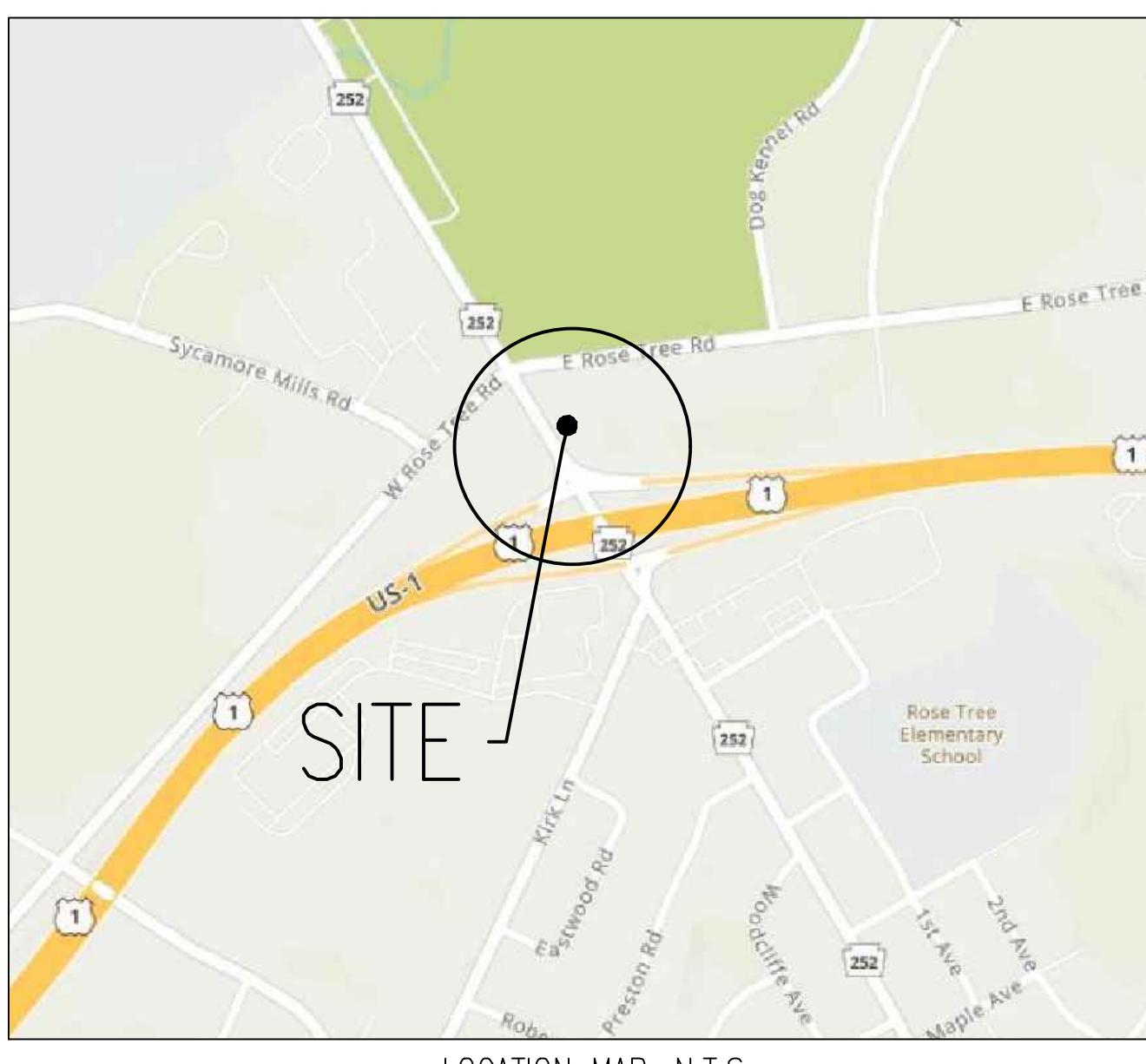


PRELIMINARY LAND DEVELOPMENT PLANS FOR SUNOCO, LLC

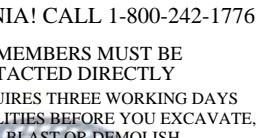
1451 PROVIDENCE ROAD &
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UPPER PROVIDENCE TOWNSHIP
DELAWARE COUNTY, PENNSYLVANIA
TAX PARCEL NO.
35-00-01404-00

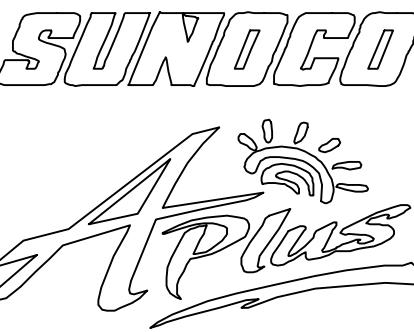
PREPARED FOR:
SIRHANDI ENTERPRISES, INC.
111 N. COVE TERRACE
OXON HILL, MD 20745



LIST OF DRAWINGS:

SHEET	TITLE
1	COVER SHEET
2	SITE PLAN
3	PROPOSED BUILDING ELEVATIONS
4	EXISTING CONDITIONS & DEMOLITION PLAN
5	SIGNAGE PLAN
6	SIGNAGE PLAN DETAILS
7	SIGNAGE PLAN DETAILS
8	UTILITY PLAN
9	GRADING PLAN
10	EROSION AND SEDIMENT CONTROL PLAN
11	EROSION AND SEDIMENT CONTROL DETAILS
12	EROSION AND SEDIMENT CONTROL DETAILS
13	STORMWATER & DRAINAGE PLAN
14	LIGHTING PLAN
15	LIGHTING DETAILS
16	LANDSCAPE PLAN
17	LANDSCAPE DETAILS
18	SITE DETAILS
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Cornerstone Consulting Engineers & Architectural, Inc.

