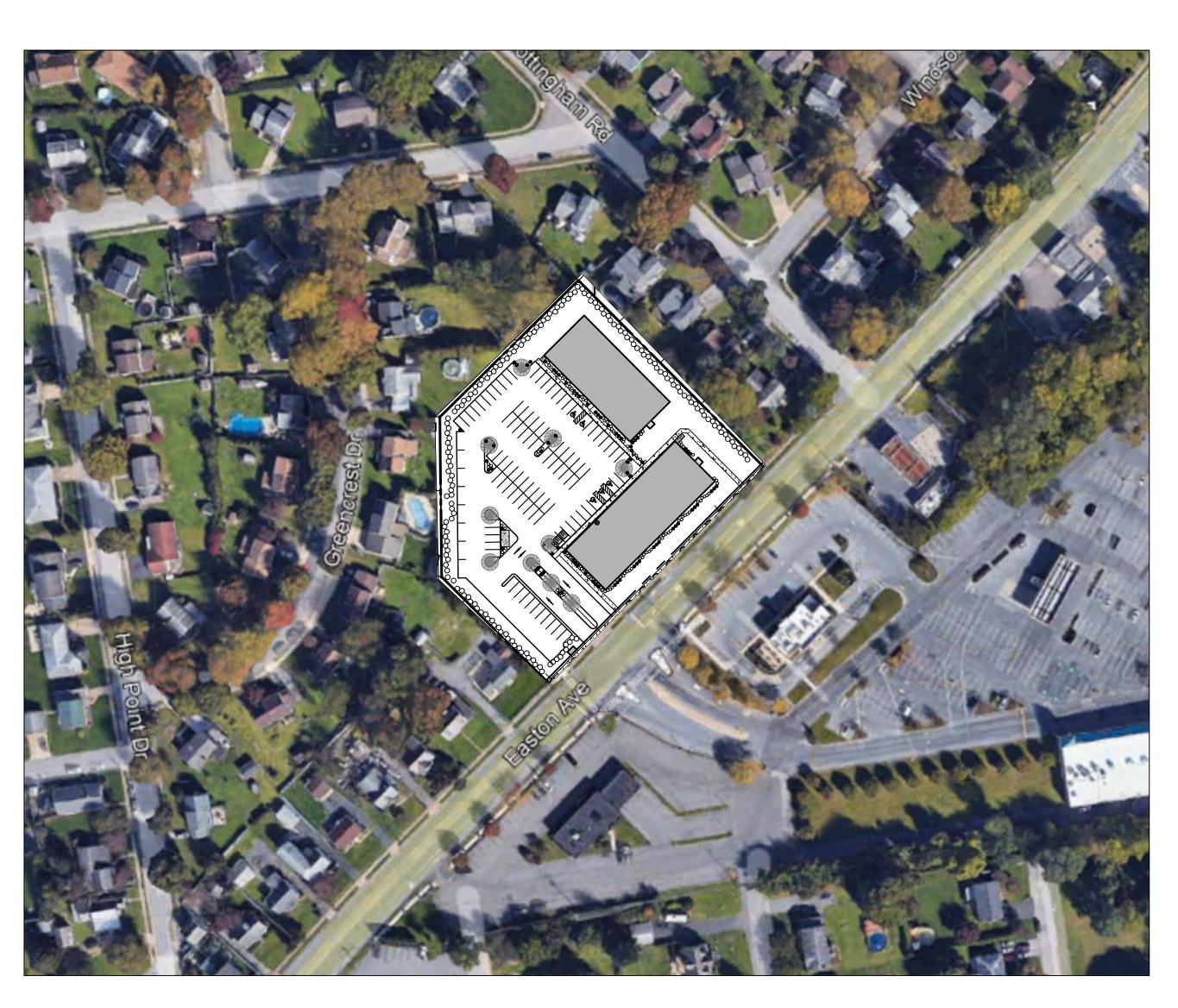
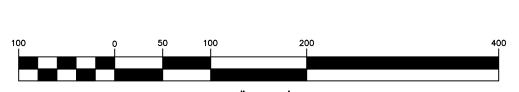
LAND DEVELOPMENT LOCATED IN THE
CITY OF BETHLEHEM
WARD 14 BLOCK SM 5
NORTHAMPTON COUNTY
COMMONWEALTH OF PENNSYLVANIA

INVOLVING PARCELS LOCATED AT 2897 EASTON AVENUE

# 2897 EASTON AVENUE LAND DEVELOPMENT

PRELIMINARY/FINAL PLAN



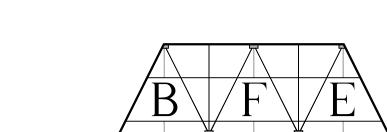


OWNER / DEVELOPER:
JAKE VIDA MANAGEMENT CORP OF PA
60 DAVINCI DR
BOHEMIA, NY 11716

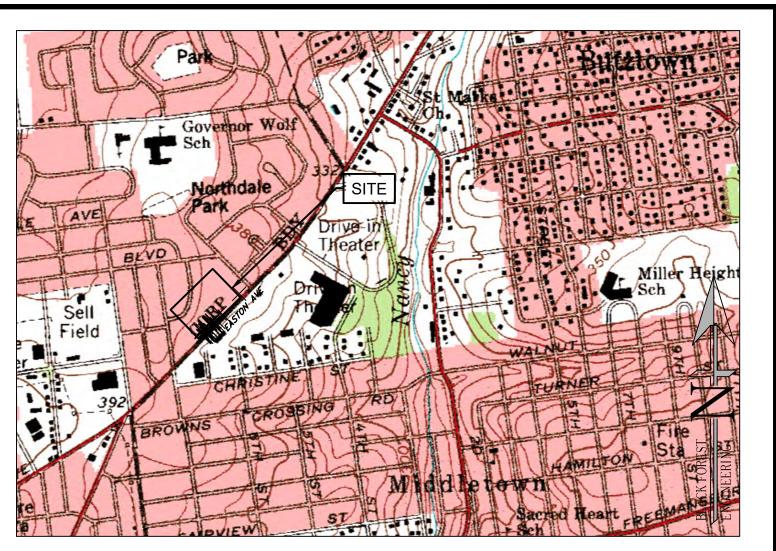
THE APPLICANT WISHES TO CONSTRUCT TWO (2) MULTI-FAMILY
APARTMENT BUILDINGS, WITH A TOTAL OF 54 UNITS (14
ONE-BEDROOM AND 40 TWO-BEDROOM APARTMENTS), ASSOCIATED

PARKING AND STORMWATER MANAGEMENT IMPROVEMENTS.

PLAN INTENT



BLACK FOREST ENGINEERING, LLC 2455 BLACK FOREST DRIVE COPLAY, PA 18037



LOCATION MAP

USGS NAZARETH QUADRANGLE
SCALE: 1"=1000'

	FINAL PLAN SHEET	INDE	Χ		
	PLAN TITLE		SH	EET	NO.
	COVER SHEET		NC	NUM	3ER
*	RECORD PLAN		1	OF	8
	EXISTING FEATURES PLAN		2	OF	8
	UTILITY PLAN		3	OF	8
	GRADING PLAN		4	OF	8
	LANDSCAPE AND LIGHTING PLAN		5	OF	8
	CONSTRUCTION DETAILS		6	OF	8
	CONSTRUCTION DETAILS		7	OF	8
	CONSTRUCTION DETAILS		8	OF	8
	PRE-DEV DRAINAGE PLAN		1	OF	2
	POST-DEV DRAINAGE PLAN		2	OF	2
	SUPPLEMENTAL PLAN	1S			
	ESPC CONTROL PLAN				
	PCSM PLAN				
	HOP PLANS (BY OTHERS)				
*	DENOTES PLAN TO BE RECORDED		'		

\*\*CALL BEFORE YOU DIG\*\*

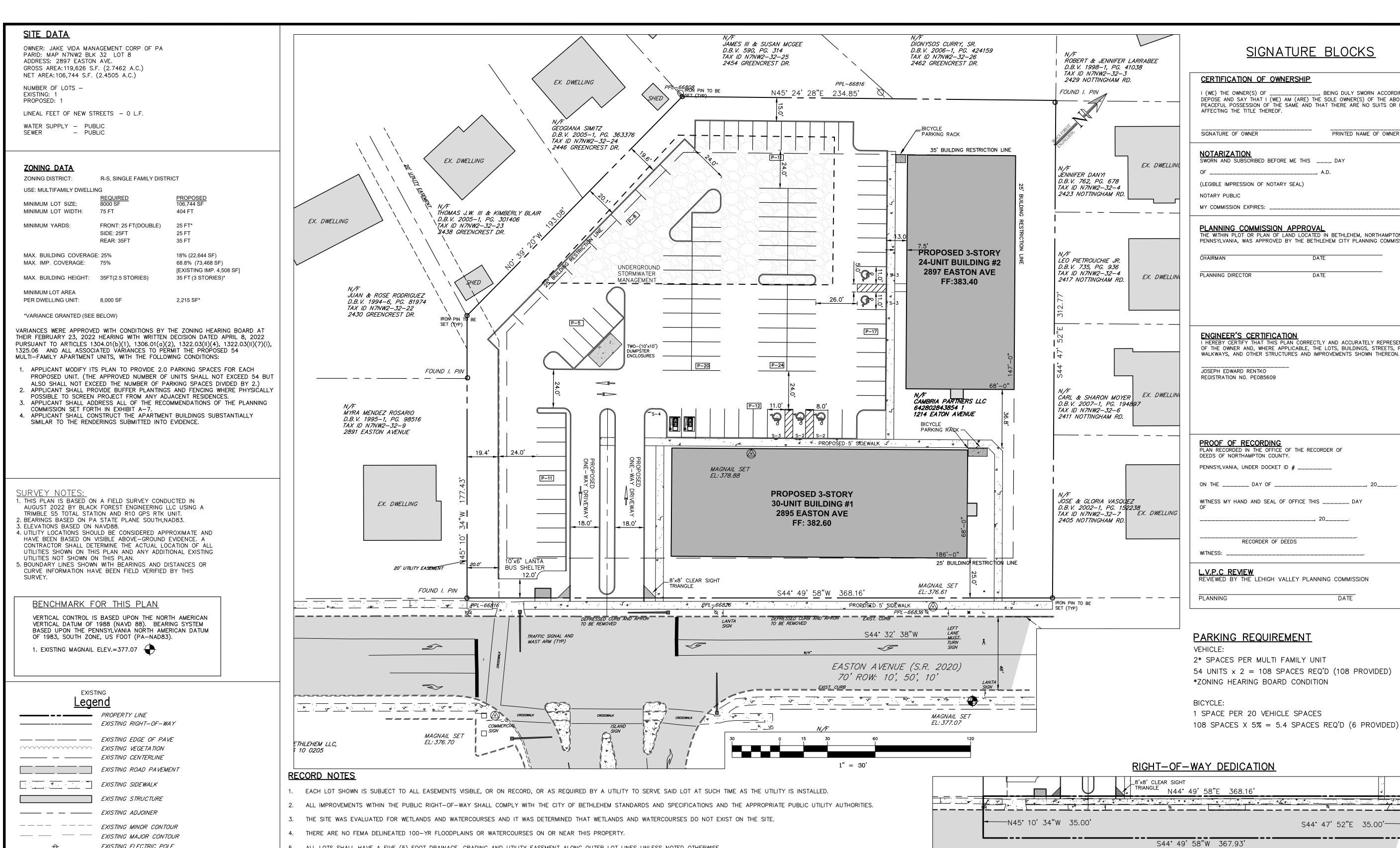
PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN STAGE — STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

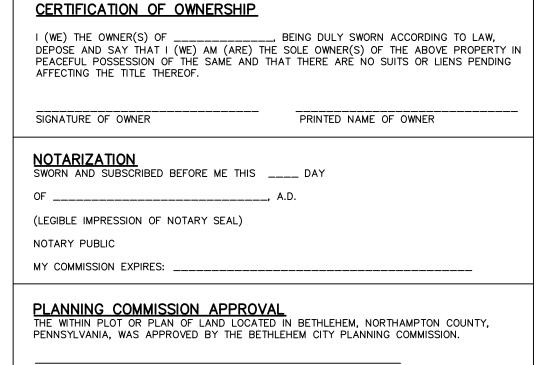
1—800—242—1776

REFERENCE NUMBER: 301320221007

REV:	DES	CRIPTION:		BY	DATE
PROJECT 22		SCALE: 1"=100'	DATE: 10/12/22	REVI	SION:



### SIGNATURE BLOCKS



ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN CORRECTLY AND ACCURATELY REPRESENTS THE LANDS OF THE OWNER AND, WHERE APPLICABLE, THE LOTS, BUILDINGS, STREETS, PARKING AREAS, WALKWAYS, AND OTHER STRUCTURES AND IMPROVEMENTS SHOWN THEREON. JOSEPH EDWARD RENTKO

PROOF OF RECORDING
PLAN RECORDED IN THE OFFICE OF THE RECORDER OF DEEDS OF NORTHAMPTON COUNTY. PENNSYLVANIA, UNDER DOCKET ID # \_\_\_\_\_ ON THE \_\_\_\_\_, 20\_\_\_\_. WITNESS MY HAND AND SEAL OF OFFICE THIS \_\_\_\_\_ DAY RECORDER OF DEEDS WITNESS: \_\_\_\_\_ L.V.P.C REVIEW REVIEWED BY THE LEHIGH VALLEY PLANNING COMMISSION

PARKING REQUIREMENT

VEHICLE:

\_\_\_\_\_

2\* SPACES PER MULTI FAMILY UNIT 54 UNITS x 2 = 108 SPACES REQ'D (108 PROVIDED) \*ZONING HEARING BOARD CONDITION

BICYCLE:

1 SPACE PER 20 VEHICLE SPACES

RIGHT-OF-WAY DEDICATION N44° 49' 58"E 368.16 S44° 47' 52"E 35.00'-

SIGN SCHEDULE

QTY.

