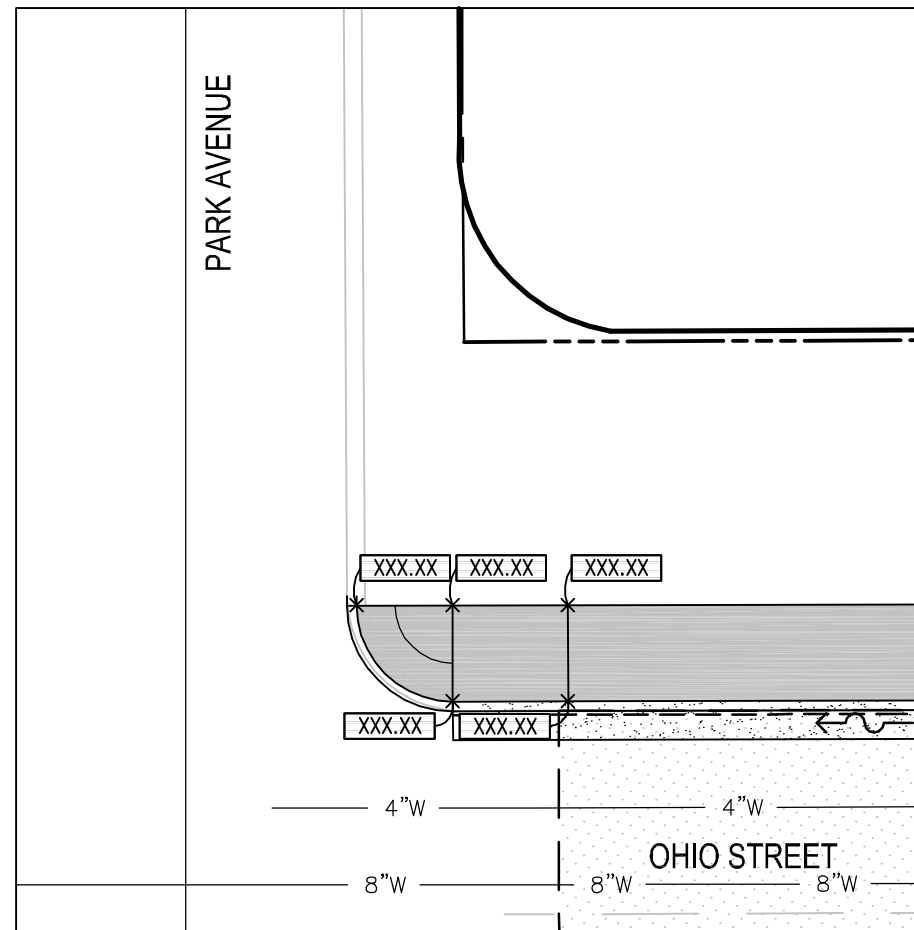
DRAWING NUMBER
C2.0

SHEET 3 OF 5

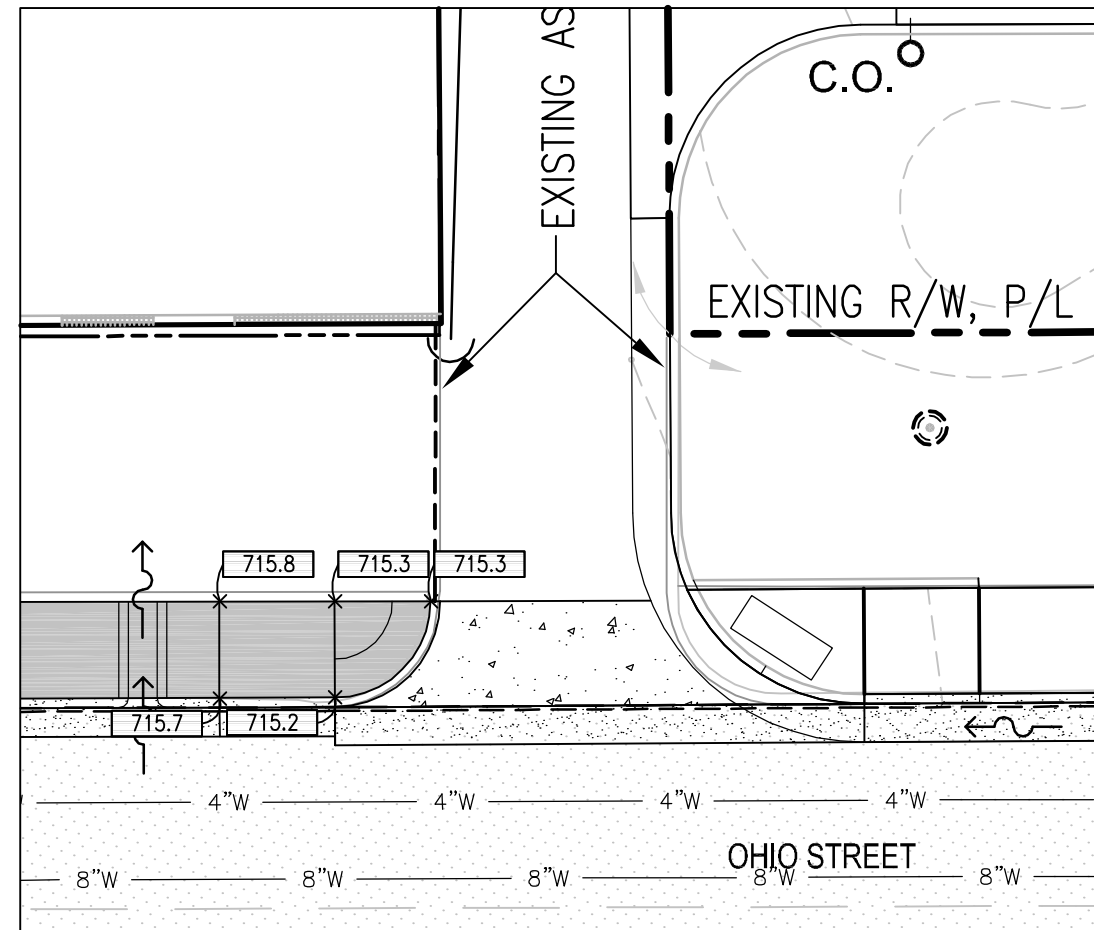


SITE LAYOUT - PLAN VIEW

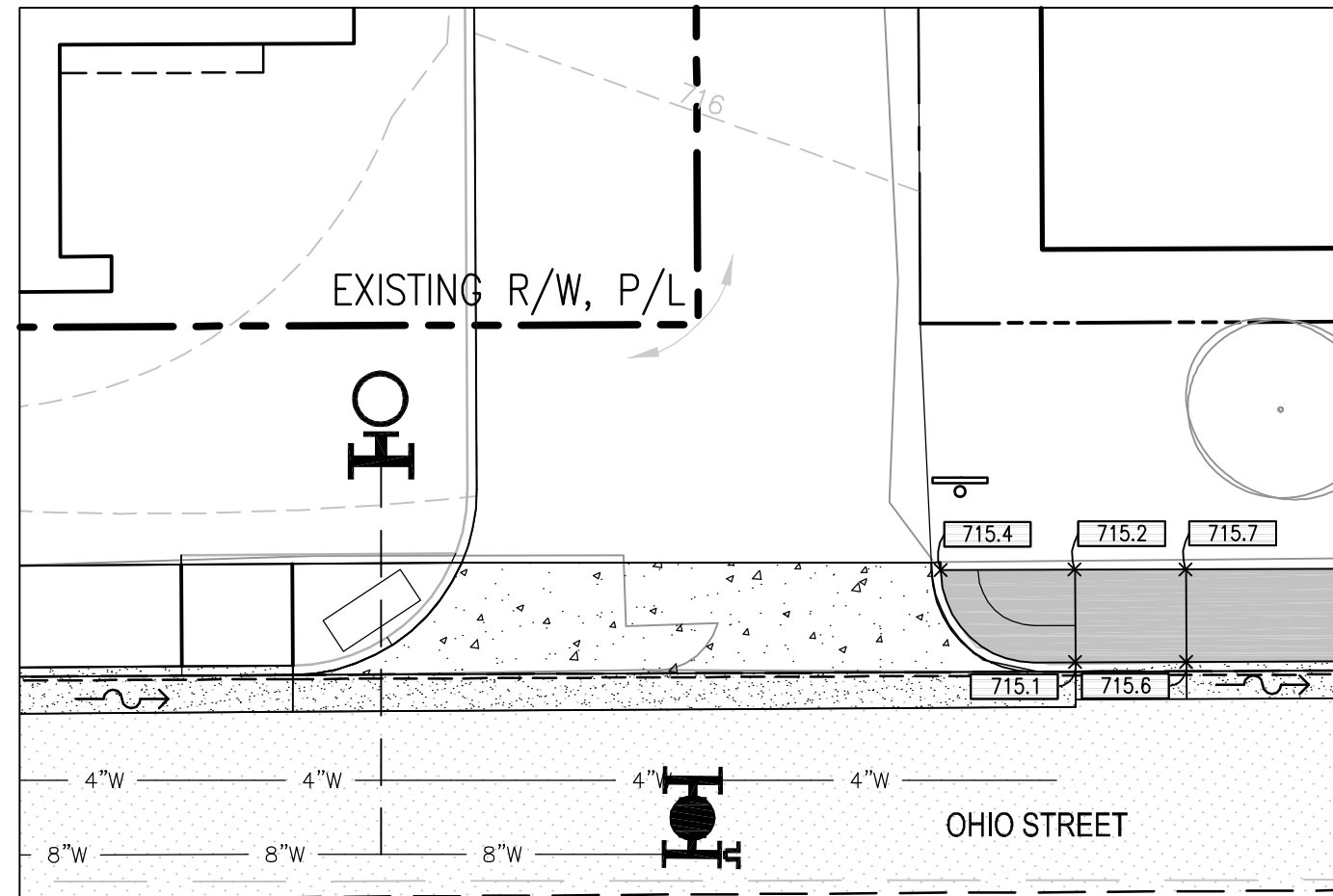
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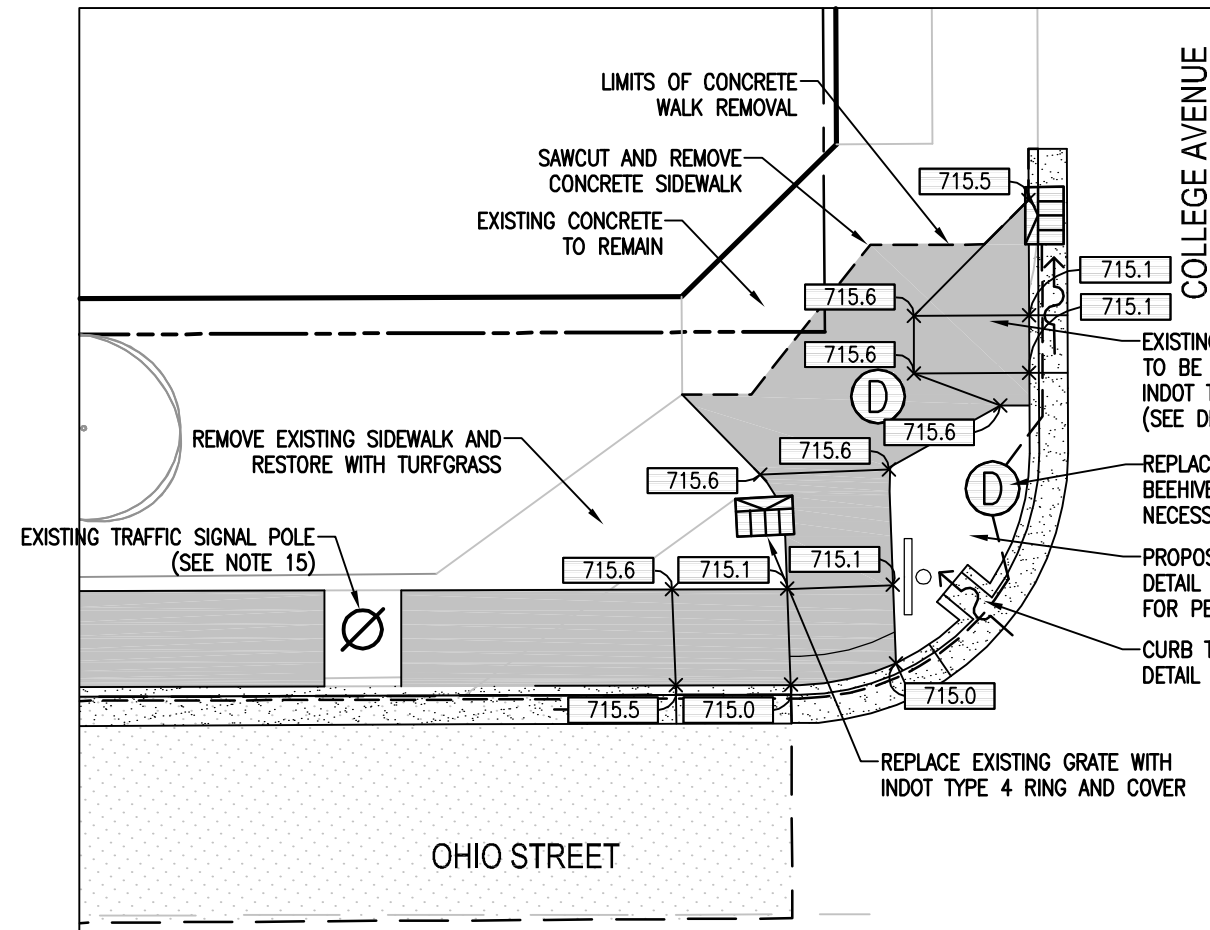
OHIO STREET AT
PARK AVENUE
SCALE: 1" = 10'