LEGEND

STOP

RESERVED PARKING

SAME AS S-2 WITH

VAN ACCESSIBLE PLAQUE

AND PARKING FINE PLAQUE

DO NOT ENTER

WITH PARKING FINE PLAQUE

SYMBOL

S-4

BLANK SIZE

24 X 24

12 X 18

12 X 18

12 X 18

12 X 6

12 X 18

30 X 30

### REV: 1" = 40'

PENNDOT #

R1-1

R7-8

R7-8B

R7-8

R7-8A

R7-8B

R5-1A

PROJECT TITLE: 2897 EASTON AVENUE LAND DEVELOPMENT

ADDRESS CITY COMMENTS

DESCRIPTION:

PROJECT OWNER: JAKE VIDA MANAGEMENT CORP OF PA

JER

BY

DATI

"CALL BEFORE YOU DIG"

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE

FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN

DESIGN STAGE - STOP CALL

PENNSYLVANIA ONE CALL SYSTEM, INC.

1-800-242-1776

REFERENCE NUMBER: 301320221007

BLACK FOREST ENGINEERING, LLC

2455 BLACK FOREST DRIVE

COPLAY, PA 18037

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ALTERATIONS MAY HAVE BEEN MADE WITHOUT THE APPROVAL OR KNOWLEDGE OF THE SIGNATORY.

PE085609 /

JOSEPH E. RENTKO, P.E. #PE085609 2455 BLACK FOREST DRIVE COPLAY, PA 18037

570-239-4499

SEAL:

60 DAVINCI DR BOHEMIA, NY 11716

ROJECT LOCATION: CITY OF BETHLEHEM WARD 14, BLOCK 5 NORTHAMPTON COUNTY PENNSYLVANIA

PLAN TITLE:	RECOR	D PLAN	1
SCALE: 1"=30'	DATE: 10/12/22	DRAWN: JER	CHECKED: JER
PROJECT NO. 2251	DRAWII 1 C		REVISION:

5. ALL LOTS SHALL HAVE A FIVE (5) FOOT DRAINAGE, GRADING AND UTILITY EASEMENT ALONG OUTER LOT LINES UNLESS NOTED OTHERWISE.

6. ACTUAL UTILITY CONNECTION POINTS SHALL BE VERIFIED PRIOR TO CONSTRUCTION.

7. ALL LOTS SHALL BE LAID OUT AND GRADED TO PREVENT CROSS LOT DRAINAGE AND TO PROVIDE POSITIVE DRAINAGE AWAY FROM PROPOSED BUILDING AREAS.

8. ALL CITY PERMITS MUST BE OBTAINED PRIOR TO THE START OF CONSTRUCTION.

RUNOFF FROM ALL ON-SITE IMPERVIOUS AREAS SHALL NOT BE DIRECTED INTO THE PUBLIC SANITARY SEWER, ACROSS THE SIDEWALK AREA WITHIN THE PUBLIC RIGHT-OF-WAY, OR ONTO ADJOINING PROPERTIES. SECTION 1753.08 B.4 OF THE CITY PROPERTY REHABILITATION & MAINTENANCE CODE.

10. ALL LATERAL SANITARY SEWER PIPING IS TO BE SCH 40 OR SDR-26 PVC PIPING UNLESS OTHERWISE NOTED.

11. WORK TO BE PERFORMED ONSITE, SHALL BE DONE IN ACCORDANCE WITH THE IBC.

12. ANY RETAINING WALL 4 FEET OR GREATER IN HEIGHT SHALL HAVE A DESIGN PREPARED, SIGNED, AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF PENNSYLVANIA AND SHALL BE SUBMITTED AT THE TIME OF BUILDING PERMIT APPLICATION TO BE REVIEWED AND APPROVED BY AN APPROVED THIRD PARTY REVIEWER. THE WALL SHALL BE DESIGNED TO BE CONTAINED COMPLETELY WITHIN THE APPLICANT'S PROPERTY OR AN EASEMENT SHALL BE ACQUIRED AND INDICATED ON THE RECORD PLAN TO ALLOW FOR THE CONSTRUCTION OF ANY PORTION OF THE WALL AND/OR WALL TIE BACKS TO BE CONSTRUCTED ON THE ADJOINING PROPERTY.

13. ALL PAVEMENT MARKINGS MUST BE THERMOPLASTIC PAVEMENT MARKINGS.

14. THE PROJECT HAS AN APPROVED PLANNING MODULE FOR 54-UNITS, SEE DEP CODE# 2-48001340-3E.

15. A TOTAL LOT (BLANKET) STORMWATER MANAGEMENT EASEMENT IS HEREBY PROVIDED ACROSS THE LOT IN ORDER FOR INSPECTION AND MAINTENANCE OF THE PROPOSED STORMWATER MANAGEMENT CONTROLS.

16. THE CITY OF BETHLEHEM FIRE DEPARTMENT SHALL APPROVE THE FINAL LOCATION OF THE FOLLOWING REQUIRED ITEMS: KNOX BOX, FIRE DEPARTMENT CONNECTION (FDC), POST INDICATING VALVE (PIV) AND 'NO PARKING FIRE LANE' SIGNAGE.

17. BY SUBMISSION OF THESE PLANS THE ENGINEER ON RECORD CERTIFIES THAT THESE PLANS ARE IN COMPLETE CONFORMANCE WITH THE CITY OF BETHLEHEM STORMWATER MANAGEMENT ORDINANCE.

18. IN ORDER TO MAINTAIN CONTINUITY BETWEEN PLAN REVISIONS, ANY CHANGES TO A PREVIOUS PLAN SUBMISSION SHALL BE FLAGGED WITH A TRIANGLE. ANY CHANGES NOT FLAGGED MAY BE CONSIDERED NOT APPROVED. FLAGGED CHANGES SHALL BE REFERENCED TO THE APPROPRIATE REVISION DATE DATE IN THE REVISION BLOCK.

19. ACCURATE AS-BUILT PLANS SHALL BE KEPT UP TO DATE DURING THE CONSTRUCTION PROCESS. AT THE COMPLETION OF THE PROJECT RECORD DRAWINGS SHALL BE DEVELOPED FROM THE AS-BUILT PLANS AND SUBMITTED TO THE CITY ENGINEER'S OFFICE, ALL FINAL DRAWINGS SHALL SHOW NORTH AMERICAN DATUM (NAD) 1983 STATE PLANE COORDINATES IN FEET (PA SOUTH, FIPS ZONE 3702) AND THE DIGITAL FILE SHALL BE IN STATE PLANE FEET COORDINATES AS APPLICABLE. THE HARD COPY OF THE RECORD DRAWINGS SHALL BE IN THE FORM OF MYLAR COPY. THE ENGINEER OF RECORD SHALL CERTIFY (IE PE STAMPED AND SIGNED) THAT THE RECORD DRAWINGS COMPLY SUBSTANTIALLY WITH THE APPROVED PLAN AND THAT THEY CONFORM TO INDUSTRY STANDARDS. ALL DIGITAL FILES RESIDE ON PC COMPATIBLE CD ROM CONTAINING THE DIGITAL REPRESENTATION OF THE FINAL PLANAS PRESENTED ON THE TWENTY-FOUR (24) INCH BY THIRTY-SIX (36) INCH SHEETS. THE DIGITAL MAP SHALL BE AUTOCAD COMPATIBLE. ALL LAYERS INCLUDED IN THE DIGITAL MAPS SHALL BE THE STANDARDIZED LAYERS PREPARED AND UTILIZED BY THE CITY OF BETHLEHEM TO ENSURE COMPATIBILITY WITH THE CITY'S EXISTING CAD STANDARDS AND AS DESCRIBED IN THE APPENDIX A OF THE CITY'S SUBDIVISION AND LAND DEVELOPMENT ORDINANCE.