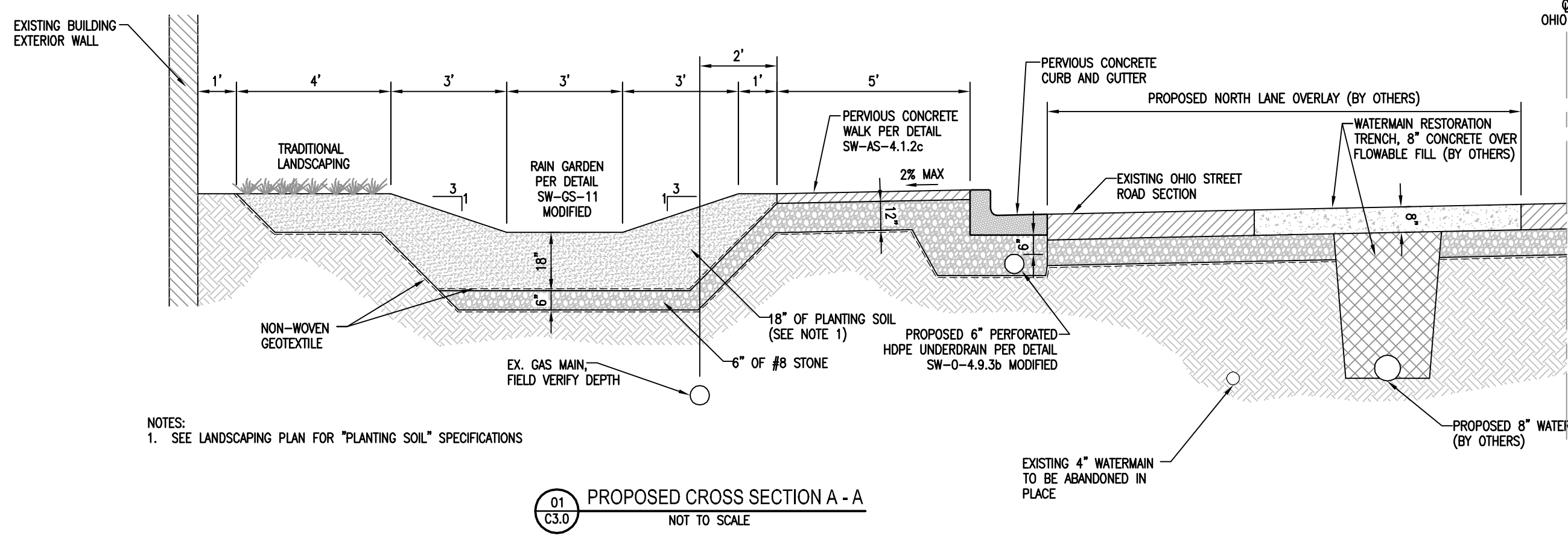
BUCHANAN ALLEY
SCALE: 1" = 10'



EASLEY ALLEY
SCALE: 1" = 10'



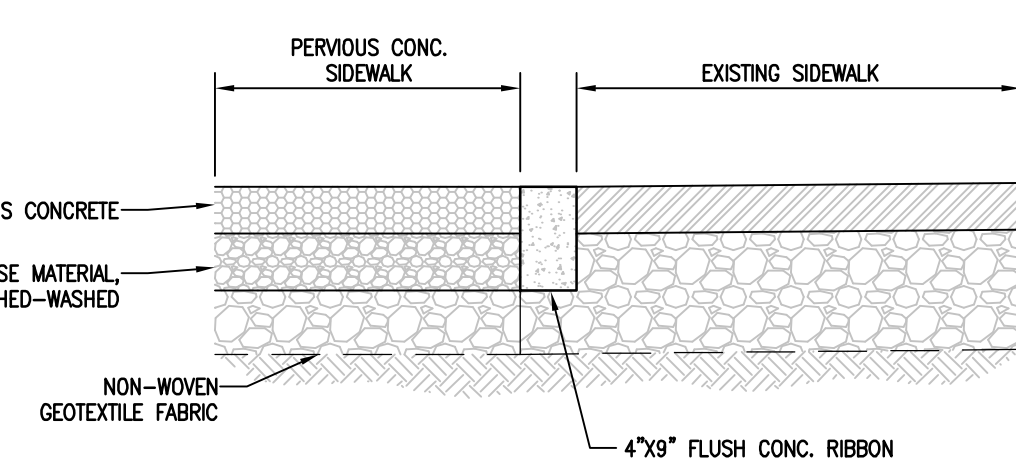
PHASE I PLAN
OHIO STREET AT COLLEGE AVENUE
SCALE: 1" = 10'



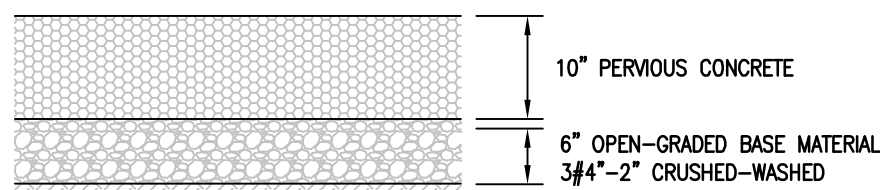
STORMWATER MANAGEMENT FACILITY
DO NOT MOW
DO NOT SPRAY

- NOTES:
1. POST TO BE NUCOR 1.12 LB D-POST OR EQUIVALENT, PAINTED, (MINIMUM)
2. POST MINIMUM 6'-0" IN LENGTH
3. POST TO BE DRIVEN A MINIMUM OF 1/3 THE LENGTH OF THE POST.

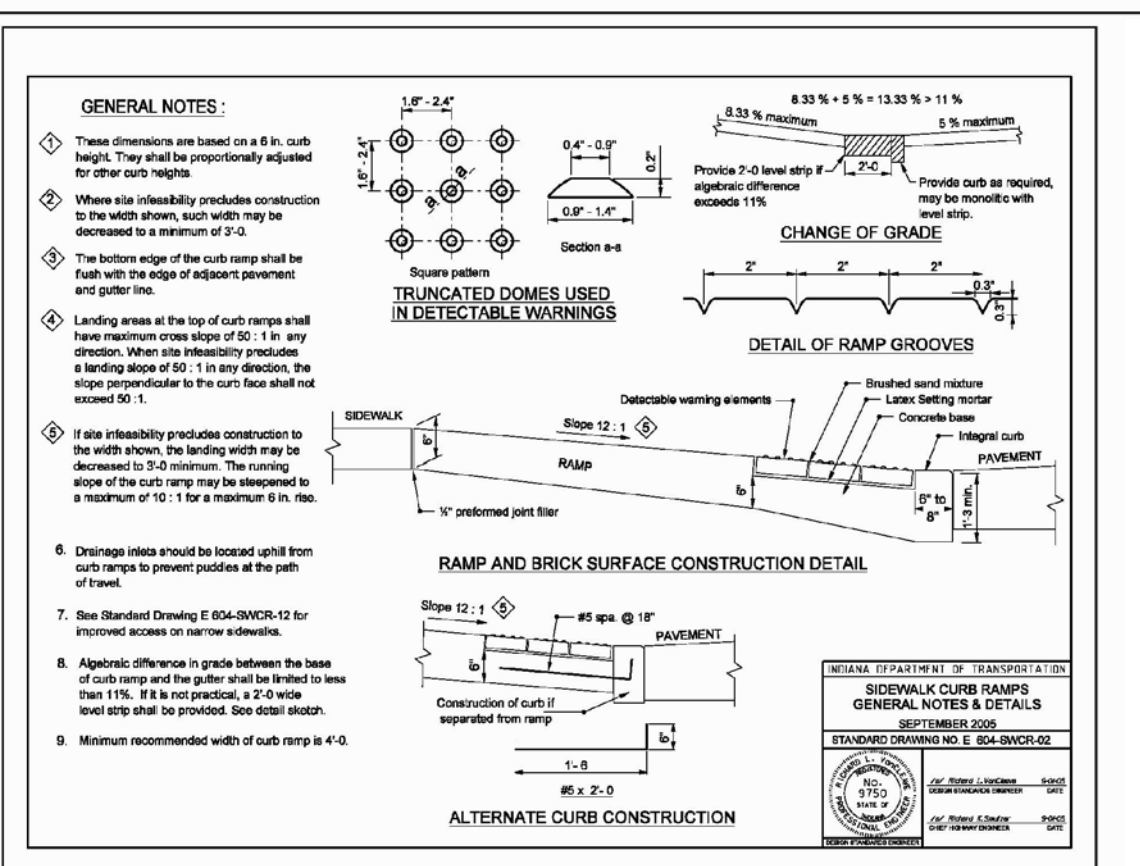
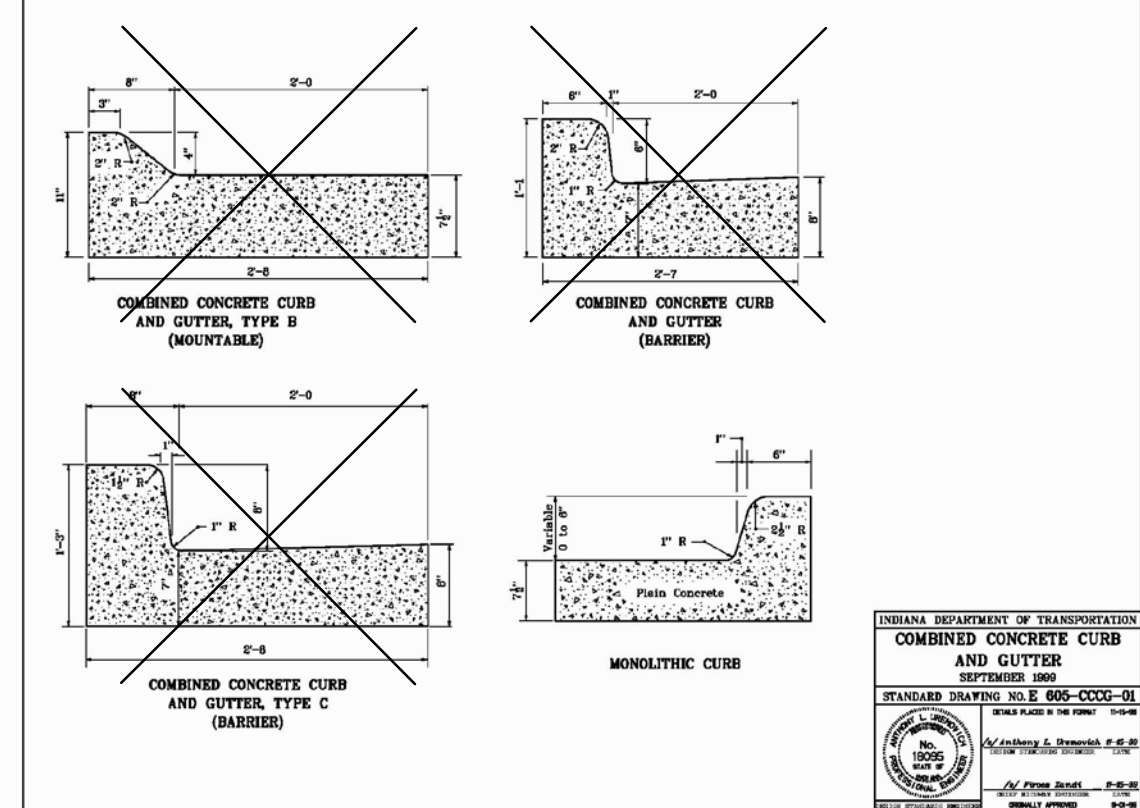
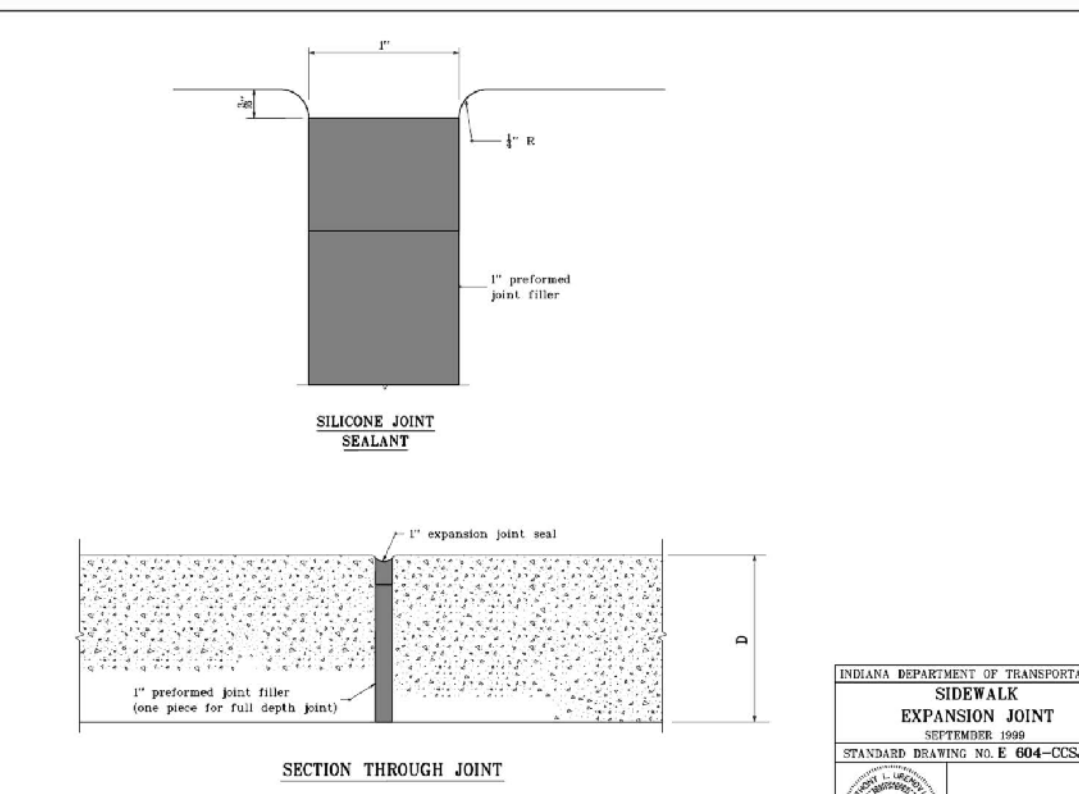
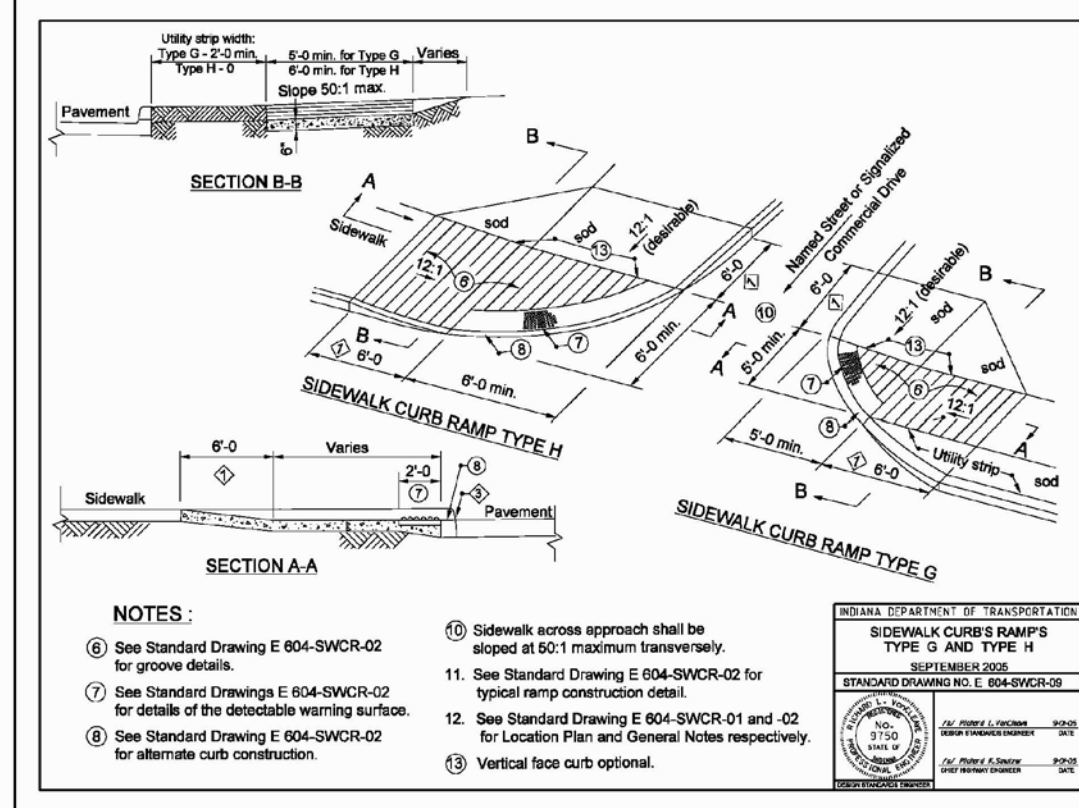
02
C3.0
RAIN GARDEN SIGN DETAIL
NOT TO SCALE