EXISTING ELECTRIC POLE EXISTING IRON PIN EXISTING CONTROL POINT

EXISTING TEST PIT

**PROPOSED** 

— — — — — — PROP. EASEMENT

PROP. TREE LINE

—X—X—X—X—X—X— PROP. FENCE

—— PROP. PROPERTY LINE

PROP. RIGHT-OF-WAY

PROP. CONTOUR MINOR

PROP. MONUMENTATION

PROP. BUILDING RESTRICTION LINE

PROP. TRACT LINE

—— PROP. DRIVEWAY

PROP. SIGN

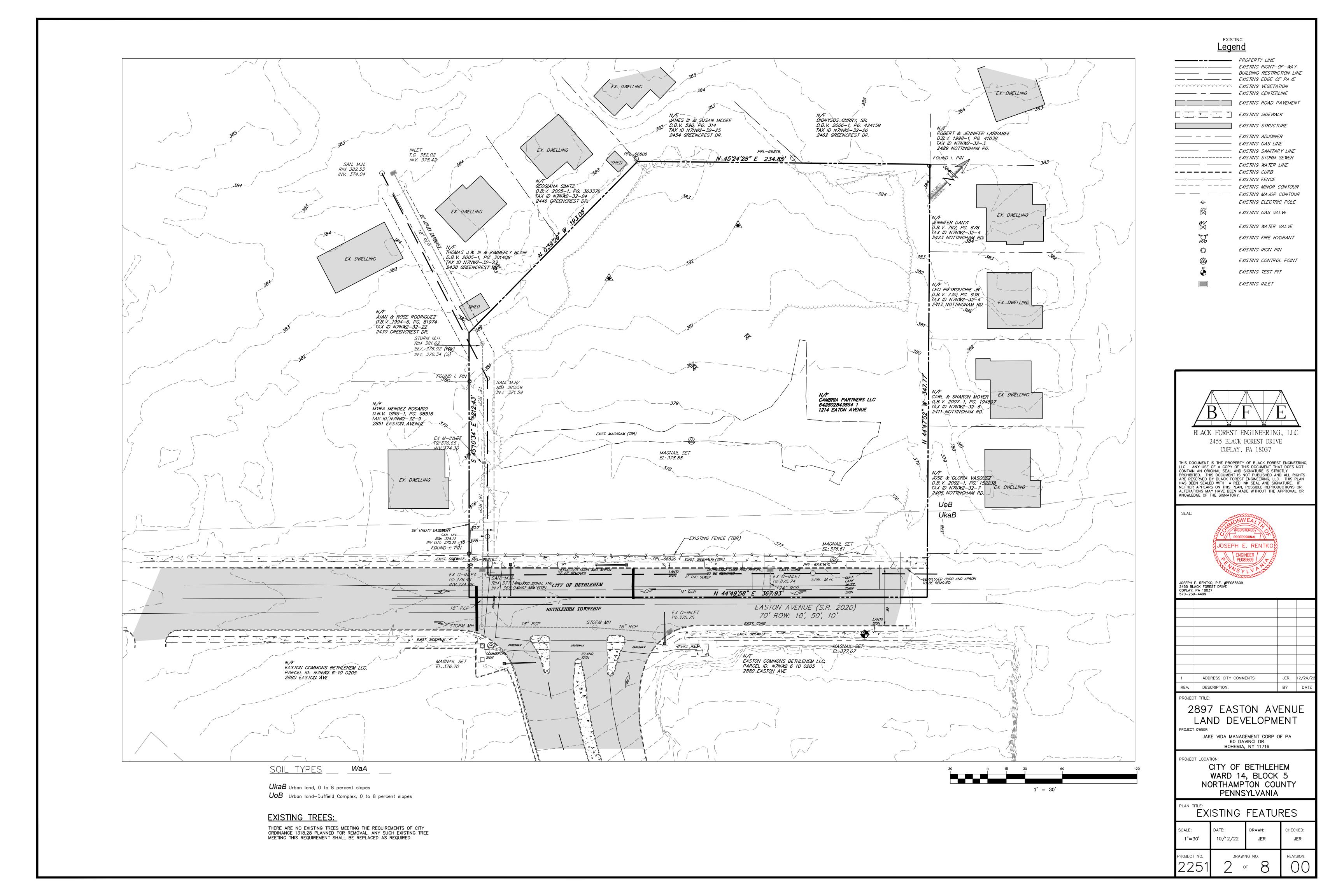
PROP. TREE

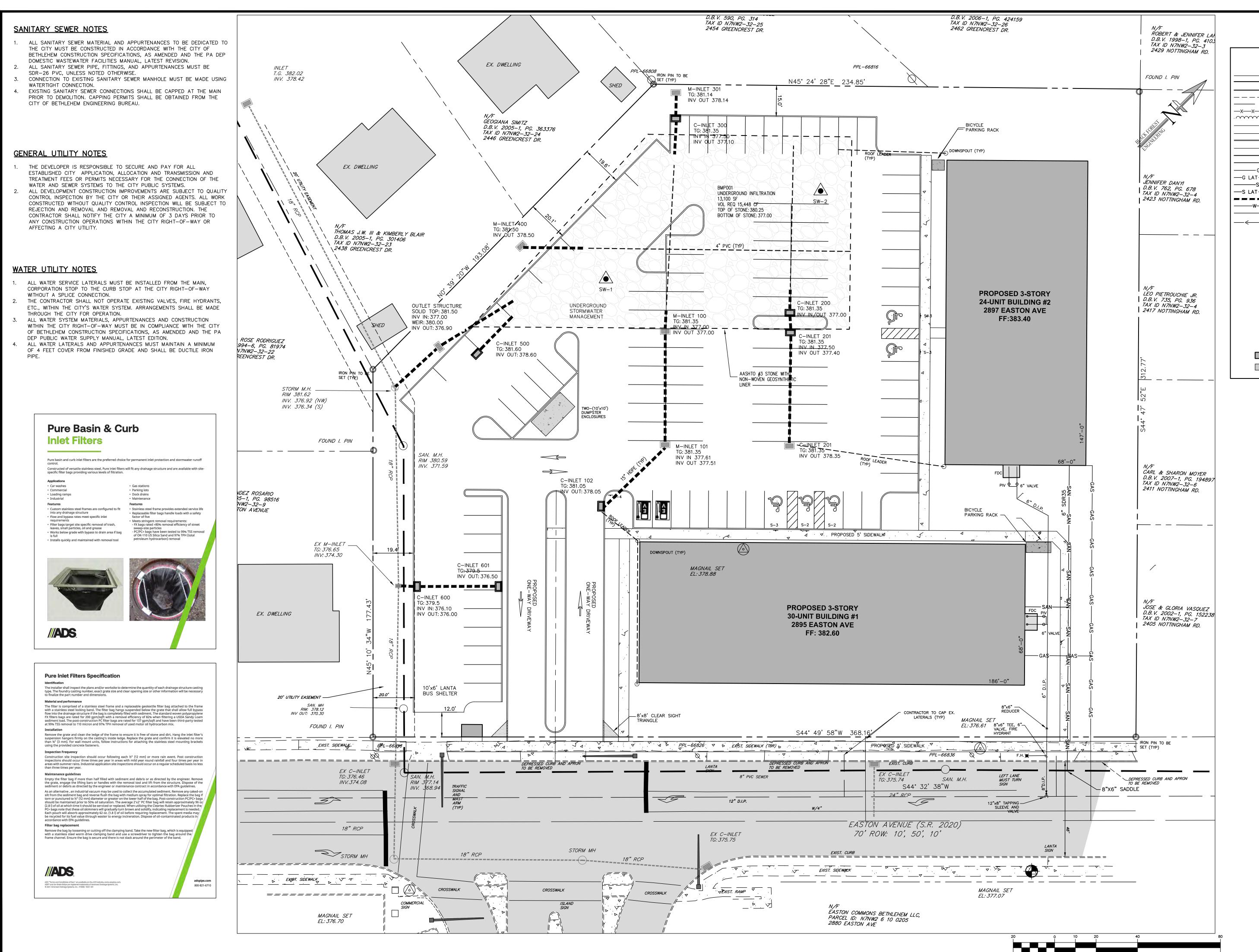
PROP. BENCHMARK

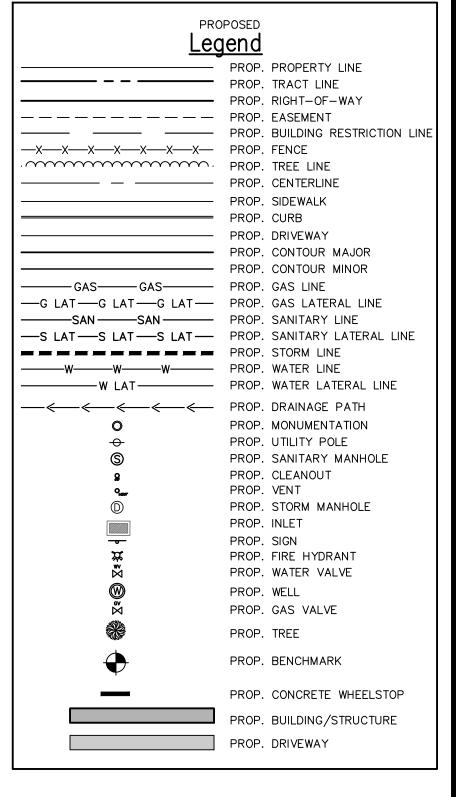
PROP. DRIVEWAY

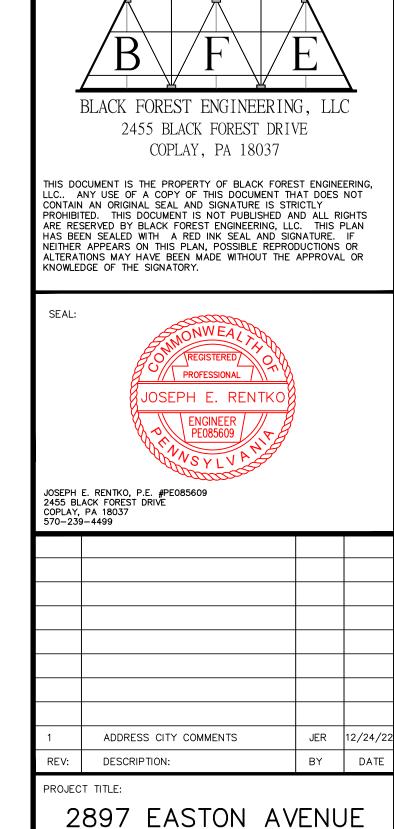
PROP. BUILDING/STRUCTURE

PROP. CONTOUR MAJOR









PROJECT OWNER:

JAKE VIDA MANAGEMENT CORP OF PA

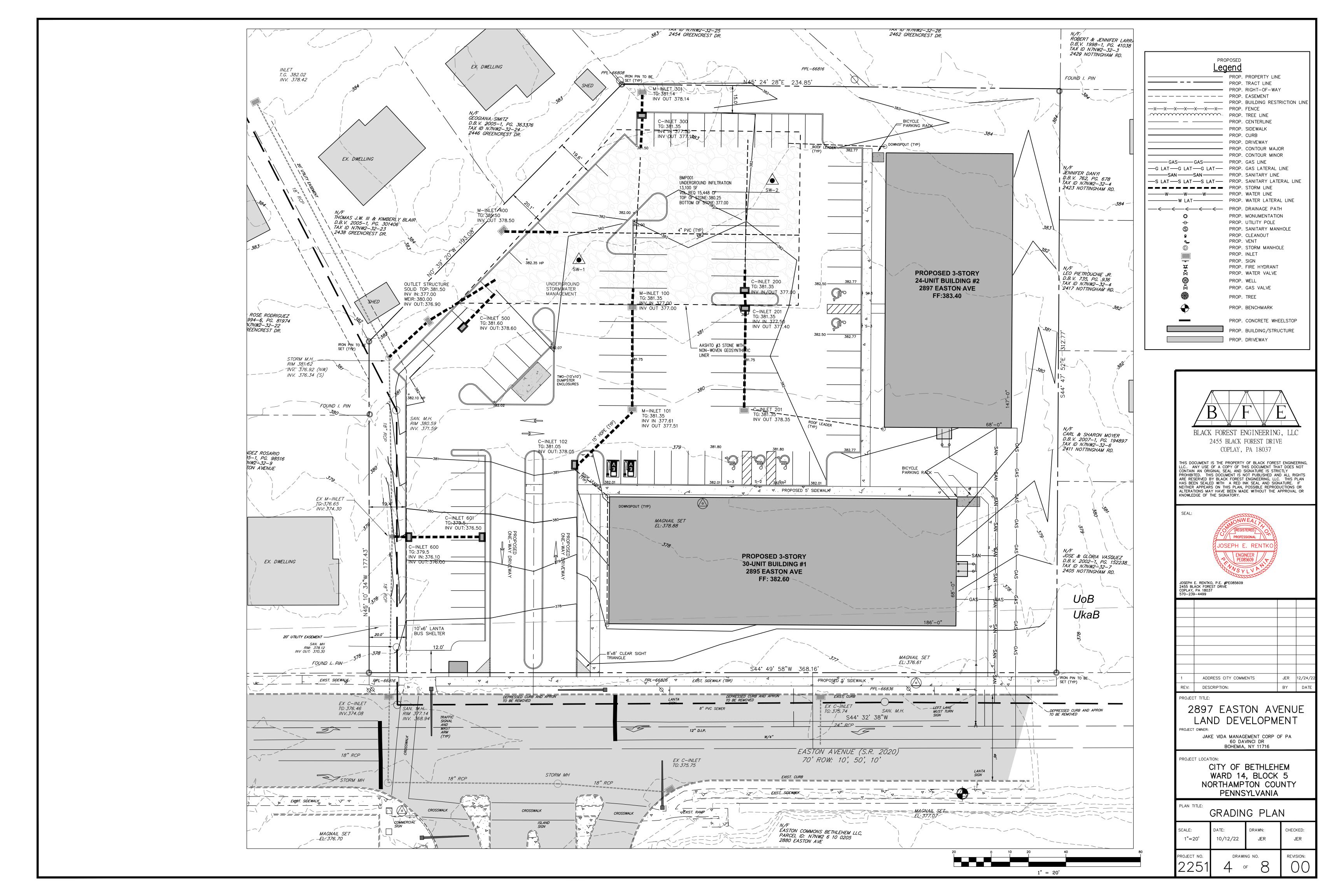
60 DAVINCI DR BOHEMIA, NY 11716

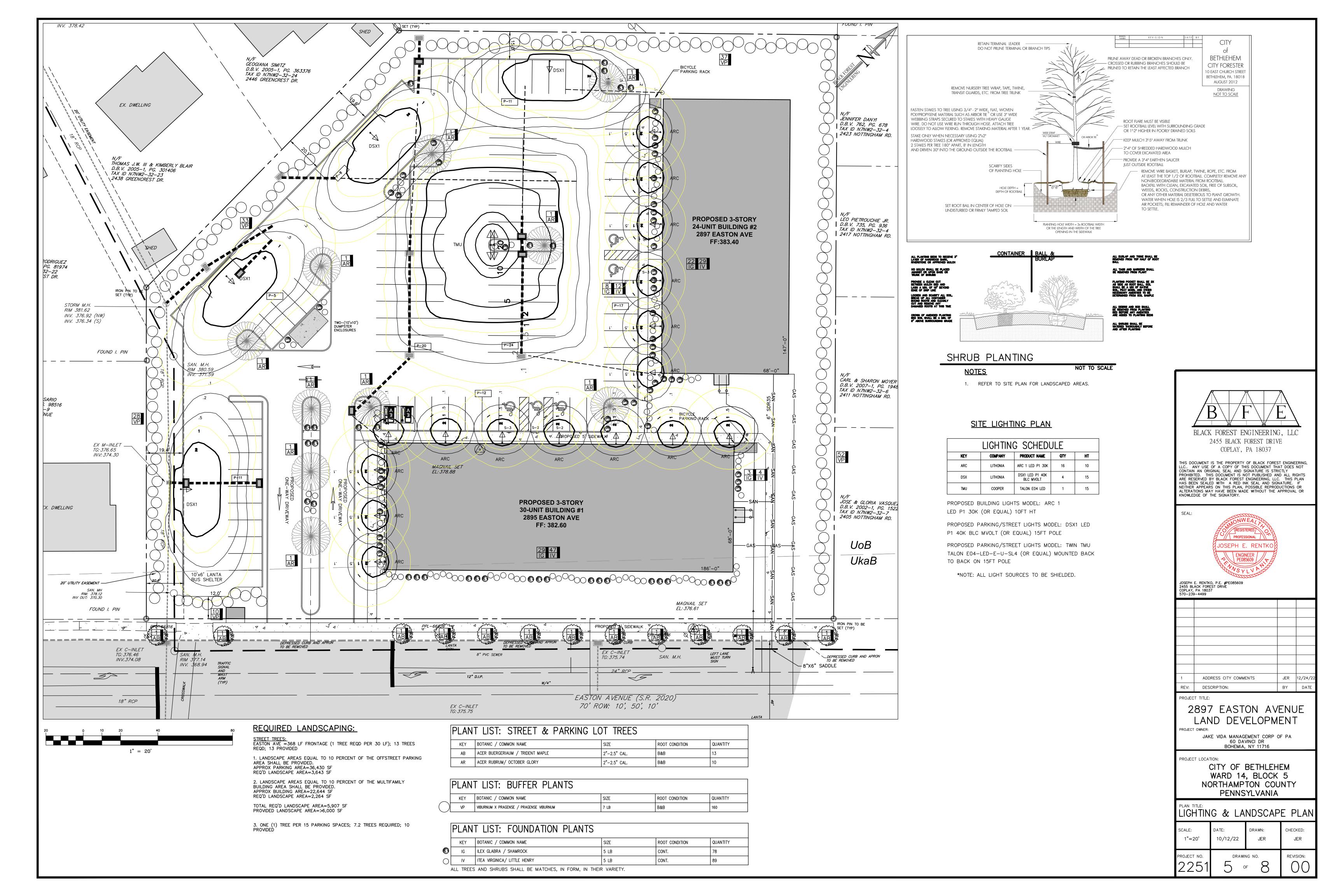
PROJECT LOCATION:

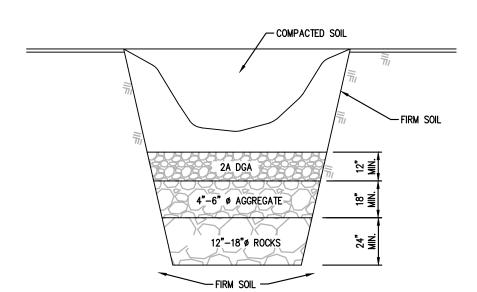
CITY OF BETHLEHEM

WARD 14, BLOCK 5
NORTHAMPTON COUNTY
PENNSYLVANIA

UTILITY PLAN								
SCALE: 1"=20'	DATE: 10/12/22	DRAWN: JER	CHECKED: JER					
PROJECT NO. 2251	7	NG NO. F 8	REVISION:					



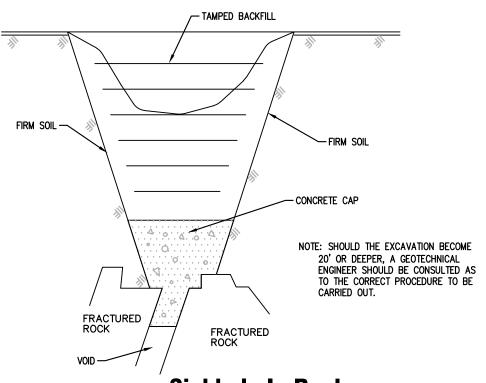




### Sinkhole In Soil

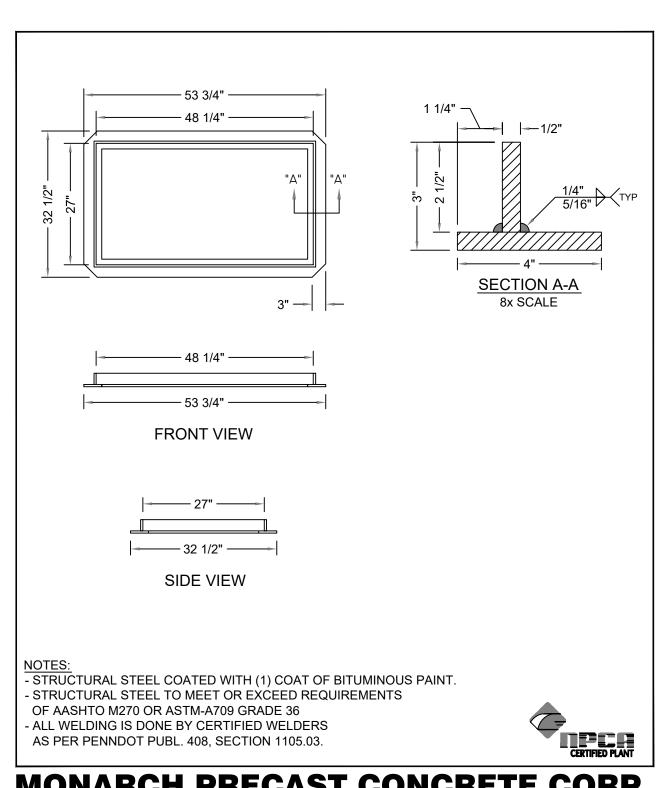
NOT TO SCALE

- 1. THE REPAIR TECHNIQUES AS DESCRIBED BELOW ARE SUITABLE ONLY IF THE SINKHOLE IS LOCATED IN AN OPEN AREA. IF THE SINKHOLE IS LOCATED UNDER OR NEAR A STRUCTURE OR A BUILDING, COMPACTION GROUTING MAY BE NECESSARY FOR REMEDIATION, AS DETERMINED BY A GEOTECHNICAL ENGINEER LICENSED IN THE
- 2. EXCAVATE DOWN TO ROCK TO SINKHOLE THROAT OR TO A DEPTH OF 15 FEET BELOW GRADE, WHICHEVER
- 3. IF ROCK IS ENCOUNTERED WITHIN 10 FEET, STOP EXCAVATION. THE LIMIT OF EXCAVATION SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER. GENERALLY, A ZONE OF SOFT, IN-FILL MATERIAL WILL BE FOUND WHICH COVERS MOST OF THE BOTTOM OF THE EXCAVATION. COVER THIS AREA WITH A GRADED ROCK FILTER AS SHOWN
- 4. BACKFILL HOLE WITH RELATIVELY IMPERMEABLE CLAY SOIL. COMPACT SOIL IN 6" LIFTS WITH A POWER TAMPER OR RAMMER TO AT LEAST 95% OF THE STANDARD PROCTOR.
- 5. BACKFILL HOLE ABOVE EXISTING GRADE TO DIVERT SURFACE WATER.



### Sinkhole In Rock

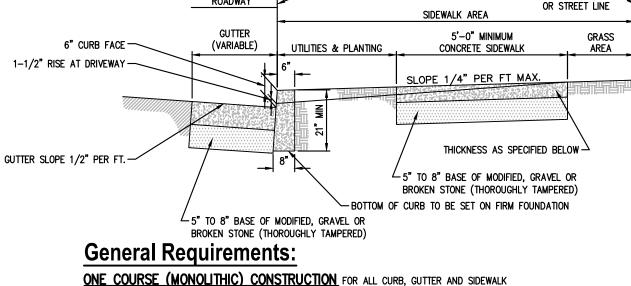
- 1. THE REPAIR TECHNIQUES AS DESCRIBED BELOW ARE SUITABLE ONLY IF THE SINKHOLE IS LOCATED IN AN OPEN AREA. IF THE SINKHOLE IS LOCATED UNDER OR NEAR A STRUCTURE OR A BUILDING, COMPACTION GROUTING MAY BE NECESSARY FOR REMEDIATION, AS DETERMINED BY A GEOTECHNICAL ENGINEER LICENSED IN THE
- 2. EXCAVATE DOWN TO BEDROCK OR TO THE SINKHOLE THROAT
- 3. EXPOSE THE ROCK SURFACE BY WASHING THE AREA WITH A SMALL HOSE WATER SPRAY AND INSTALL HIGHSUMP CEMENT INTO VOIDS AND CREVICES UNTIL VOIDS ARE FILLED AND A CAP COVERS THE AREA. THE LIMIT OF EXCAVATION AND CONCRETE SHALL BE DETERMINED BY THE ENGINEER.
- 4. AFTER CONCRETE HAS SET OVERNIGHT, BACKFILL HOLE WITH RELATIVELY IMPERMEABLE CLAY SOIL. COMPACT SOIL IN 6" LIFTS WITH A POWER TAMPER OR RAMMER TO AT LEAST 95% OF THE STANDARD PROCTOR. THE TOP THREE(3) FEET SHALL BE BACKFILLED WITH 2RC CRUSHED AGGREGATE.
- 5. BACKFILL HOLE ABOVE EXISTING GRADE TO DIVERT SURFACE WATER.
- 6. WHEN SINKHOLE IS UNDER A PROPOSED UTILITY. CONCRETE IS TO BE SET 6" BELOW THE UTILITY TO ALLOW FOR



### **MONARCH PRECAST CONCRETE CORP**

WWW.MONARCHPRECAST.COM

3" M ALTERNATE STEEL FRAME



PROPERT LINE -

ONE COURSE (MONOLITHIC) CONSTRUCTION FOR ALL CURB, GUTTER AND SIDEWALK CONCRETE MIX: TO BE CLASS A CONCRETE 3300# 6 BAG MIX - 5.6 GAL. WATER PER BAG THROUGHTOUT; USE POWER BATCH MIXER. NO SLAG.

**CURB:** 21" MINIMUM DEPTH WITH APPROVED FINISH ON TOP AND EXPOSE FACE. **GUTTER:** 8" DEPTH - SLOPE OF GUTTER 1/2" RISE PER FOOT AWAY FROM CURB. **SIDEWALK:** <u>Thickness</u> – residential area – 5", business and industrial areas – 6" AT RESIDENTIAL DRIVEWAYS - 6", AT BUSINESS AND INDUSTRIAL DRIVEWAYS - 8" FINISH - USE WOOD FLOAT TO PRODUCE SKID RESISTANCE SURFACE.

ONGRADES OF 5% OR MORE PRODUCE A ROUGHER FINISH. - WALK AND PARKWAY AREAS 1/4" PER FOOT (2%) TOWARD CURB. EXPANSION AND CONTRACTION JOINTS: SEE CITY CONSTRUCTION STANDARD NO. 1A. HANDICAP RAMPS: REQUIRED ON ALL RADII IN ACCORDANCE WITH CURRENT ADA REQUIREMENTS. **DRIVEWAYS:** SEE CITY STANDARD DRIVEWAY ENTRANCE AND APRON SKETCH.

**EXCAVATION** WHEN EXCAVATING IN THE CARTWAY OF THE CITY STREET, A CLEAN, FULL DEPTH CUT-BY JACK IN CARTWAY HAMMERING OR SAWCUTTING-SHALL BE MADE IN THE STREET BETWEEN THE AFFECTED AND THE UNAFFECTED WORK AREAS. FURTHER, FINAL RESTORATION IN THE AFFECTED AREA OF THE STREET SHALL CONSIST OF CREATING A NEW CLEAN CUT BY SAWCUTTING 12" BEYOND THE EDGE OF ANY AFFECTED WORK AREAS, BACKFILLING WITH PENNDOT 2A MODIFIED STONE, AND PROPERLY COMPACTING THIS STONE TO THE ELEVATION OF THE TOP OF THE SUBBASE (I.E. BOTTOM OF THE BASE COURSE OF MACADAM), BUT NO HIGHER THAN 3-INCHES BELOW THE FINISH GRADE-EXCEPT AS REQUIRED TO PROVIDE REASONABLE TEMPORARY ACCESS AT DRIVEWAYS.

### Ordinance Requirements:

REQUIREMENTS MUST BE IN ALL CASES.

48 1/4"

57 1/4**"** 

PLAN VIEW

45 1/4**"** 

SECTION A - A

2 1/2"—

FAX (610) 437-7133

WARRANT OF SURVEY - PROCURED FROM THE CITY ENGINEER'S OFFICE; PROVIDES FOR ESTABLISHING LINE & GRADES; STAKES TO BE PROTECTED BY APPLICANT AND USED WITHIN 30 DAYS. PROCURED FROM THE CITY ENGINEER'S OFFICE; FOR SIDEWALK AND DRIVEWAY CONSTRUCTION

### **DETAIL REQUIREMENTS:**

FOR FURTHER DETAILS AND OTHER REQUIREMENTS SEE THE FOLLOWING DOCUMENTS ON FILE IN THE OFFICE OF THE "STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF CONCRETE CURB, GUTTER AND SIDEWALK" CODIFIED ORDINANCES OF THE CITY OF BETHLEHEM, ARTICLES 903 AND 909.