03
C3.0
PROPOSED PERVIOUS SIDEWALK
ADJACENT TO EXISTING SIDEWALK
NOT TO SCALE



04
C3.0
PERVIOUS CONCRETE
CROSSWALK SECTION
NOT TO SCALE

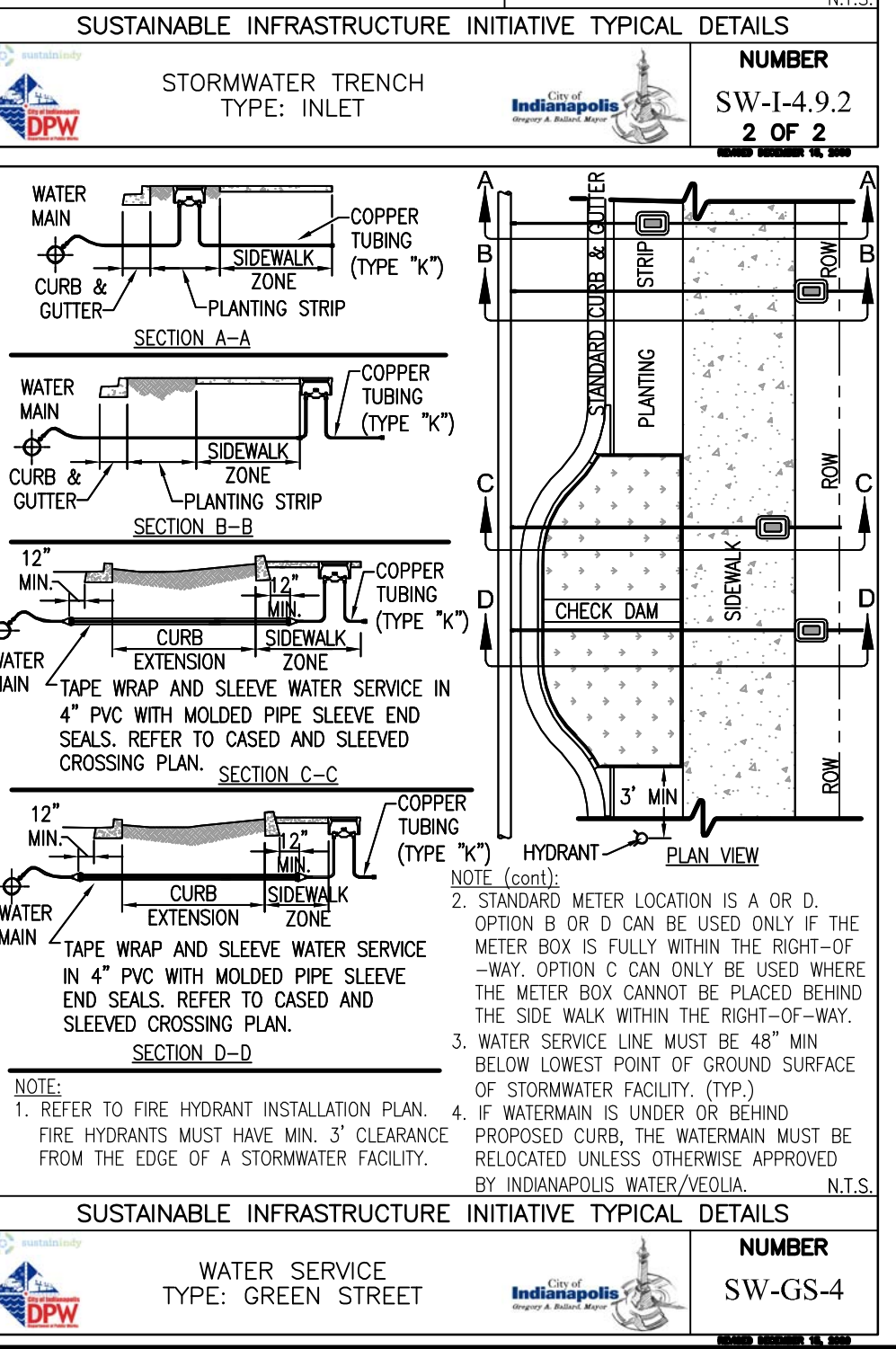
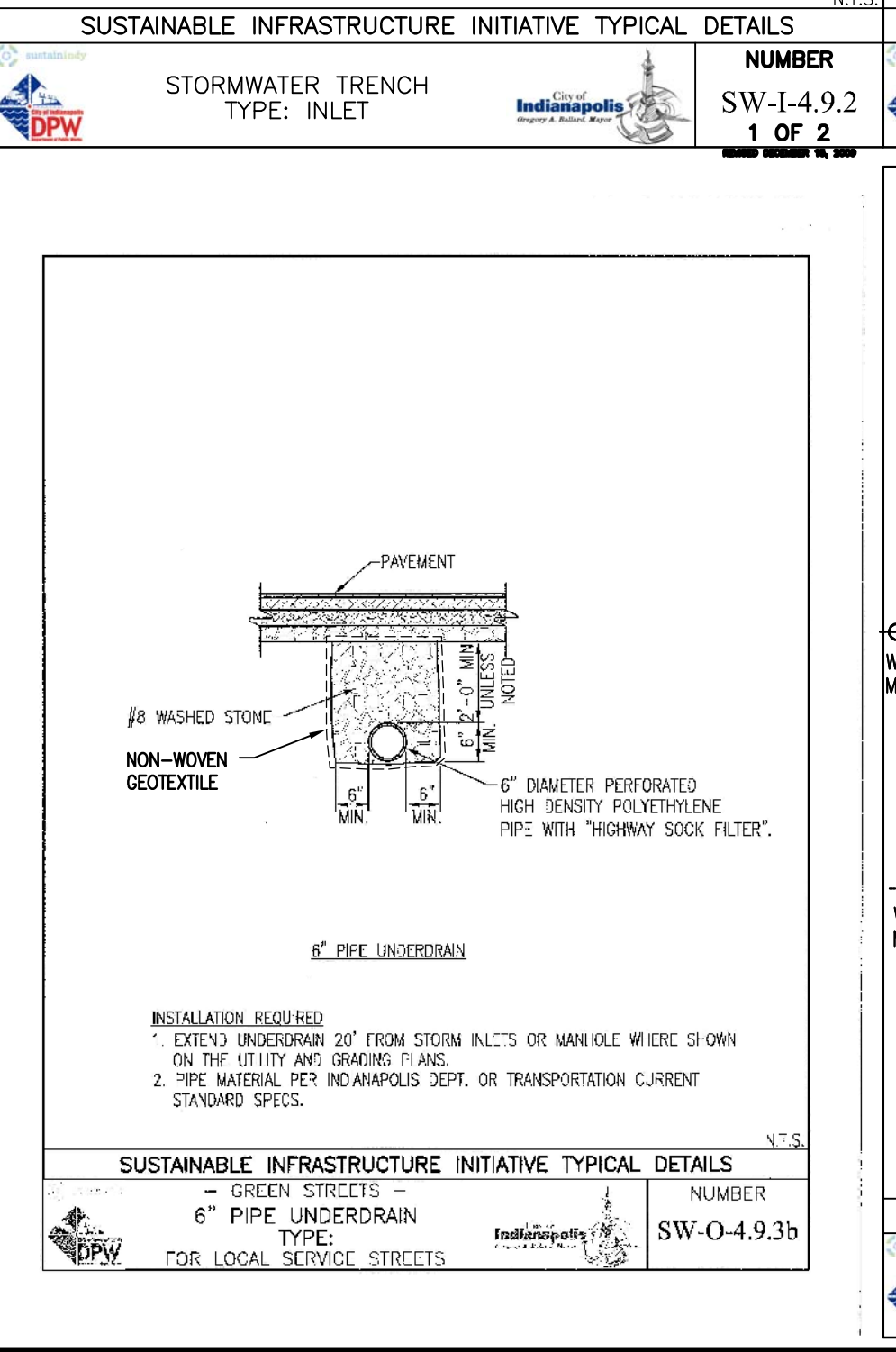
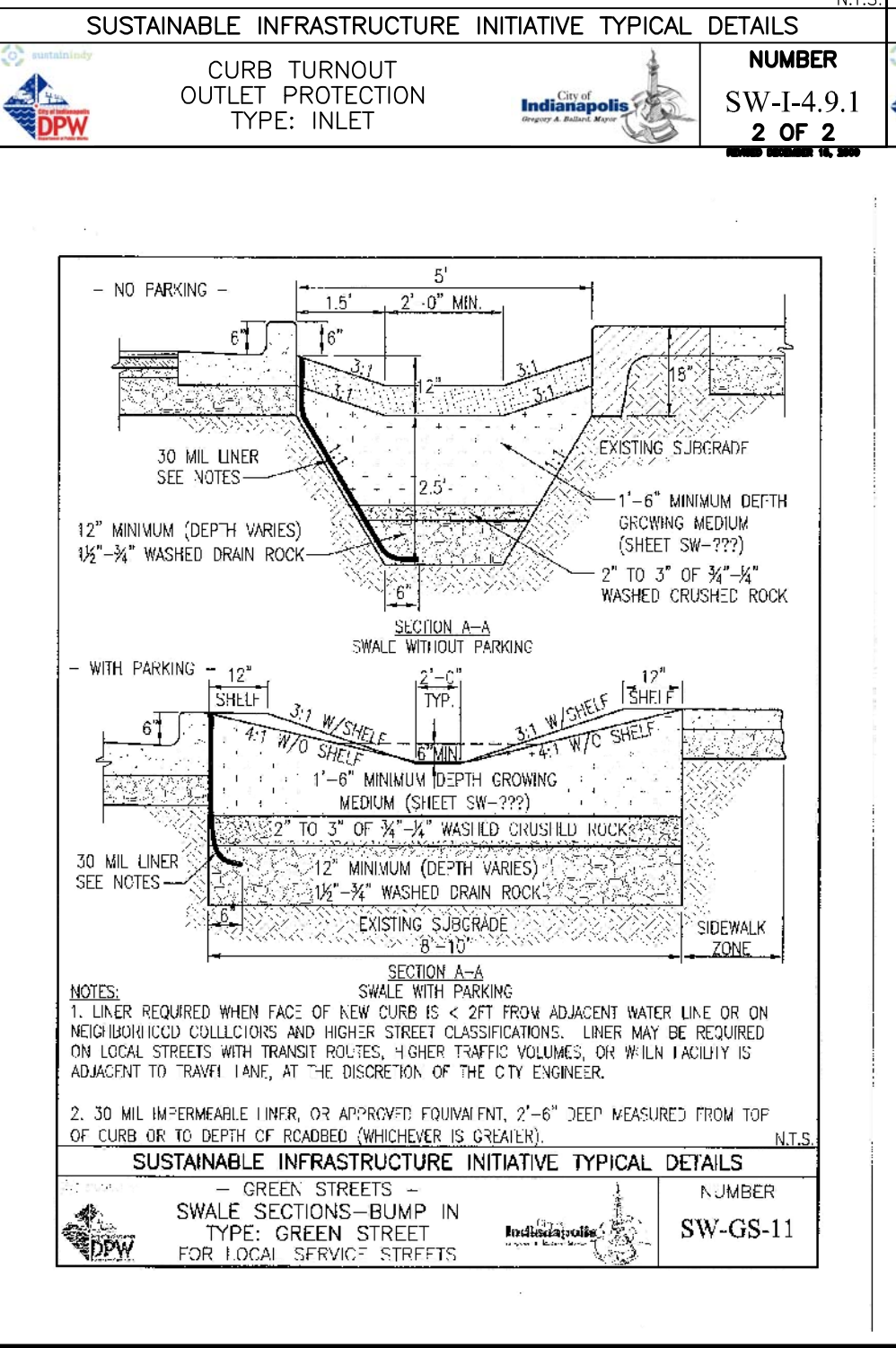
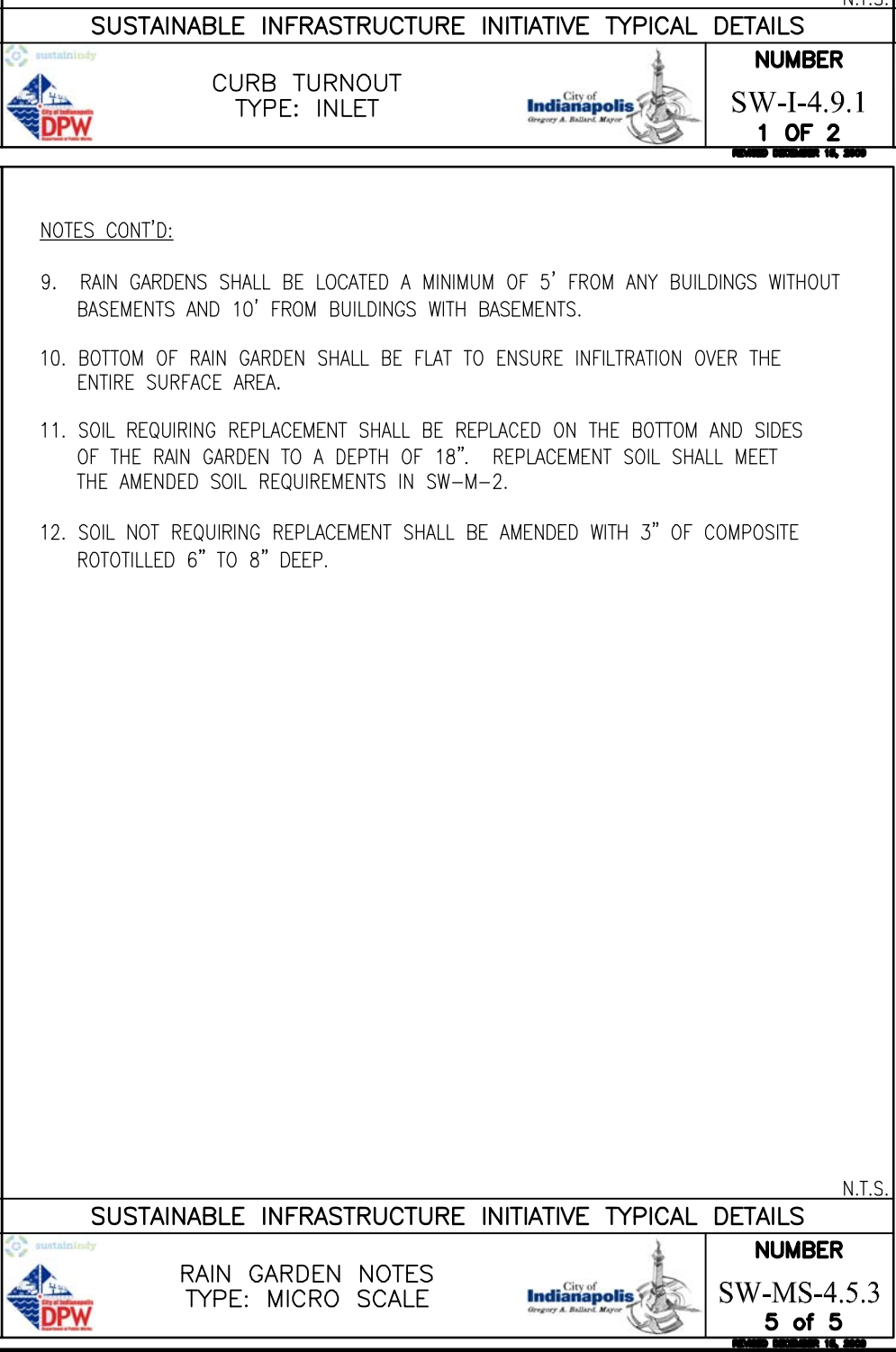