\* WHENEVER A CURB, GUTTER AND/OR SIDEWALK IS LOCATED IN THE HISTORIC DISTRICT, SPECIAL REQUIREMENTS MAY \* CHANGES TI DIMENSIONAL REQUIREMENTS MAY BE CONSIDERED IN CASES WHERE OBSTRUCTIONS OR ENCROACHMENTS EXIST. ANY EXCEPETIONS MUST BE APPROVED BY THE CITY ENGINEER. CURRENT ADA

### **BUREAU OF ENGINEERING** Construction Standard No. 1

NOT TO SCALE

REQUIREMENTS OF PUB. 408, SECTION 605, FOR INLET ASSEMBLIES.

THESE DETAILS DEPICT THE SHAPE AND DIMENSIONS

3. PROVIDE ANGLES EMBEDDED IN THE CONCRETE AS A

SEAT THE GRATE DIRECTLY WITHIN THE UNIT. 4. PLACE A TYPE M INLET ADJACENT TO THE BACK EDGE O

SECTION B - B

REQUIRED FOR UNIFORMITY AND COMPATIBILITY. THEY DO

NOT INCLUDE DETAILS REQUIRED FOR MANUFACTURING AND

HANDLING PRECAST TOP UNITS. ONLY TOP UNITS SUPPLIED

BY A MANUFACTURER LISTED IN BULLETIN 15 SHALL BE

CAST-IN-PLACE TOP UNITS MAY BE MONOLITHIC WITH THE

THE CURB. FLUSH WITH THE PAVEMENT SURFACE. WHEN

REQUIRED WITHIN A CONCRETE MOUNTABLE CURB SECTION

BEARING AREA FOR THE GRATE FOR ALL TOP UNITS WHICH

. GRADE ADJUSTMENT RINGS SHALL BE

MASONRY OR PRECAST CONCRETE

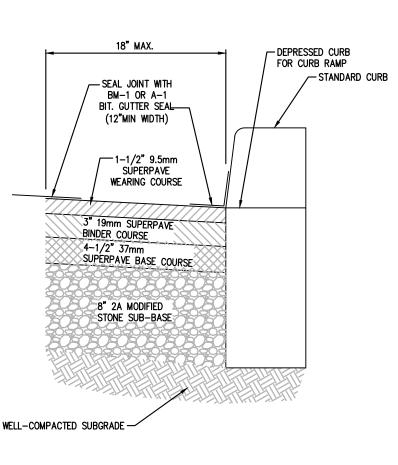
INLET BOX.

1 1/4"x 1 1/4"x 1/8" (MIN.)-

TYPE M INLET CONCRETE TOP UNITS

NOT TO SCALE

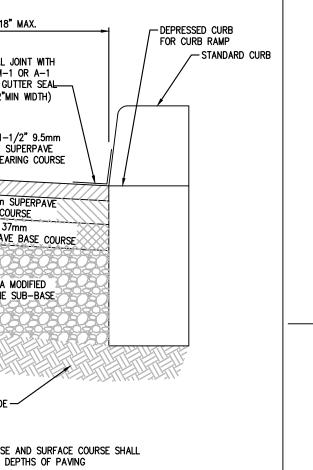
TYPE M INLET

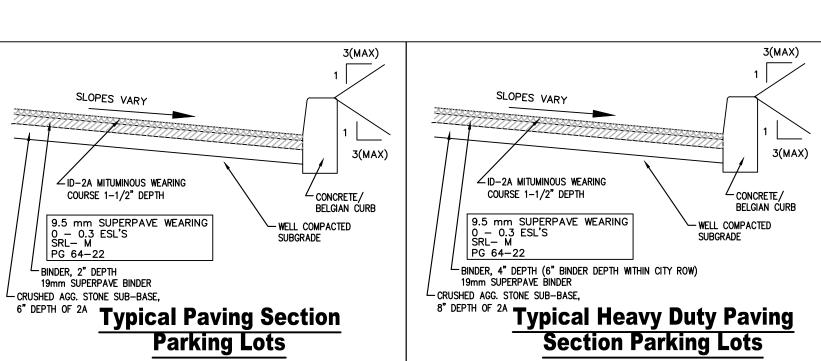


\* THE BASE COURSE AND SURFACE COURSE SHALL MATCH EXISTING DEPTHS OF PAVING

**Pavement Restoration** For Curb Replacement

NOT TO SCALE





VARIES-5 FT. TYP. DEPTH" CLASS A- 3500 PSI CONC AGGREGATE BASE (no slag) COMPACTED SUBGRADE

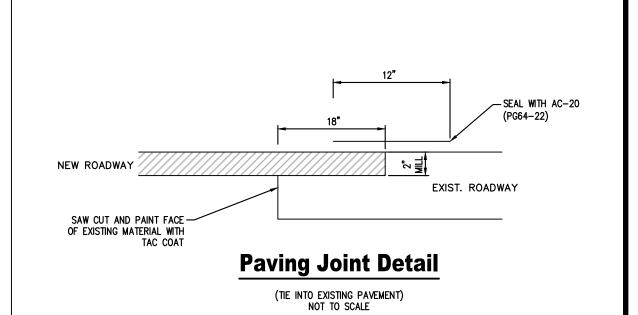
### -DEPTH = 4" ONSITENote:

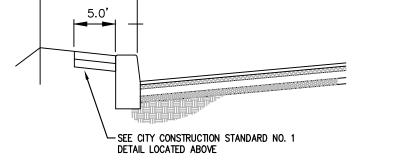
CONSTRUCT IN SECTIONS NOT OVER 10 FEET WITH

- VERTICAL JOINTS FOR FULL DEPTH OF PAVEMENT. THE JOINTS SHALL BE MADE BY REMOVABLE METAL PLATES SO THAT ADJACENT BLOCKS WILL BE MADE ON DIFFERENT DAYS. EXPANSION JOINTS LOCATED 30' O.C.
- TOOLED JOINTS LOCATED 5' O.C. SIDEWALK IS TO BE LIGHT BROOM FINISHED IN THE
- DIRECTION OF SIDEWALK WIDTH 5. ALL MATERIAL AND CONSTRUCTION PROCEDURES SHALE COMPLY WITH THE CITY OF BETHLEHEM
- 6. ALL SIDEWALK OUTSIDE OF THE ROW SHALL USE ABOVE DETAIL. ALL SIDEWALK WITHIN THE ROW SHALL FOLLOW THE CITY STANDARD "CONSTRUCTION

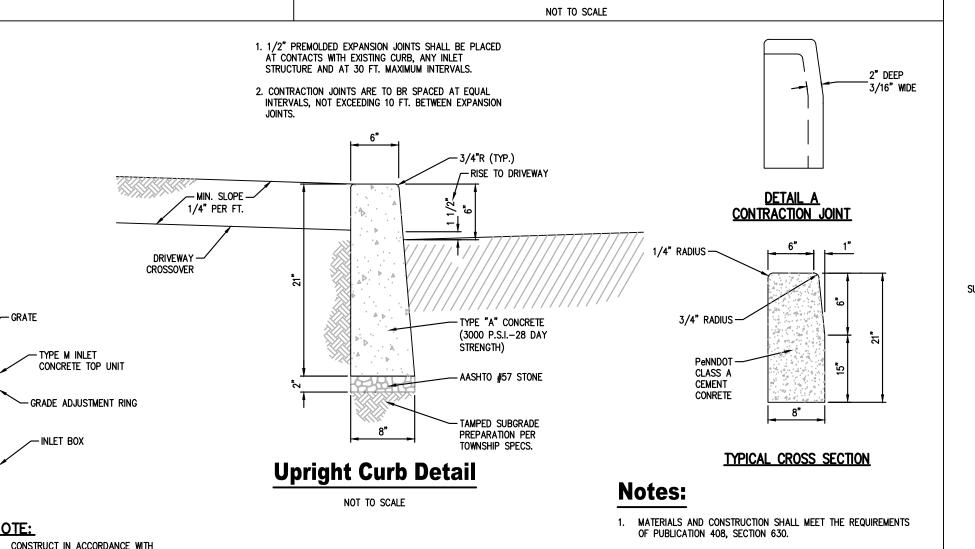
### **Concrete Sidewalk Detail**

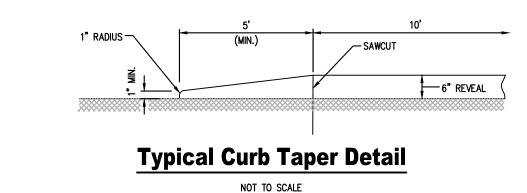
NOT TO SCALE





### **Concrete Sidewalk Detail** Along Orchard Street





## CONSTRUCTION JOINT -(SEE DETAIL A)

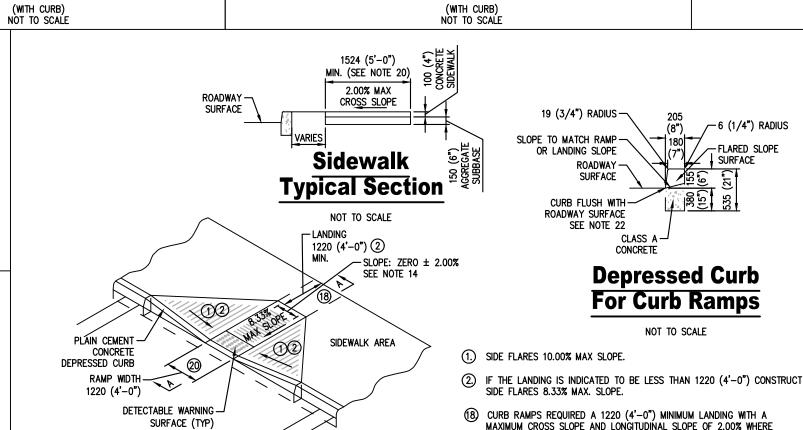
2. SPACE CONTRACTION JOINTS IN UNIFORM LENGTHS OR

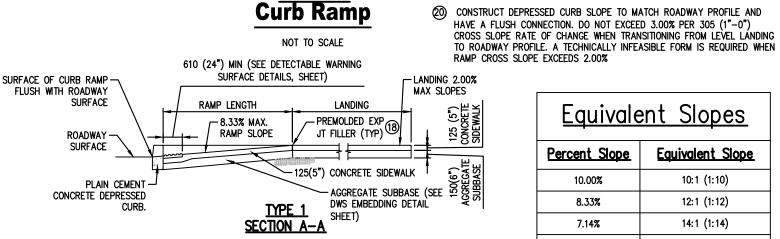
CONFORM TO CROSS SECTIONAL AREA OF CURB.

3. PLACE 3/4" PREMOLDED EXPANSION JOINT FILLER MATERIAL AT STRUCTURES AND AT THE END OF THE WORK DAY. CUT MATERIAL TO CONFORM TO AREA ADJACENT TO CURB OR TO

### **Concrete Curb**

NOT TO SCALE

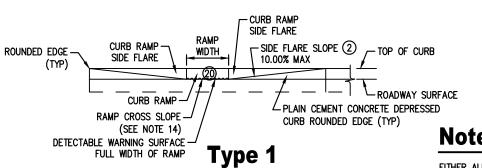




Type 1

Equivalent Slopes Percent Slope <u>Equivalent Slope</u> 10:1 (1:10) 10.00% 8.33% 12:1 (1:12) 14:1 (1:14) 7.14% 5.00% 20:1 (1:20) 2.00% 50:1 (1:50) 100:1 (1:100) 1.00%

PEDESTRIANS PERFORM TURNING MANEUVERS. SEE DETAILS FOR LOCATION



**Elevation** 

### **Notes:**

NOT TO SCALE PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTIONS 350, 409, 630, 676 AND 694.

EITHER ALL METRIC OR ALL ENGLISH VALUES MUST BE USED ON PLANS. METRIC AND ENGLISH VALUES SHOWN MAY NOT BE MIXED.

PROVIDE EXPANSION JOINT MATERIAL 13 (1/2") THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH CONSTRUCT CURB RAMPS WITH A MINIMUM 1220 X 1220 (4'-0" X 4'-0") CLEAR SPACE BEYOND THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICLE TRAVEL LANE. SEE SHEET 7 FOR CROSSWALK DETAILS. . SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.

PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS THAN THE STANDARD 205 (8") HEIGHT.

CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE. 3. TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 4500 (15'-0"). ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS NON-WALK AREA IS AN OBSTRUCTED OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS. 10. THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON FOLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSHBUTTONS. FOR ALTERATION PROJECTS, PROVIDE ACCESS TO

EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STUB POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN 11. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. US CUSTOMARY UNITS IN () PARENTHESIS.
12. ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB.
13. PROVIDE DETECTABLE WARNING SURFACES (DWS) 610 (24") MINIMUM (IN THE DIRECTION OF PEDESTRIAN TRAVEL) ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES, EITHER LIGHT—ON—DARK OR DARK—ON—LIGHT FOR THE FULL WIDTH OF RAMP.

14. FOR NEW CONSTRUCTION, DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE.
15. FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE. THE SLOPES INDICATED IN THE DETAILS SHOW THE MAX SLOPE ALLOWABLE. SLOPES THAT EXCEED THOSE INDICATED IN THE DETAILS, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE DECONSTRUCTED. 16. CONSTRUCT SIDEWALKS AT A LONGITUDINAL SLOPE NOT TO EXCEED 5.00%. FOR ROADWAY PROFILE SLOPES THAT EXCEED 5.00%, CONSTRUCT PARALLEL SIDEWALKS ADJACENT TO ROADWAY AT A LONGITUDINAL SLOPE NOT TO EXCEED ROADWAY PROFILE SLOPE.

17. THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED AN ALGEBRAIC DIFFERENCE OF 11.00%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, LANDING OR BLENDED TRANSITION IS NOT TO EXCEED 5.00%. SEE SHEET 8 FOR DETAILS. 18. THE CONSTRUCTION STANDARDS DEPICTED ARE MOST APPROPRIATE FOR NEW CONSTRUCTION. ALL CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE

19. ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. (FOR EXAMPLE, A 150 (6") CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 1830 (6'-0") FOR A 12:1 (1:12) SLOPE.

20. Sidewalk width may be reduced to 1220 (4'-o"), when passing areas 1525 x 1525 (5'-o" x 5'-o") are provided every 61 meters (200') 1. THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS. 22. CONSTRUCT DEPRESSED CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE FLOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT

PONDING. FOR LEVEL LANDINGS BEHIND DEPRESSED CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. 23. CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING. GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3:1 (1:3) MAXIMUM. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN ACCESS ROUTE. 24. CONSTRUCT TOP OF PLAIN CEMENT CONCRETE DEPRESSED CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).

25. FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE OF MARKED CROSSWALK LINES. SEE SHEET 7 FOR DETAILS.

26. A 1220 (4'-0") MAXIMUM DIGITAL DISPLAY LEVEL WILL BE USED TO VERIFY THE SLOPES OF CURB RAMPS AND SIDEWALKS.

BLACK FOREST ENGINEERING, LLC 2455 BLACK FOREST DRIVE COPLAY, PA 18037

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JOSEPH E. RENTKO, P.E. #PE085609 2455 BLACK FOREST DRIVE COPLAY, PA 18037

SEAL:

REV:

ADDRESS CITY COMMENTS JER

DAT

BY

PROJECT TITLE:

DESCRIPTION:

2897 EASTON AVENUE LAND DEVELOPMENT PROJECT OWNER:

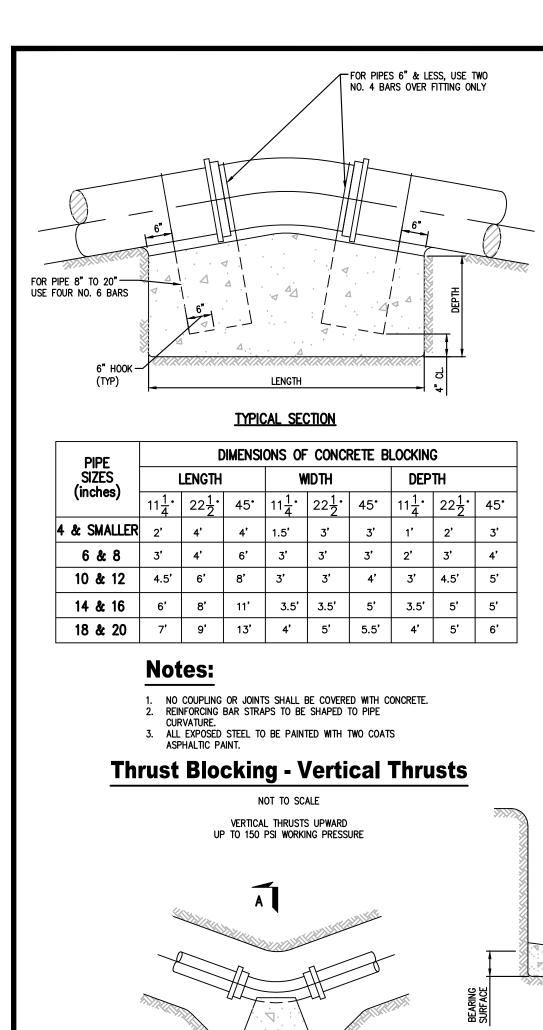
JAKE VIDA MANAGEMENT CORP OF PA 60 DAVINCI DR

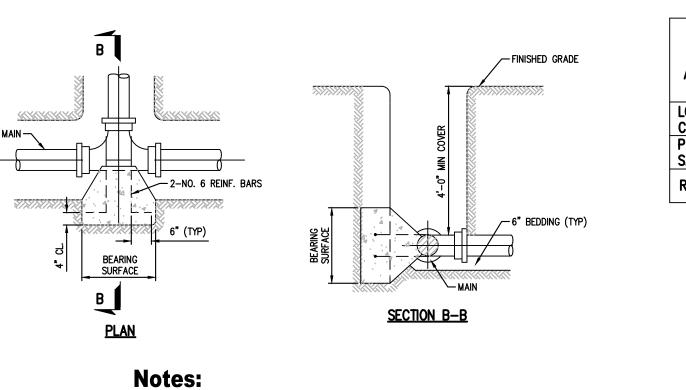
BOHEMIA, NY 11716

PROJECT LOCATION: CITY OF BETHLEHEM WARD 14, BLOCK 5 NORTHAMPTON COUNTY PENNSYLVANIA

CONSTRUCTION DETAILS

CHECKED: SCALE: DATE: DRAWN: 10/12/22 AS NOTED JER JER ROJECT NO REVISION: DRAWING NO





- SEE STANDARD DETAIL STANDARD DETAIL VII—27 FOR BEARING AREA REQUIRED.
   NO COUPLING OR JOINTS SHALL BE COVERED WITH CONCRETE.
   REINFORCING BAR STRAPS TO BE SHAPED TO PIPE
- CURVATURE.

  4. ALL EXPOSED STEEL TO BE PAINTED WITH TWO COATS ASPHALTIC PAINT.

### **Thrust Blocking For Tees**

NOT TO SCALE TYPICAL BLOCKING FOR HORIZONTAL & VERTICAL DOWNWARD THRUSTS UP TO 150 PSI WORKING PRESSURE

			BE/	ARING	AREA	REQU	JIRED,	SQUA	ARE F	EET			
Type of Bearing		4" and EGREE	d less BEN		C	6" aı EGREI	nd 8" E BEN	D	10" and 12" DEGREE BEND				
Material and Allowable loads, psf	11 <u>1</u>	$22\frac{1}{2}$	45	90	11 <u>1</u>	$22\frac{1}{2}$	45	90	11 <u>1</u>	22 <u>1</u>	90		
LOOSE SAND OR MEDIUM CLAY - 2,000	1.0	2.0	2.7	4.0	1.5	3.0	6.0	10.0	3.0	6.2	12.0	22.0	
PACKED GRAVEL AND SAND - 4,000	1.0	1.0	1.5	2.0	1.0	1.5	3.0	5.0	1.5	3.1	6.0	11.0	
ROCK - 10,000	1.0	1.0	1.0	1.0	1.0	1.0	1.2	2.0	1.0	1.3	2.4	4.4	

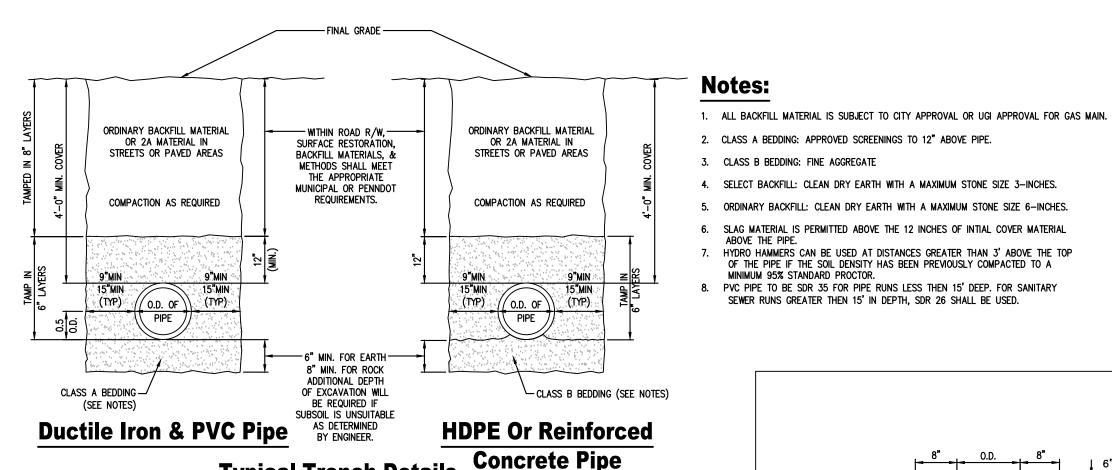
BEARING AREA REQUIRED, SQUARE FEET									
Type of Bearing Material	14" and 16" 18" and 20 DEGREE BEND DEGREE BENI OR DEFLECTION OR DEFLECTION						<b>E BEND</b>		
and Allowable Loads	11 1/4	$22\frac{1}{2}$	45	90	11 <del>1</del> 4	$22\frac{1}{2}$	45	90	
LOOSE SAND OR MEDIUM CLAY -2,000	6.0	12.0	22.5	40.0	9.5	19.0	37.0	67.0	
PACKED GRAVEL AND SAND - 4,000	3.0	6.0	11.3	20.0	4.8	9.5	18.5	33.5	
ROCK - 10,000	1.2	2.4	4.5	8.0	2.0	3.8	7.4	13.5	

### **Notes:**

THRUST BLOCKING FOR TEES SHALL HAVE THE SAME BEARING AREA AS 90° BENDS OF THE PIPE SIZE OF THE OUTLET. DEAD ENDS SHALL HAVE THE SAME BEARING AS 90° BENDS.

### Thrust Blocking Schedule NOT TO SCALE

SCHEDULE OF DIMENSIONS UP TO 150 PSI WORKING PRESSURE



**Concrete Pipe Typical Trench Details** 

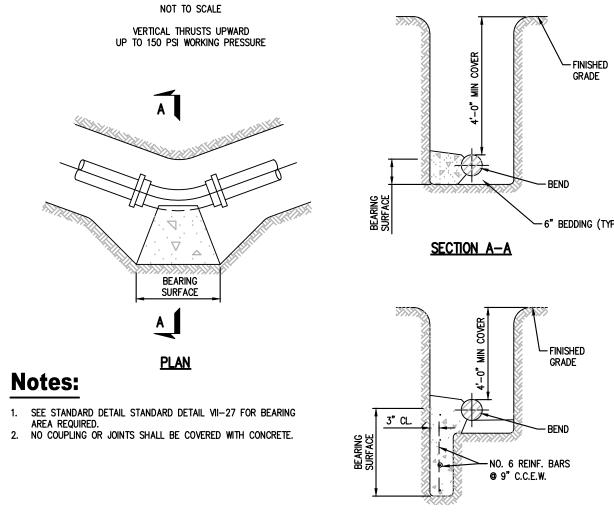
NOT TO SCALE

6"-15"ø=4" - 18"-42"ø=6" TRENCH -SUBGRADE 27"-39"ø=9" **Typ. Sewer Concrete Encasement Detail** 

NOT TO SCALE

OF THE PIPE IF THE SOIL DENSITY HAS BEEN PREVIOUSLY COMPACTED TO A

SEWER RUNS GREATER THEN 15' IN DEPTH, SDR 26 SHALL BE USED.