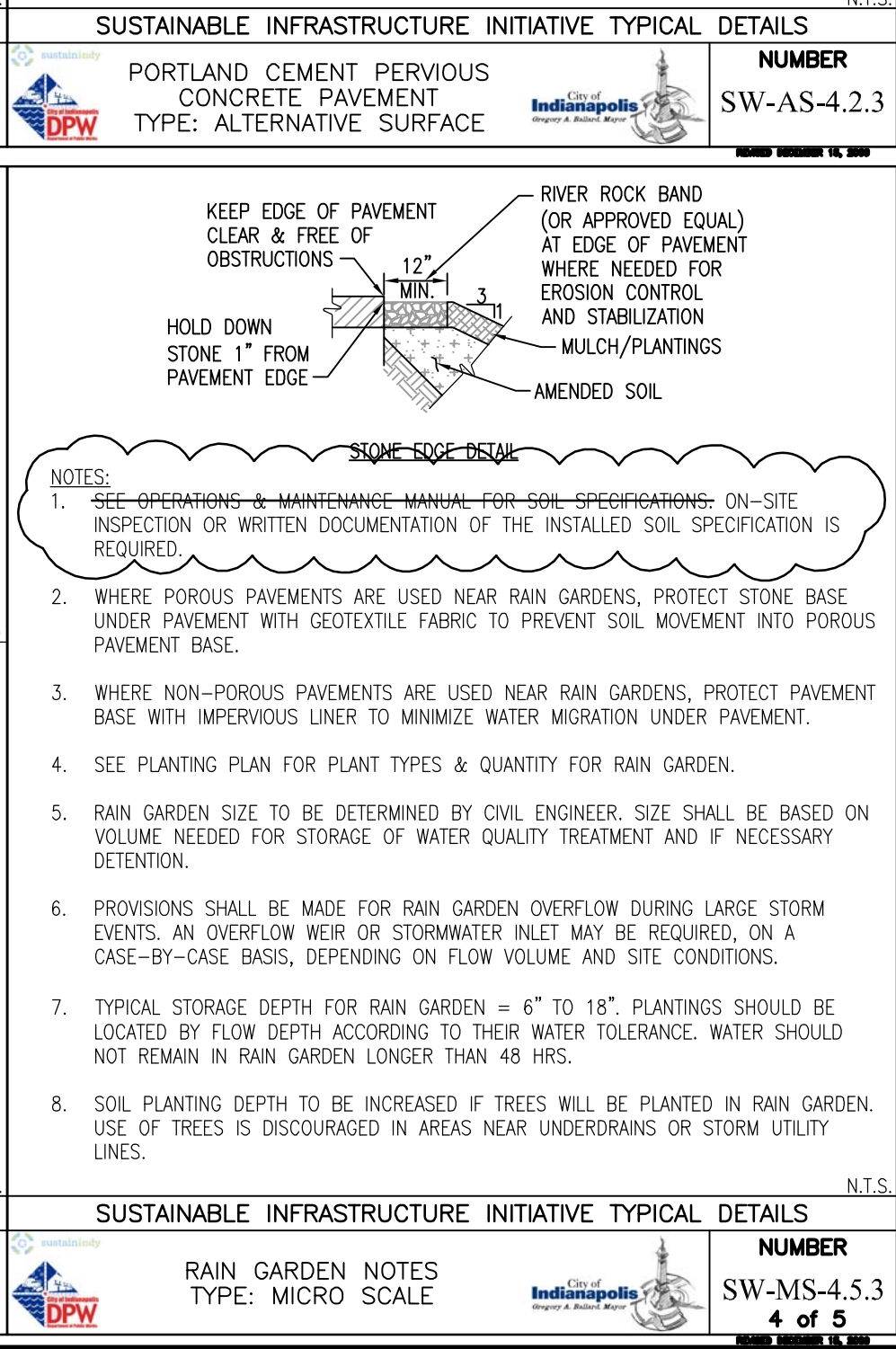
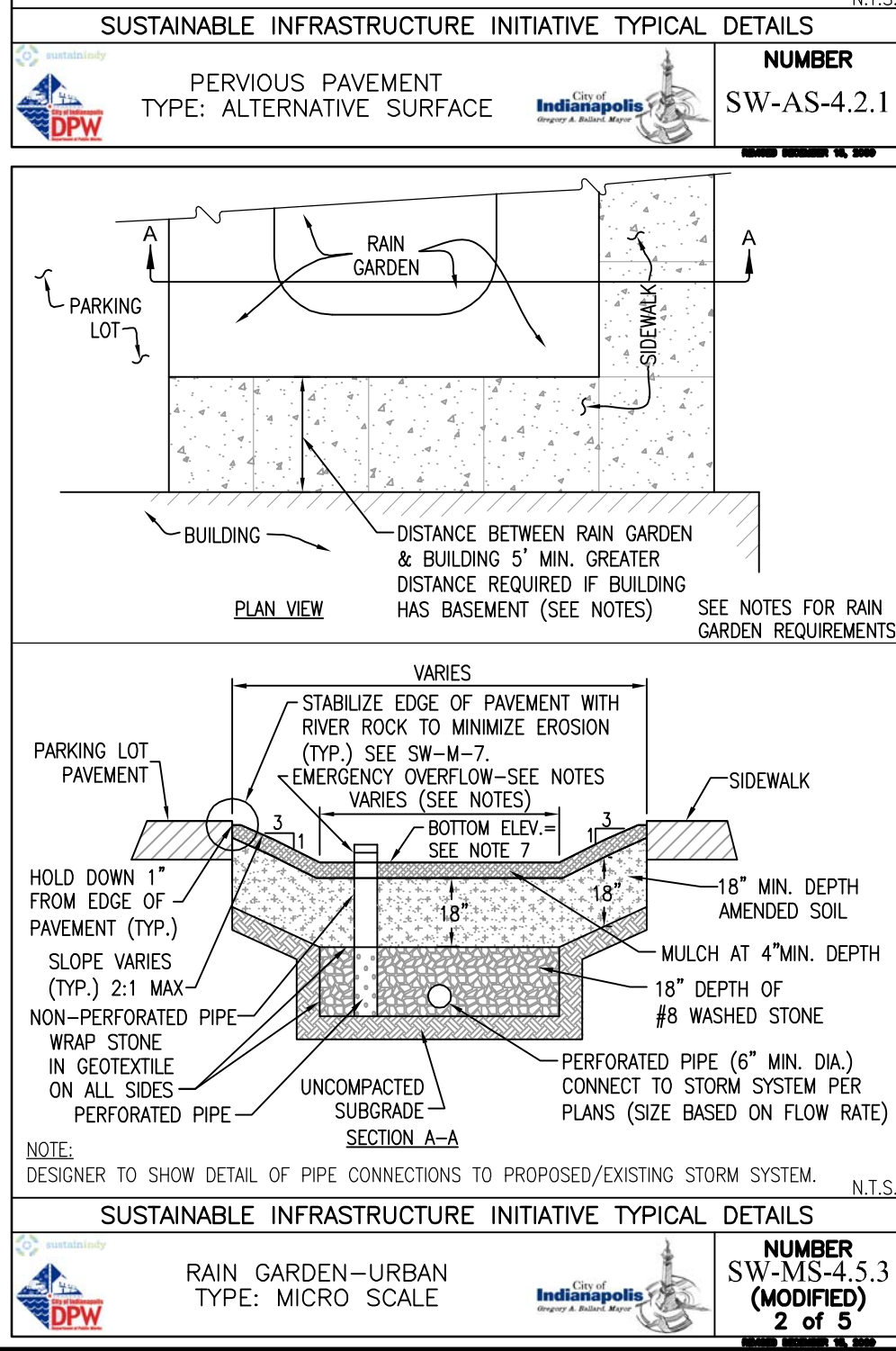
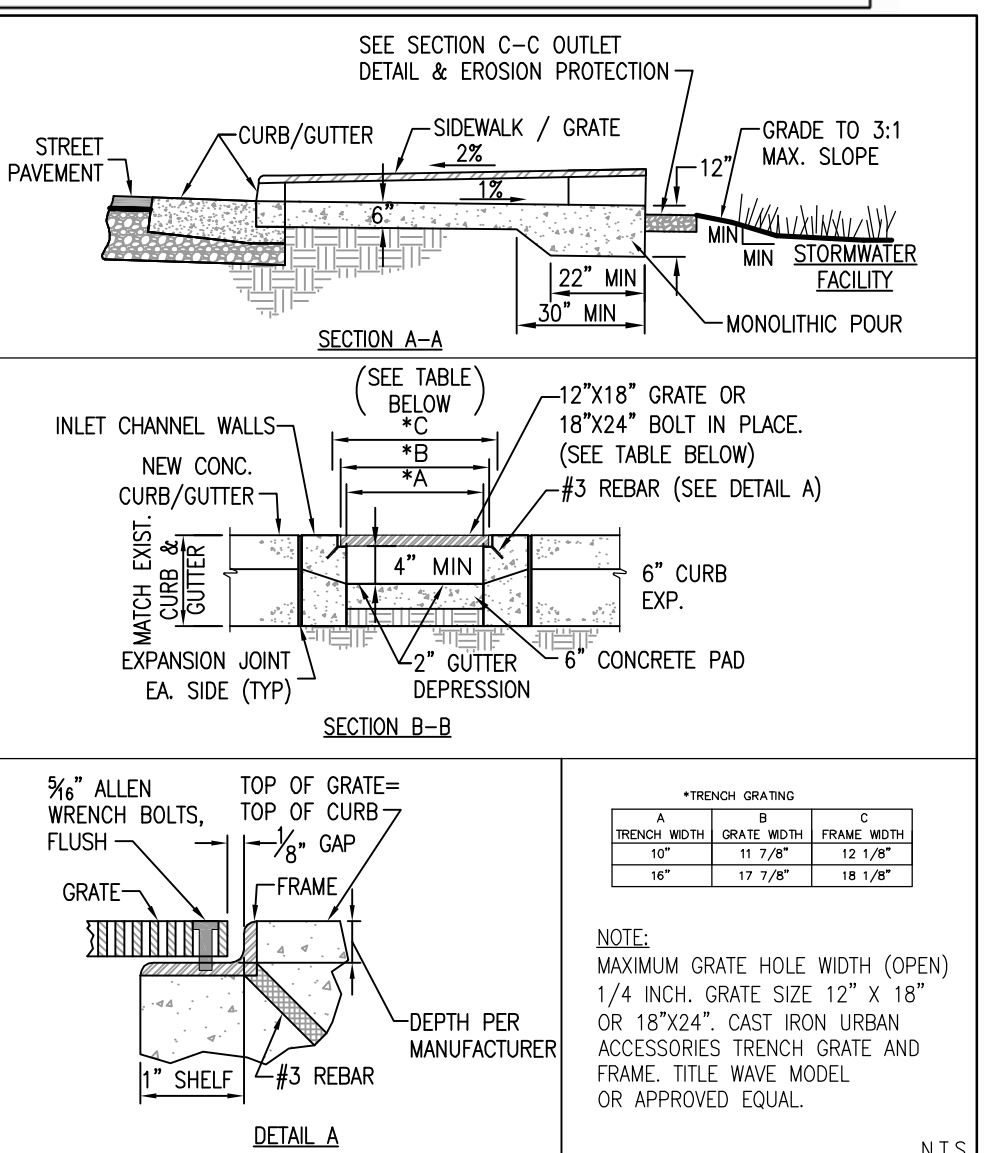
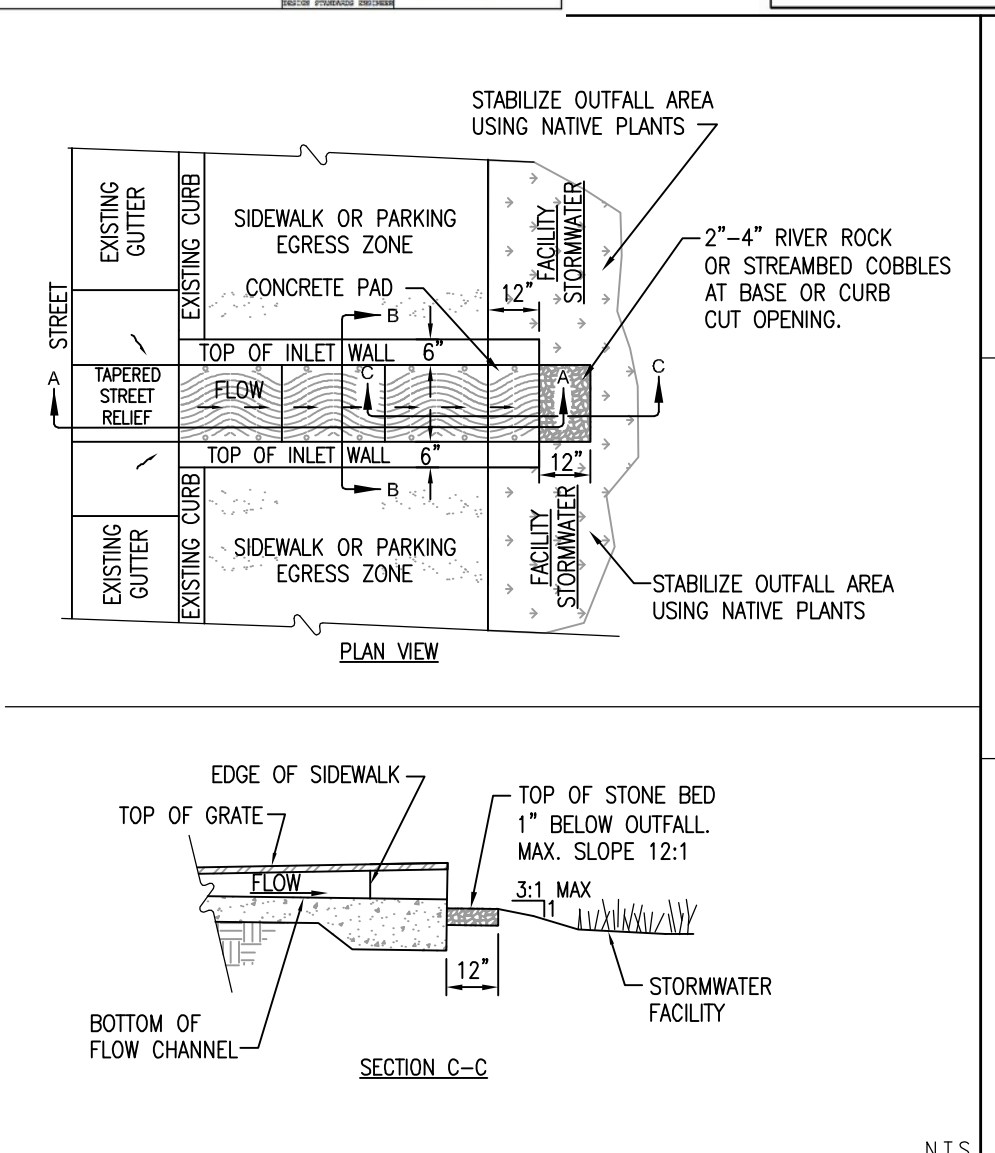
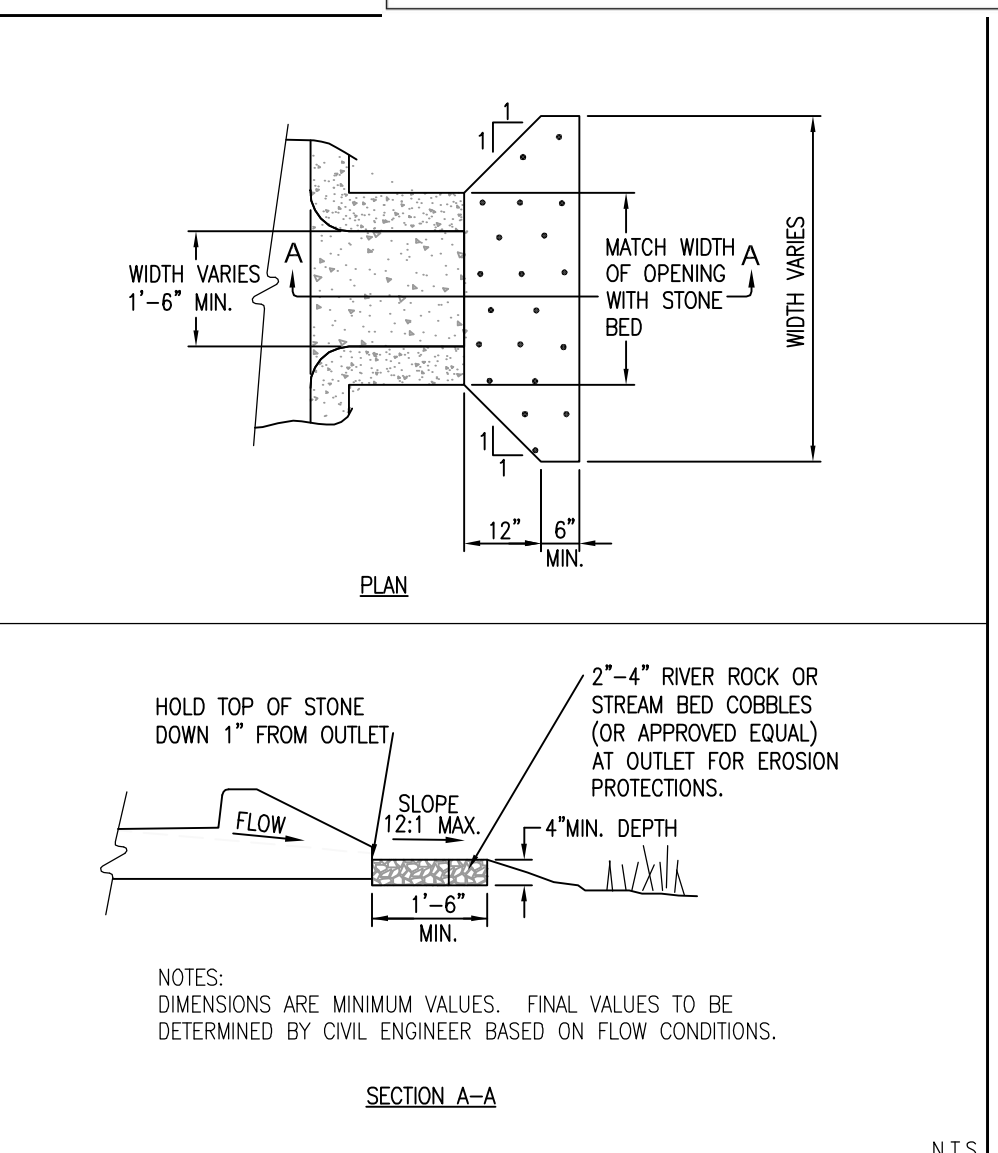
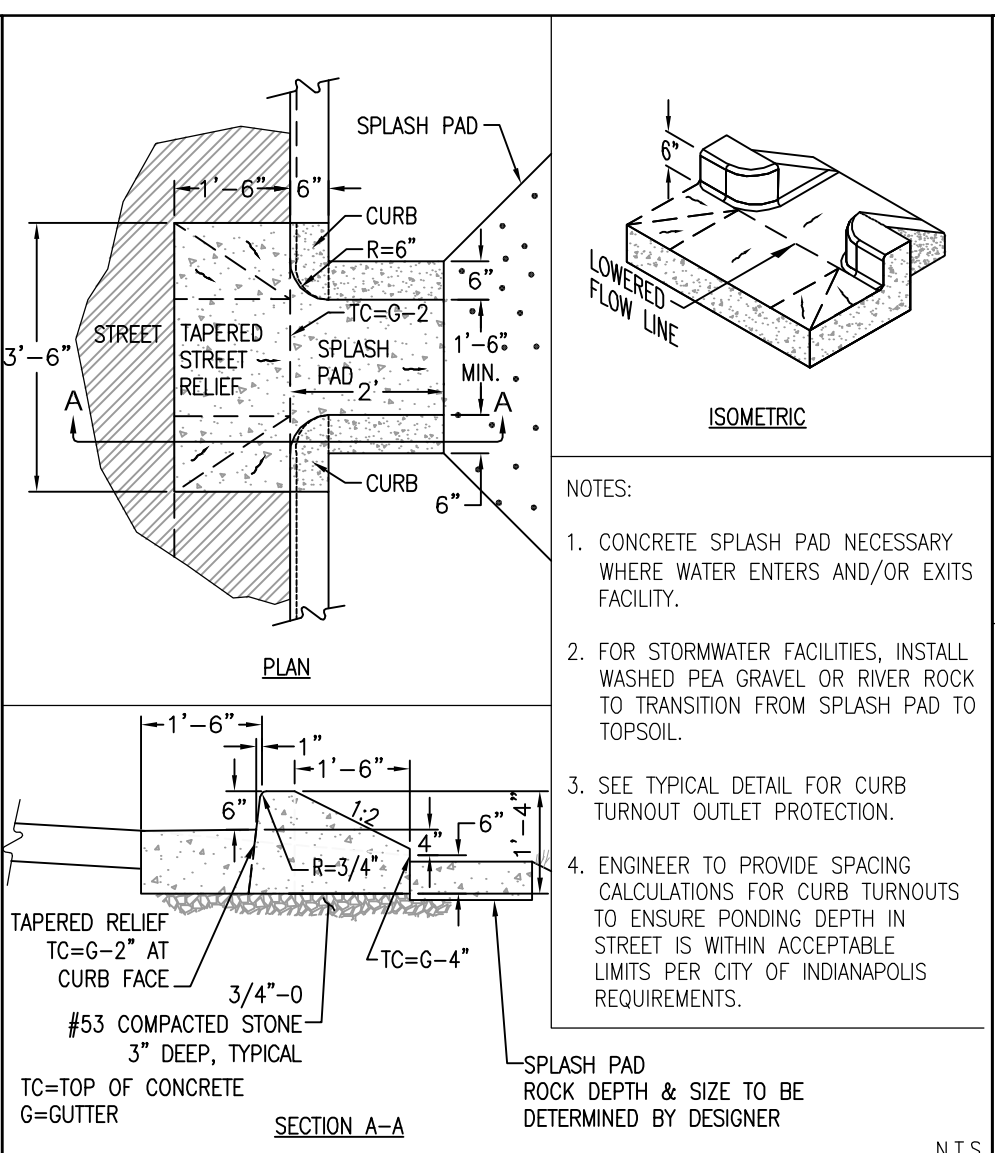
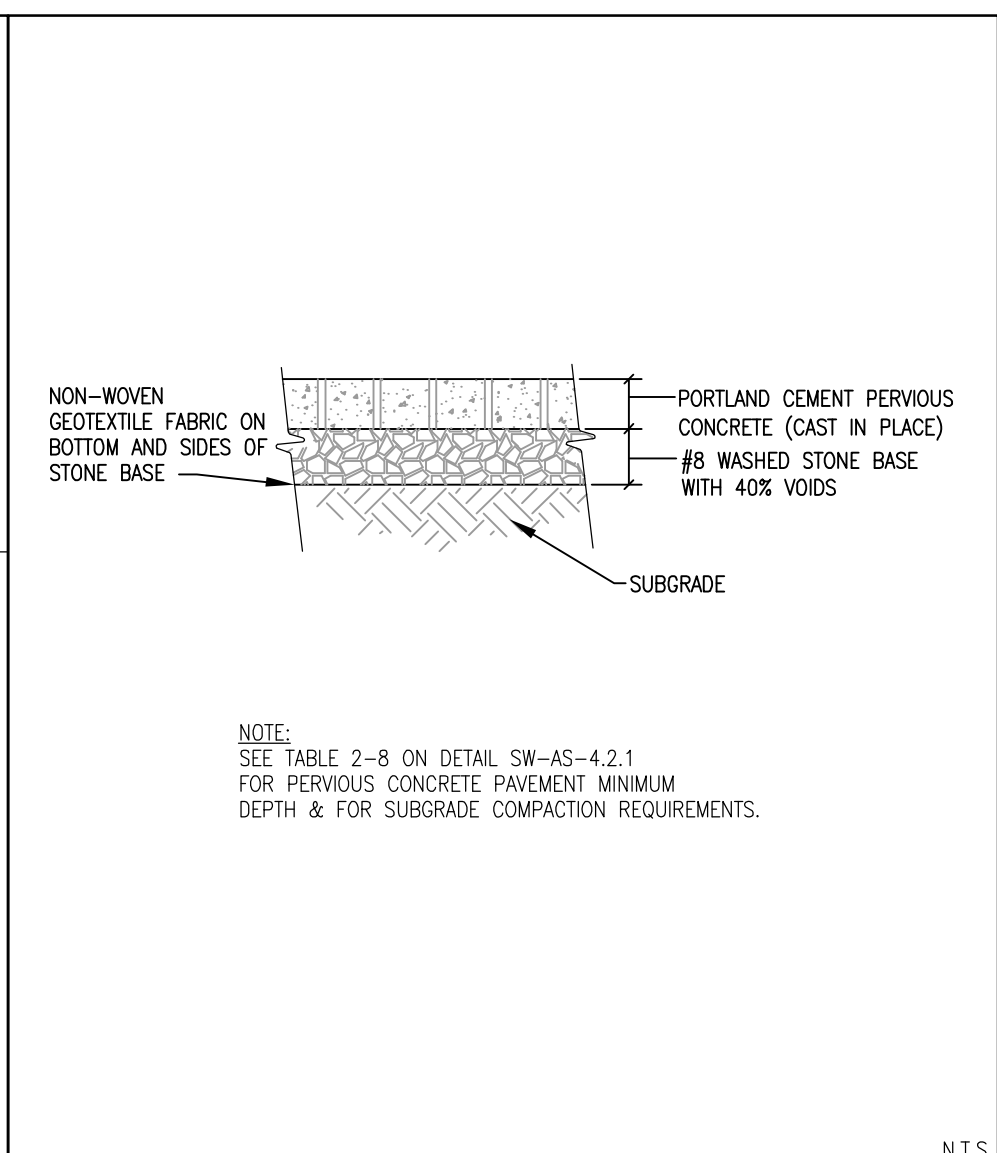