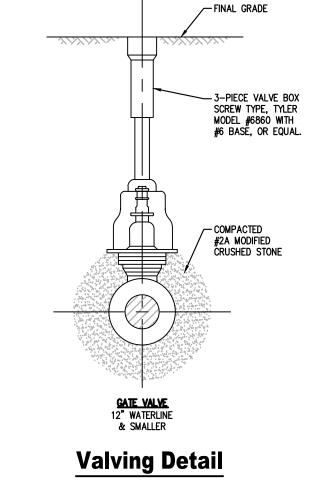


### **Thrust Blocking For Bends** NOT TO SCALE

SECTION A-A

ADDITIONAL BEARING AS REQUIRED

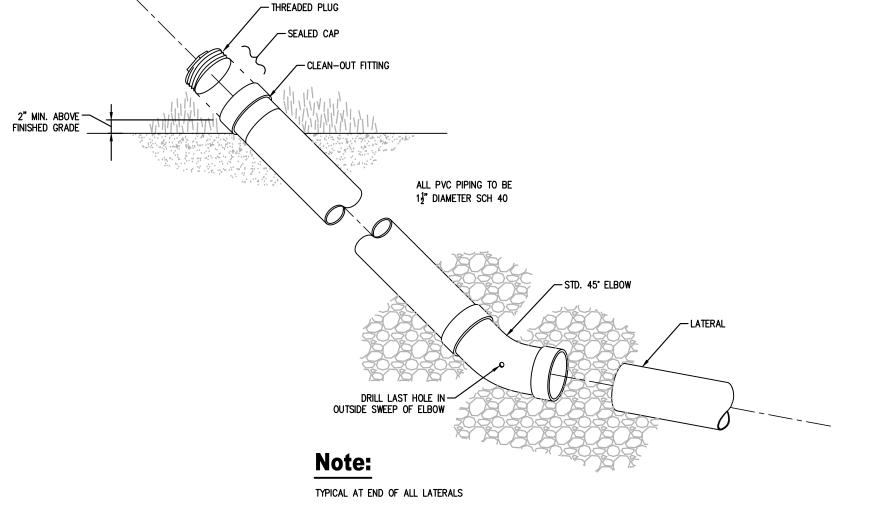
TYPICAL BLOCKING FOR HORIZONTAL & VERTICAL DOWNWARD THRUSTS UP TO 150 PSI WORKING PRESSURE



### NOT TO SCALE

### NOTE: 1. VALVES 8" OR SMALLER SHALL BE RODDED TO A FITTING WITH 2

- ALL-THREAD RODS, 12" VALVES WITH 4 ALL-THREAD RODS.
- ROD DIAMETER SHALL BE EQUAL TO THAT OF THE GLAND BOLTS. RODS SHALL BE GIVEN ONE COAT OF BITUMASTIC PAINT.



### **Lateral Clean-out**

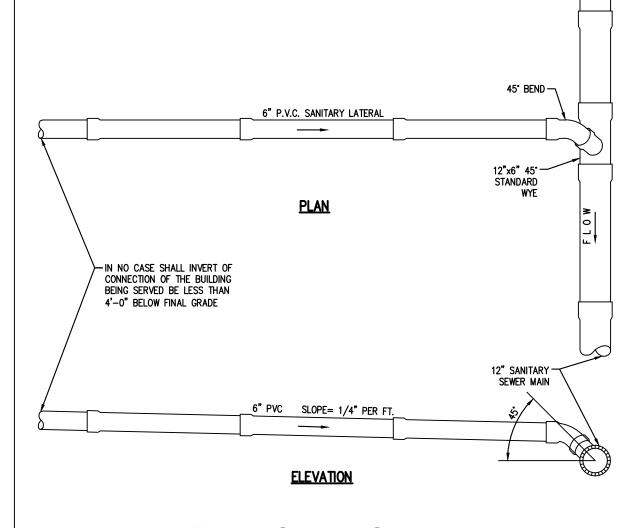
NOT TO SCALE

─NUT SHALL BE CAST

IN BRASS CAP

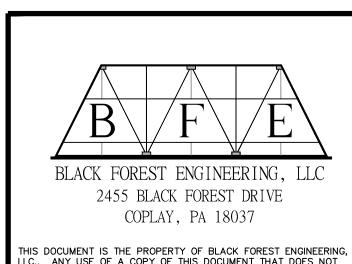
₩ATER MAIN

VALVE BOX —



**Typical Sanitary Sewer Lateral Connection** 

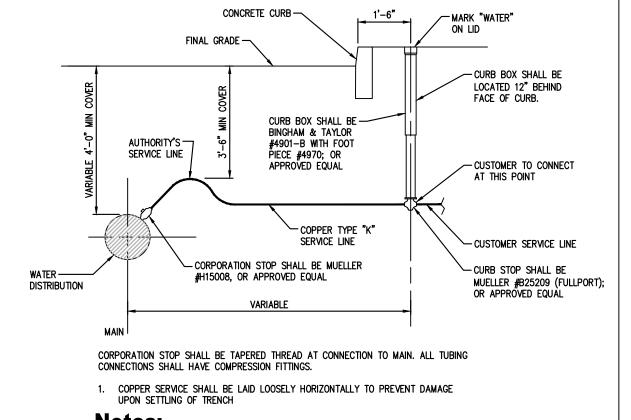
NOT TO SCALE



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SEAL:

JOSEPH E. RENTKO, P.E. #PE085609 2455 BLACK FOREST DRIVE COPLAY, PA 18037 570-239-4499

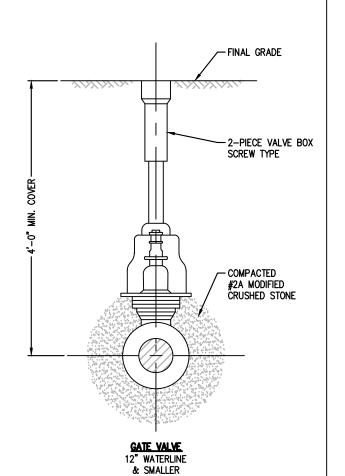


### **Notes:**

- 1. ALL PIPE MUST BE BEDDED IN A MIN. 4" LAYER OF SAND OR SCREENINGS AND SHALL BE BACK FILLED WITH THE SAME MATERIAL IN MAX. 6" LAYERS COMPACTED. EACH LAYER SHALL BE HAND TAMPED UNTIL 1' OF COVER EXISTS OVER THE PIPE.
- PIPES AROUND WIRES AND ALL PLUGS, CAPS, HYDRANTS, TEES, CROSSES, VALVES, ETC., SHALL BE BLOCKED WITH CONCRETE TO TAKE THE REACTION AND OR THRUST.

### **Water Lateral Small Service Connection**

NOT TO SCALE



**Gate Valve Detail** 

**NOTE:** 

1. RETAINER GLANDS REQUIRED ON ALL MECHANICAL JOINT FITTINGS

└3 LAYERS ASPHALT PAPER CONCRETE THRUST BLOCK 2" Surface Blowoff NOT TO SCALE NOT TO SCALE ROD DIAMETER SHALL BE EQUAL TO THAT OF THE GLAND BOLTS.
RODS SHALL BE GIVEN ONE COAT OF BITUMASTIC PAINT.