CONCRETE	4"	6"	8"
ASPHALT	2 1/2"	5"	8"
PAVER	2 1/2"	3 1/2"	3 1/2"
ENGINEERING REQUIREMENTS	NO	YES	YES
COMPACTION REQUIREMENTS	NO	YES	95%

TABLE 2-8
PERVIOUS PAVEMENT REQUIREMENTS FOR TOP LIFT DEPTH, ENGINEERING, AND COMPACTION

NOTE:
1. DIMENSIONS LISTED ARE MINIMUMS. DESIGNER MUST VERIFY PAVEMENT DEPTH BASED ON SECTIONS SW-AS-4.2.2 AND SW-AS-4.2.3.
2. MINIMUM STONE BASE DEPTH = 6"

* COMPACTION TO BE MINIMUM REQUIRED FOR STABLE BASE TO ENSURE INFILTRATION CAPACITY. ENGINEER TO SPECIFY REQUIREMENTS BASED ON SITE CONDITIONS AND GEOTECHNICAL REPORT.



INDIANAPOLIS DOWNTOWN INC.

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WILLIAMS CREEK CONSULTING, INC.

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OHIO STREET PILOT PROJECT

OHIO ST. BETWEEN PARK AVE. AND COLLEGE AVE.

INDIANAPOLIS, IN 46204

PROJECT NUMBER

01.224.B.1

DRAWING NUMBER

C3.0

SHEET 4 OF 5

INDIANAPOLIS DOWNTOWN INC.

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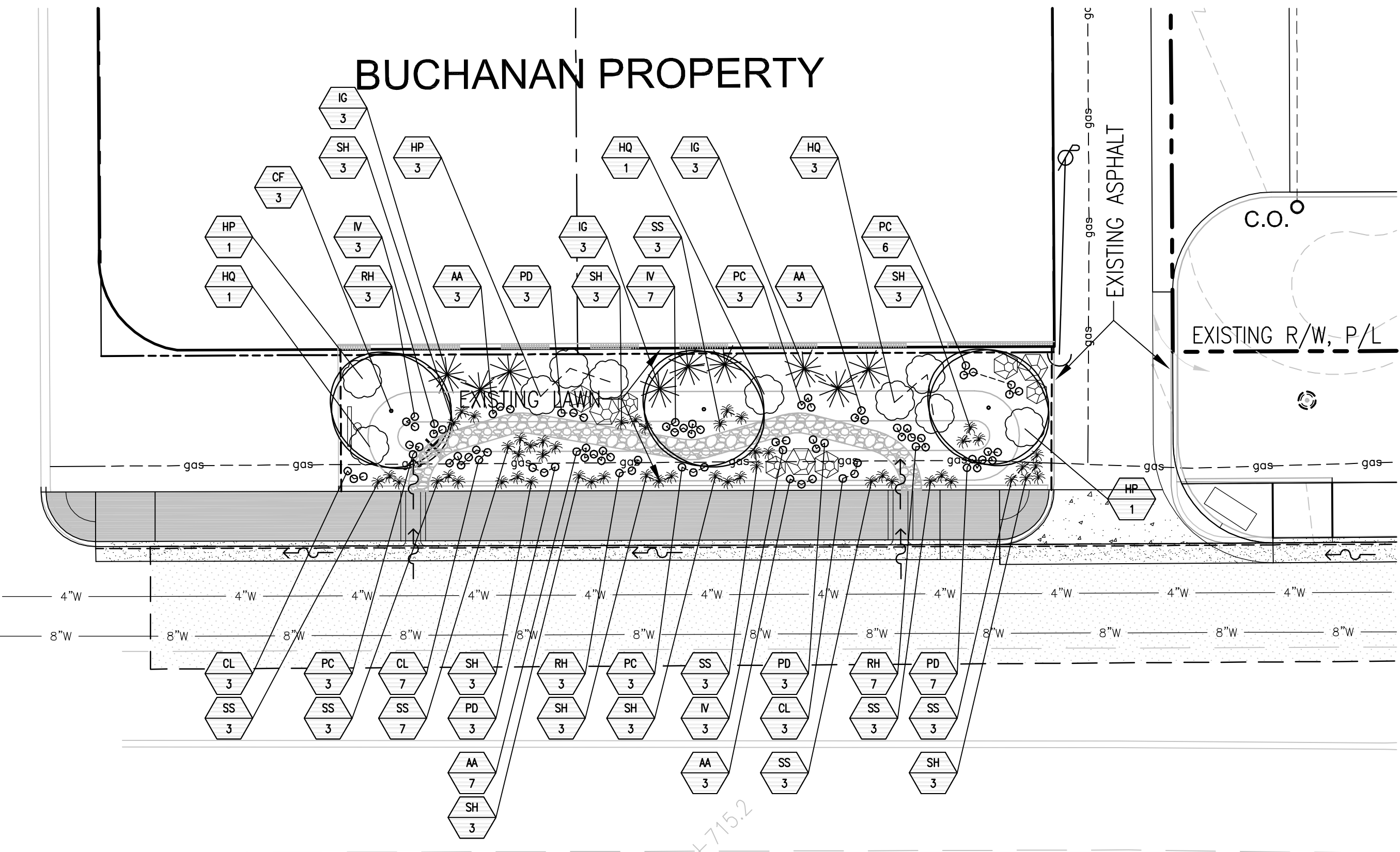
DRAWING NUMBER

C3.0

SHEET 4 OF 5

PARK AVE

BUCHANAN PROPERTY



BUCHANAN PROPERTY SITE LANDSCAPE - PLAN VIEW
SCALE: 1" = 10'

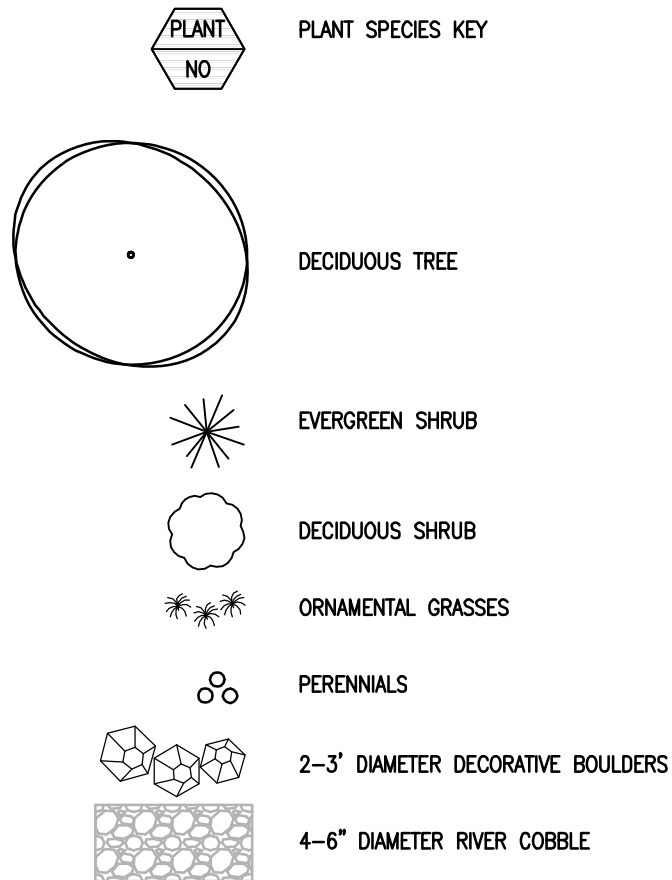
PLANT SCHEDULE - BUCHANAN PROPERTY

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES & SHRUBS - TRADITIONAL LANDSCAPE PLANTINGS					
3	CF	CORNUS FLORIDA 'CHEROKEE PRINCESS'	CHEROKEE PRINCESS WHITE DOGWOOD	1 1/2" - 1 3/4" CALIPER	CONT./BBB SPRING BLOOM
5	HQ	HYDRANGEA QUERCIFOLIA 'PEE WEE'	PEE WEE OAKLEAF HYDRANGEA	3 - 5 GALLON	CONT - WHITE SUMMER BLOOM
5	HP	HYPERICUM PROLIFICUM 'SUNBURST'	SUNBURST ST. JOHNSWORT	3 - 5 GALLON	CONT - YELLOW SUMMER BLOOM
9	IG	ILEX GLABRA 'CHAMZIN'	NORDIC HOLLY	3 - 5 GALLON	CONTAINER EVERGREEN
PERENNIALS & ORNAMENTAL GRASSES - RAIN GARDEN PLANTINGS					
16	AA	ASTER AZUREUS	SKY BLUE ASTER	1 GALLON	BLUE FALL BLOOM
13	CL	COREOPSIS LANCEOLATA	LANCE-LEAF COREOPSIS	1 GALLON	YELLOW SPRING BLOOM
13	IV	IRIS VIRGINICA SHREVEI	BLUE FLAG IRIS	1 GALLON	BLUE SPRING BLOOM
16	PD	PENSTEMON DIGITALIS	FOXGLOVE BEARDTONGUE	1 GALLON	WHITE SUMMER BLOOM
15	PC	PETALOSTEMUM CANDIDUM	WHITE PRAIRIE CLOVER	1 GALLON	WHITE SUMMER BLOOM
13	RH	RUDBECKIA HIRTA	BLACK-EYED SUSAN	1 GALLON	YELLOW SUMMER - FALL BLOOM
28	SS	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	THE BLUES LITTLE BLUESTEM	2 GALLON	MEDIUM TEXTURE
24	SH	SPOROBOLUS HETEROLEPIS 'TARA'	TARA DWARF PRAIRIE DROPSEED	2 GALLON	FINE TEXTURE

NOTES - BUCHANAN PROPERTY

- DECORATIVE BOULDERS TO BE ROUNDED WITHOUT SHARP EDGES. ROUNDED NATIVE GLACIAL BOULDERS PREFERABLE. BOULDERS TO BE 2-3' DIAMETER. BURY 1/4 TO 1/2 OF BOULDER INTO SURROUNDING GRADE.
- 2-3" AGED LEAF COMPOST MULCH, OR EQUIVALENT, TO BE USED IN PLANTING AREA. DO NOT USE SHREDDED HARDWOOD MULCH.

LEGEND - BUCHANAN PROPERTY



RAIN GARDEN PLANTING SOIL SPECIFICATIONS
THE SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN TWO INCHES. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR SPREAD WITHIN THE RAIN GARDEN AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, OR OTHER NOXIOUS WEEDS. THE PLANTING SOIL FOR RAIN GARDEN FACILITIES SHALL CONSIST OF A MIXTURE OF SAND, TOPSOIL, AND COMPOST WITH A PH RANGE OF 5.5 AND 6.5. IN ADDITION, THE SOIL SHALL HAVE INFILTRATION RATES NO LESS THAN 0.5 INCHES PER HOUR. TO ACHIEVE THIS, TYPICAL SOIL MIXES CONSIST OF APPROXIMATELY 20-30% ORGANIC COMPOST (I.E. LEAF COMPOST), 20-30% TOP SOIL, AND 40-60% SAND OR ROUGHLY A 4:2:2 RATIO OF SAND, SOIL AND COMPOST.

THE PLANTING SOIL SHALL INCLUDE A 1.5 TO 3 PERCENT ORGANIC CONTENT AND A MAXIMUM 500 PPM CONCENTRATION OF SOLUBLE SALTS.

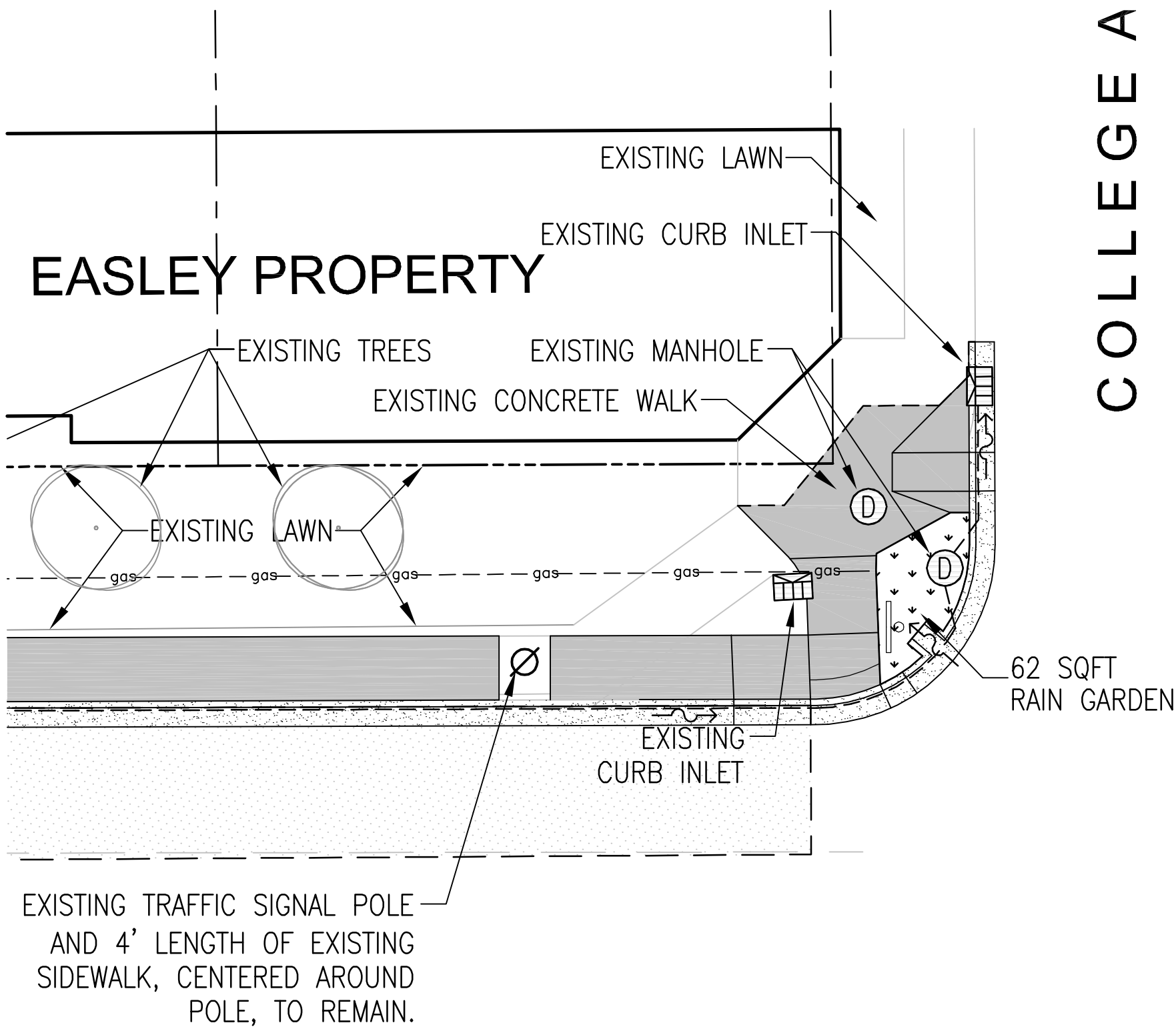
IF THE EXISTING SOIL DOES NOT MEET THE ABOVE CHARACTERISTICS, THEN IT SHALL EITHER BE ADJUSTED TO MEET THE CRITERIA OR REMOVED AND REPLACED WITH AN ACCEPTABLE PLANTING SOIL. SOIL TESTS SHALL BE PERFORMED FOR EVERY 500 CUBIC YARDS OF PLANTING SOIL, WITH THE EXCEPTION OF PH AND ORGANIC CONTENT TESTS, WHICH ARE REQUIRED ONLY ONCE PER RAIN GARDEN AREA.