ROADWAY BOX, TYLER PIPE CO. -

#2B CRUSHED STONE -

SERIES 6870 OR EQUAL

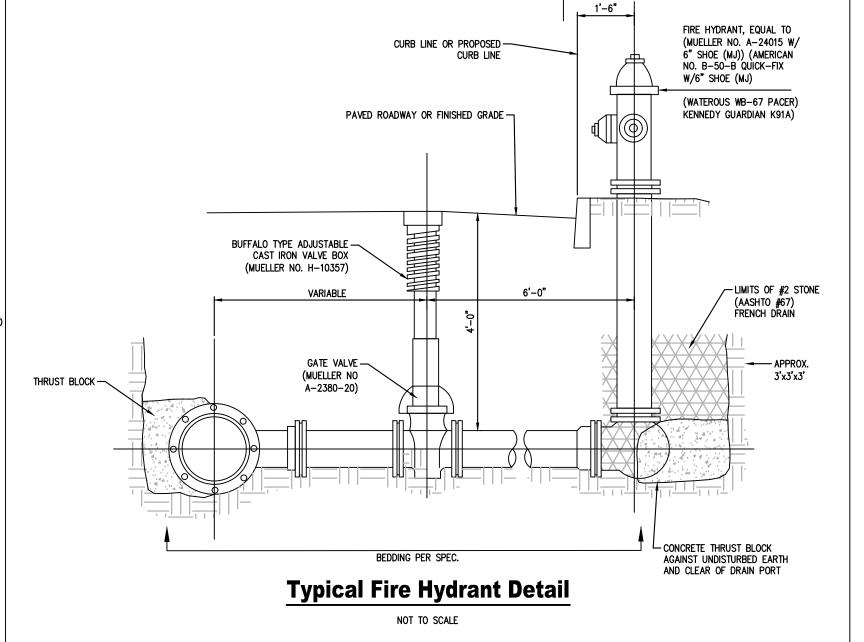
2" CURB STOP AND DRAIN-

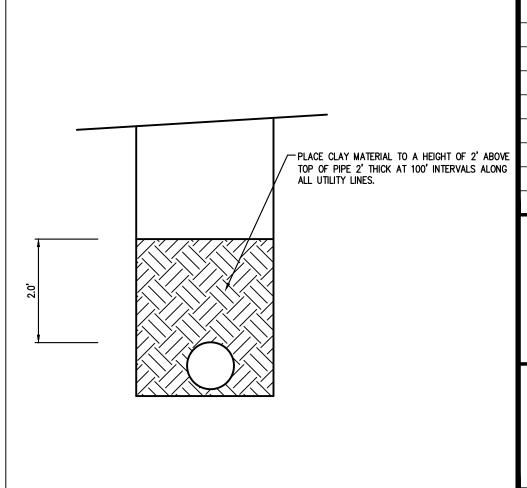
GALVANIZED PIPE -

QUARTER BEND -

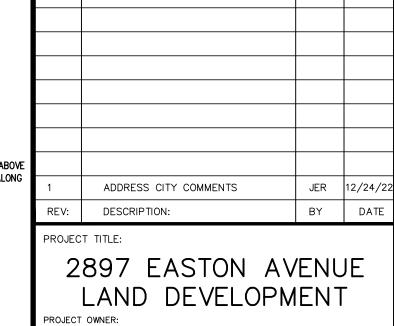
COUPLING

2" CORPORATION STOP -





**Typical Trench Plug** 

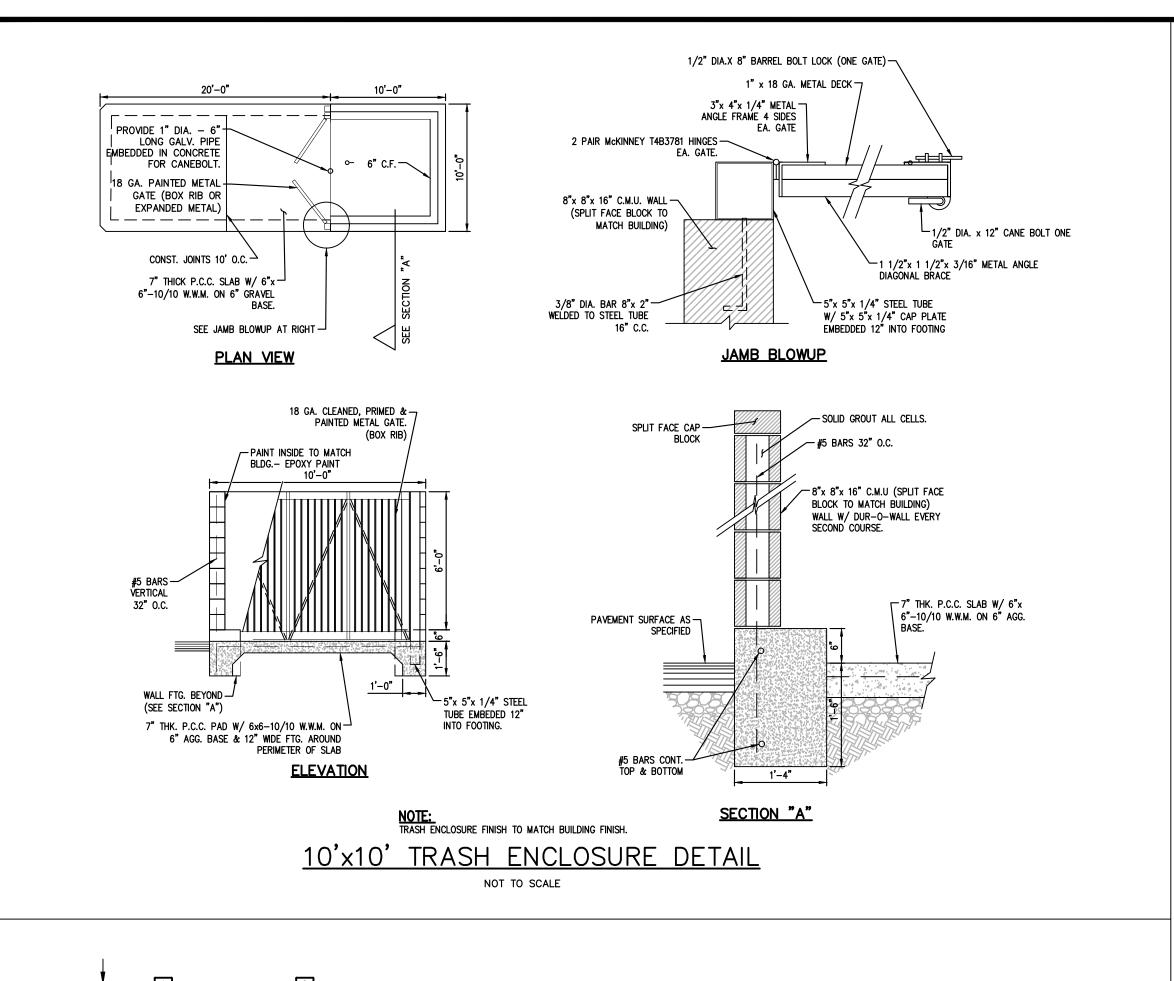


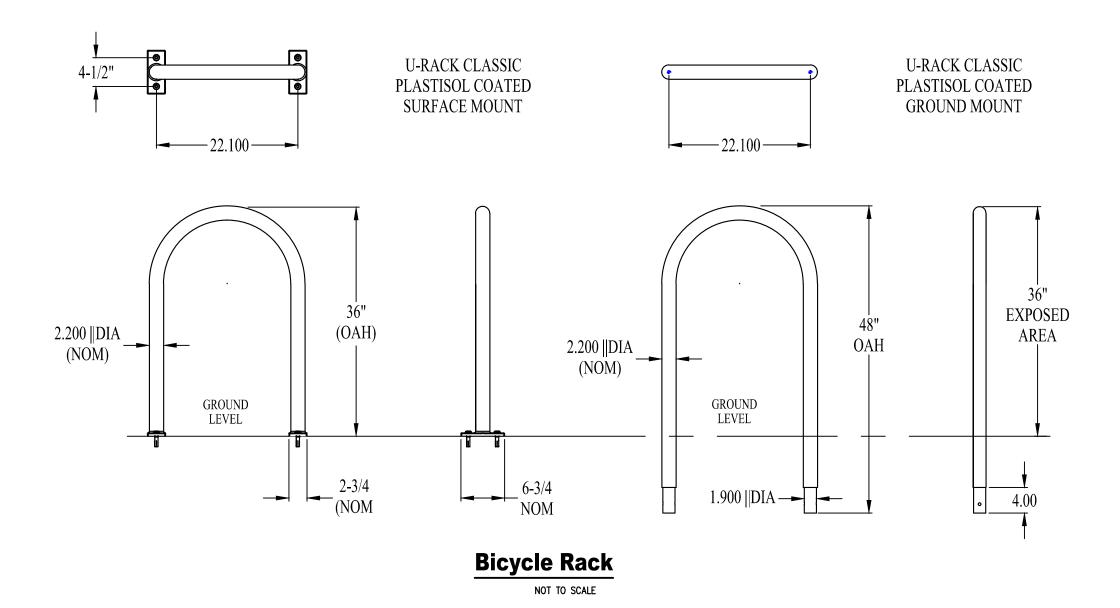
JAKE VIDA MANAGEMENT CORP OF PA 60 DAVINCI DR BOHEMIA, NY 11716

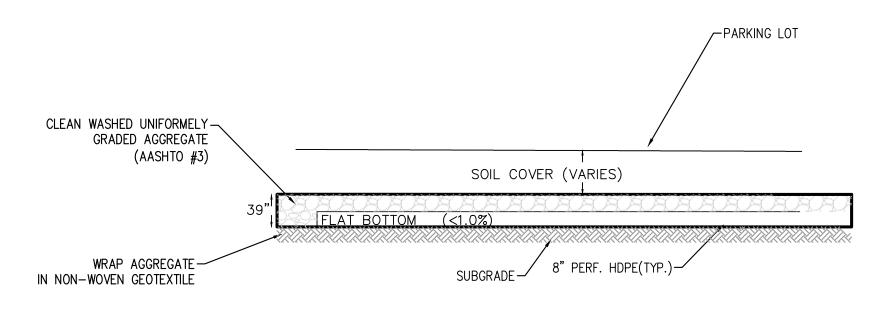
PROJECT LOCATION: CITY OF BETHLEHEM WARD 14, BLOCK 5 NORTHAMPTON COUNTY PENNSYLVANIA

CONSTRUCTION DETAILS CHECKED: DRAWN: JER

SCALE: 10/12/22 JER AS NOTED ROJECT NO. DRAWING NO. REVISION:

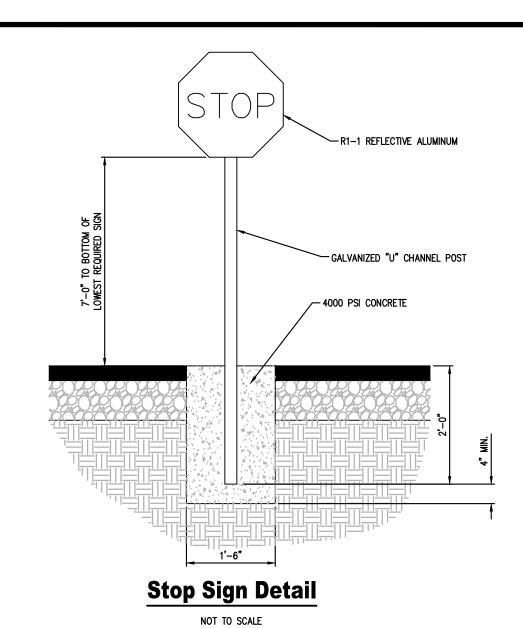






### SEEPAGE PIT #1 SECTION N.T.S.

BMP #	SEEPAGE PIT ID	BED SLOPE %	VOLUME (CF)	BOTTOM OF STONE	TOP OF STONE
1	BMP 1	0	17030	377	380.25



COLOR: LEGEND AND BORDER

WHITE (NON-REFLECTORIZED)

BLUE (NON-REFLECTORIZED)

WHITE (NON-REFLECTORIZED)

BACKGROUND

BACKGROUND

" Reserved Parking" Sign

PennDOT R7-8

NOT TO SCALE

VIOLATORS SUBJECT TO FINE AND TOWING

MIN.FINE \$50 MAX.FINE \$200

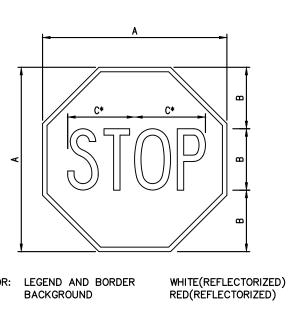
R7-8F

12"X18"

12"X6" R7-8B **ADA** 

**Parking Signs** 

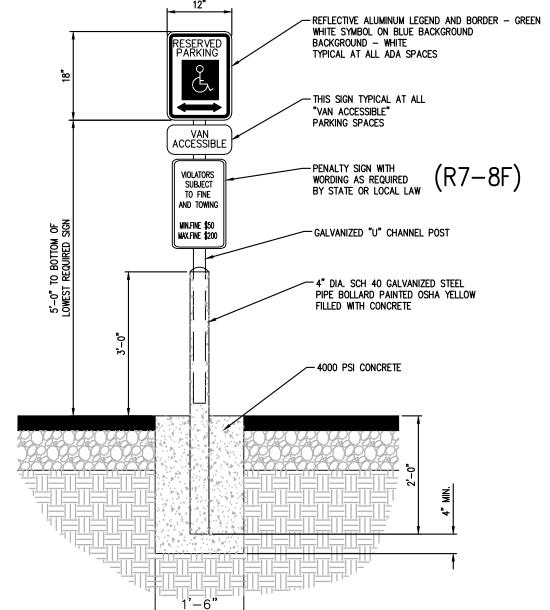
NOT TO SCALE



COLOR: LEGEND AND BORDER RED(REFLECTORIZED)

SIGN DIMENSIONS SER-BOR-BLANK SIZE A B C LES DER STD.

(HIGH INTENSITY SIGNS REQUIRED)



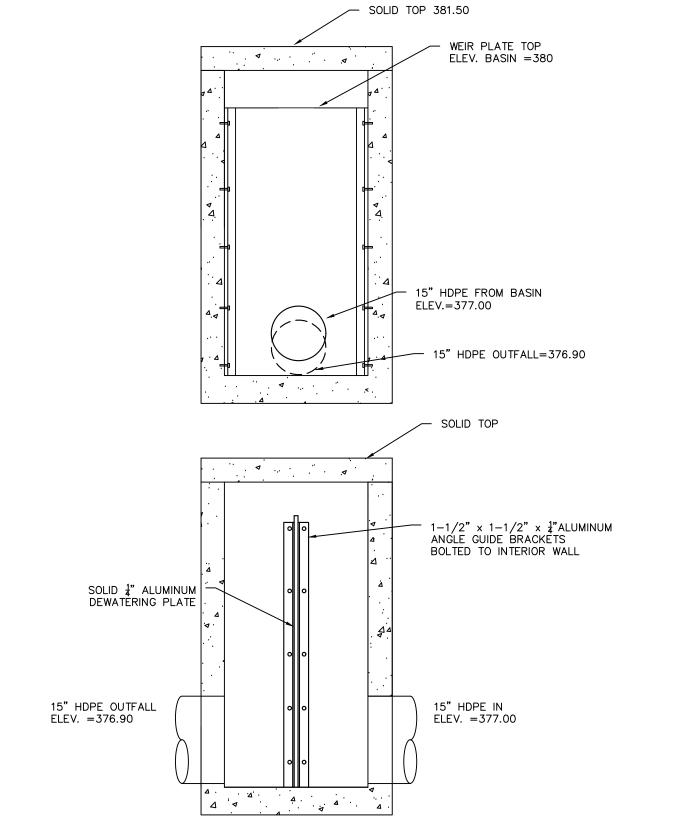


NOT TO SCALE

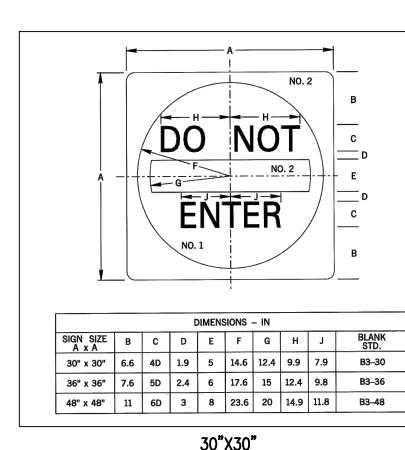
NOTE:
ONE AT EACH ADA SPACE. WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES.

BLANK SIZE	T DENINDOT /
LANK SIZE	T DENINDOT /
	PENNDOT #
24 X 24	R1-1
12 X 18 12 X 18	R7-8 R7-8B
12 X 18 12 X 6 12 X 18	R7-8 R7-8A R7-8B
30 X 30	R5–1A
	12 X 18 12 X 6 12 X 18

- MOUNT ALL SIGNS ON PENNDOT STD. 2.25 LB. BREAKAWAY CHANNEL BAR POSTS, UNLESS NOTED OTHERWISE.
- MARK ALL PARKING SPACES WITH 4" WIDE SOLID WHITE LINES.

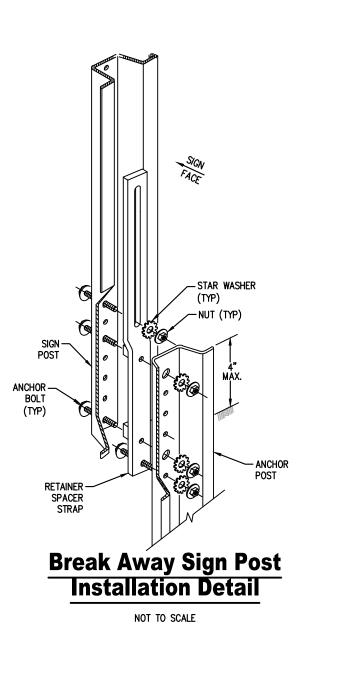


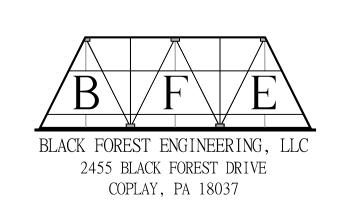
BASIN OUTLET STRUCTURE



30"X30"

Do Not Enter Sign





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EPH E. RENTKO, P.E. #PE085609 55 BLACK FOREST DRIVE PLAY, PA 18037

SEAL:

2455 BL	E. RENTKO, P.E. #PE085609 ACK FOREST DRIVE PA 18037 D-4499		
1	ADDRESS CITY COMMENTS	JER	12/24/
REV:	DESCRIPTION:	BY	DATE
PROJEC	T TITLE:		

2897 EASTON AVENUE LAND DEVELOPMENT

PROJECT OWNER:

JAKE VIDA MANAGEMENT CORP OF PA

60 DAVINCI DR

BOHEMIA, NY 11716

PROJECT LOCATION:

CITY OF BETHLEHEM

CITY OF BETHLEHEM
WARD 14, BLOCK 5
NORTHAMPTON COUNTY
PENNSYLVANIA

CONSTRUCTION DETAILS

SCALE: DATE: DRAWN: CHECKED: JER

PROJECT NO. DRAWING NO. REVISION: OF 8