THE PLANTING SOIL SHALL BE TESTED AND SHALL MEET THE FOLLOWING CRITERIA:

- PH RANGE 5.5 - 6.5
- ORGANIC MATTER 1.5 - 3% (BY WEIGHT)
- MAGNESIUM 35 LB./AC
- PHOSPHORUS (PHOSPHATE - P2O5) 75 LB./AC
- POTASSIUM (POTASH - K2O) 85 LB./AC
- SOLUBLE SALTS NOT TO EXCEED 500 PPM

ALL RAIN GARDEN AREAS SHALL HAVE A MINIMUM OF ONE TEST. EACH TEST SHALL CONSIST OF BOTH THE STANDARD SOIL TEST FOR PH, PHOSPHORUS, AND POTASSIUM AND ADDITIONAL TESTS OF ORGANIC MATTER, AND SOLUBLE SALTS. A TEXTURAL ANALYSIS IS REQUIRED FROM THE SITE STOCKPILED TOPSOIL IF TOPSOIL IS IMPORTED. THEN A TEXTURE ANALYSIS SHALL BE PERFORMED FOR EACH LOCATION WHERE THE TOP SOIL WAS EXCAVATED. SHOULD THE PH FALL OUT OF THE ACCEPTABLE RANGE, IT MAY BE MODIFIED (HIGHER) WITH LIME OR (LOWER) WITH IRON SULFATE PLUS SULFUR.

EASLEY PROPERTY



OHIO & COLLEGE INTERSECTION LANDSCAPE - PLAN VIEW
SCALE: 1" = 10'

PLANT SCHEDULE - OHIO & COLLEGE INTERSECTION

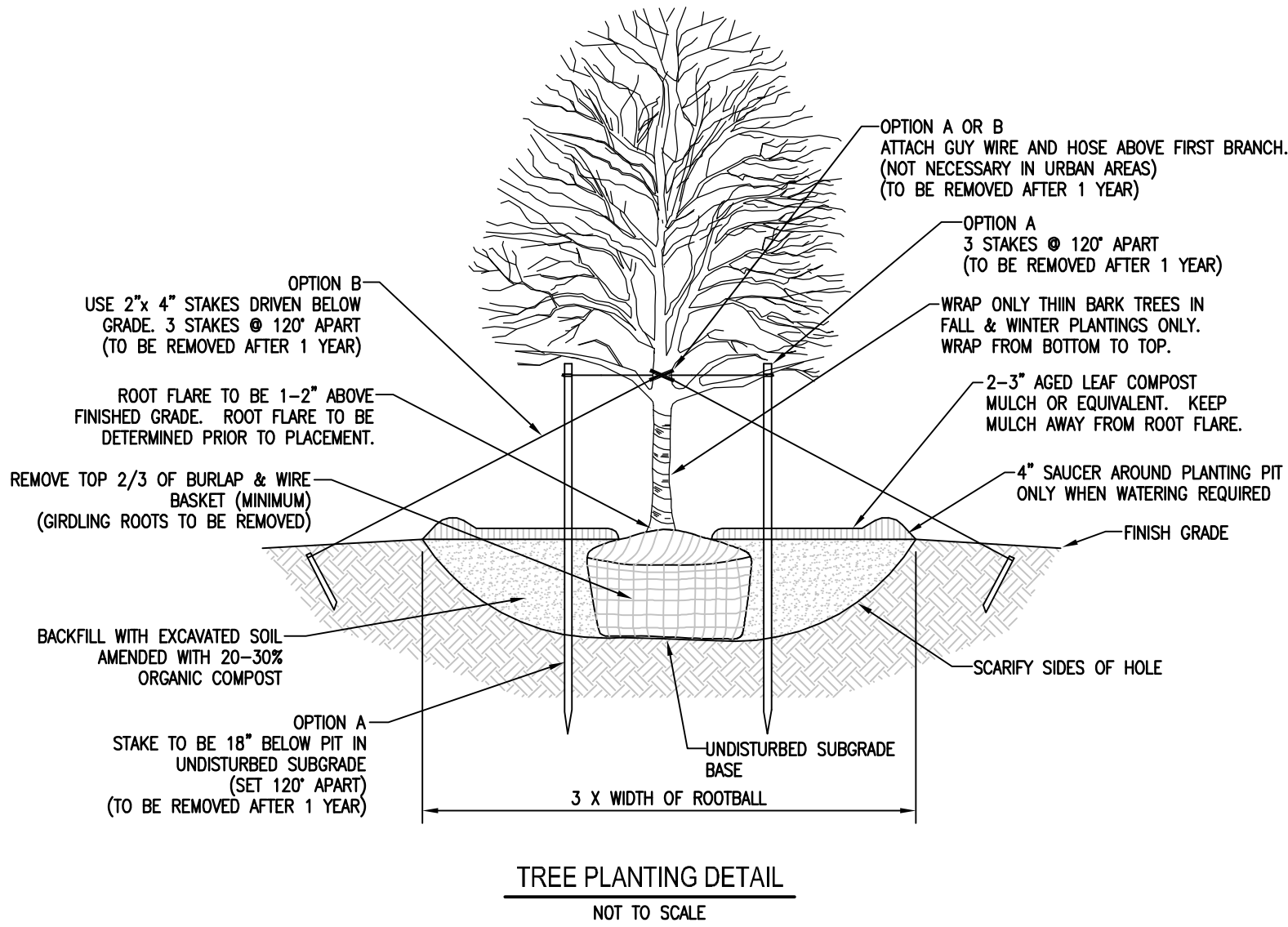
PERENNIALS & ORNAMENTAL GRASSES - RAIN GARDEN PLANTINGS					
3	AA	ASTER AZUREUS	SKY BLUE ASTER	PLUG	BLUE FALL BLOOM
3	CL	COREOPSIS LANCEOLATA	LANCE-LEAF COREOPSIS	PLUG	YELLOW SPRING BLOOM
3	IV	IRIS VIRGINICA SHREVEI	BLUE FLAG IRIS	PLUG	BLUE SPRING BLOOM
3	PD	PENSTEMON DIGITALIS	FOXGLOVE BEARDTONGUE	PLUG	WHITE SUMMER BLOOM
3	PC	PETALOSTEMUM CANDIDUM	WHITE PRAIRIE CLOVER	PLUG	WHITE SUMMER BLOOM
3	RH	RUDBECKIA HIRTA	BLACK-EYED SUSAN	PLUG	YELLOW SUMMER - FALL BLOOM
5	SS	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	THE BLUES LITTLE BLUESTEM	PLUG	MEDIUM TEXTURE
5	SH	SPOROBOLUS HETEROLEPIS 'TARA'	TARA DWARF PRAIRIE DROPSEED	PLUG	FINE TEXTURE

LEGEND - OHIO & COLLEGE INTERSECTION

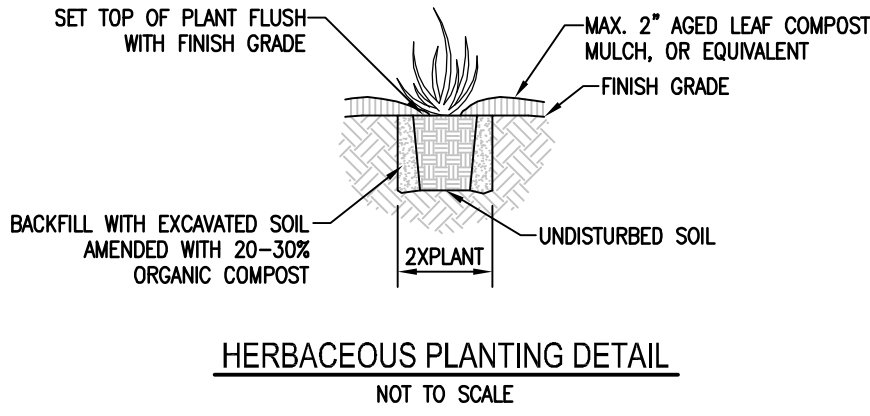


NOTES - OHIO & COLLEGE INTERSECTION

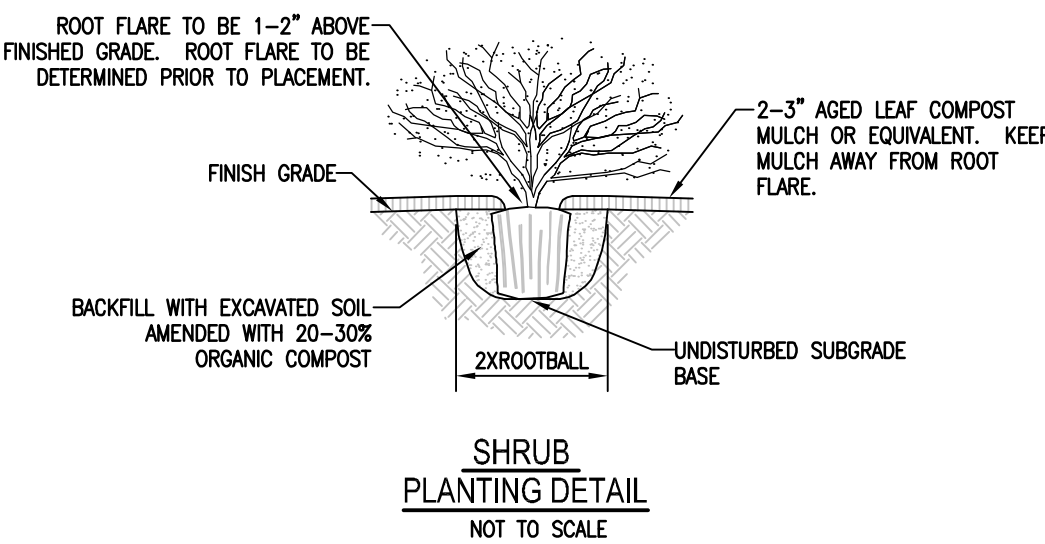
- PLUGS TO BE PLANTED 18" ON CENTER (O.C)
- 2-3" AGED LEAF COMPOST MULCH, OR EQUIVALENT, TO BE USED IN PLANTING AREA. DO NOT USE SHREDDED HARDWOOD MULCH.



TREE PLANTING DETAIL
NOT TO SCALE



HERBACEOUS PLANTING DETAIL
NOT TO SCALE



SHRUB PLANTING DETAIL
NOT TO SCALE



Know what's below.
Call before you dig.

OHIO STREET PILOT PROJECT
OHIO ST. BETWEEN PARK AVE. AND COLLEGE AVE.
INDIANAPOLIS, IN 46202

LANDSCAPE PLAN & DETAILS

PROJECT NUMBER
01.224.B.1

DRAWING NUMBER
C4.0

SHEET 5 OF 5

INDIANAPOLIS DOWNTOWN INC.
111 MONUMENT CIRCLE
INDIANAPOLIS, IN 46204

WILLIAMS CREEK CONSULTING, INC.
919 NORTH EAST STREET
INDIANAPOLIS, INDIANA 46202
Ph: (317) 423-0690 Fax: (317) 423-0696



DWN BY: EEK
CHKD. BY:
SCALE: 1" = 10'
DATE: 03-04-10

REVISIONS