Pocono Region

213 West Main Street, Lansdale, PA 19446
Phone: 215-62-8400
www.cornerstonenet.com

Lehigh Valley Region

610-820-8260

Philadelphia Region

215-562-2600

GENERAL NOTES

1. THIS PLAN REFERENCES A SURVEY PLAN BY: CORNERSTONE CONSULTING ENGINEERS & ARCHITECTURAL, INC. PLAN ENTITLED: "BOUNDARY/LOCATION AND TOPOGRAPHICAL SURVEY" PLAN DATE: 2/27/2020
2. OWNER / APPLICANT: SIRHANDI ENTERPRISES, INC. 111 N. COVE TERRACE OXON HILL, MD 20745
3. PROJECT LOCATION INFORMATION: 1451 PROVIDENCE ROAD, UPPER PROVIDENCE TOWNSHIP, DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA TAX PARCEL NO. 35-00-01404-00
4. ZONING INFORMATION: ZONING DISTRICT: B-BUSINESS DISTRICT EXISTING USE: E3 - AUTOMOTIVE SERVICE STATION WITH E3-CONVENIENCE STORE PROPOSED USE: E3 - CONVENIENCE STORE (P), E3 - AUTOMOTIVE FUELING (P) & E17 CARWASH (SE)
5. ZONING BULK AND AREA REQUIREMENTS: B BUSINESS ZONING DISTRICT: MINIMUM LOT REQUIREMENTS: REQUIRED EXISTING PROPOSED MIN. LOT AREA: 10,000 SF 79,191.86 SF (1.81 AC) 387.87 FT @ BLDG. LINE 387.87 FT @ BLDG. LINE MIN. LOT WIDTH: 40 FT 134.9 FT 69.3 FT BUILDING SETBACKS: STREET LINE: ROSE TREE RD 40 FT 11.1 FT 40.0 FT SIDE YARD: PROVIDENCE RD 40 FT 10 FT N/A N/A REAR YARD: 15 FT 109.80 FT 39.2 FT MAX. STRUCTURE HEIGHT: 35 FT 18 FT +/- 25 FT +/- MAX. IMPERVIOUS: 75 % 27% (21,519) SF 65% (51,870) SF TOTAL: 27 SPACES
6. PARKING REQUIREMENTS: REQUIRED: E3 CONVENIENCE STORE - ONE (1) SPACE PER EMPLOYEE PLUS ONE (1) SPACE PER 250 SF OF PUBLIC AREA E13 AUTOMOTIVE FUELING - ONE PER EMPLOYEE E17 CARWASH - ONE (1) SPACE PER EMPLOYEE PLUS TWO (2) SPACE PER WASH BAY. E3 CONVENIENCE STORE - THREE (3) EMPLOYEES + 5,000 SF /250 SF = 23 SPACES E3 AUTOMOTIVE FUELING - ONE EMPLOYEE = 1 SPACE E17 CARWASH - ONE EMPLOYEE + 2 SPACES / 1 = 3 SPACES TOTAL: 27 SPACES

7. PROPOSED: 42 PARKING SPACES (INCLUDING 2 ACCESSIBLE PARKING SPACES) BY GRAPHICAL PLOTTING ONLY THIS PROPERTY IS LOCATED IN FEMA FLOOD MAP - OTHER AREAS/ZONE X. MAP ENTITLED "FLOOD INSURANCE RATE MAP, DELAWARE COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)" Panel 92 of 250, MAP NUMBER 4204500092, REVISED NOVEMBER, 2009.
8. THE WORD "CERTIFIED" OR "CERTIFICATE" AS USED AND HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING FACTS AS STATED IN THIS PLAN AND REFERENCED SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXPRESSED OR IMPLIED.
9. THE DRAWING IS PREPARED BY CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC. AND NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDED OR BY ANY OTHER MEANS OR STORED, PROCESSED, OR TRANSMITTED IN OR TO ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR, ENGINEER, ARCHITECT, OR DESIGN PROFESSIONAL. COPIES OF THIS PLAN WITHOUT A RAISED IMPRESSION OR COLOR SEAL ARE NOT VALID.
10. THE BUILDING FOOTPRINTS ARE CONCEPTUAL ONLY AND ESTABLISH BUILDING ENVELOPES IN WHICH THE FINAL BUILDING FOOTPRINTS WILL BE GENERALLY LOCATED. THE FINAL BUILDING FOOTPRINTS SHALL BE DETERMINED AT THE TIME OF BUILDING PERMIT ISSUANCE AND SHALL BE GENERALLY AS CONFIGURED ON THE APPROVED RECORD PLAN WITH AN OVERALL SQUARE FOOTAGE OF THE BUILDING AS SHOWN ON THE APPROVED RECORD PLAN. ANY RESULTING MINOR MODIFICATIONS TO GRADE OR IMPROVEMENTS SHALL BE RECORDED AND APPROVED BY THE TOWNSHIP ENGINEER.
11. PUBLIC WATER AND PUBLIC SEWER SYSTEMS ARE PROPOSED.
12. CONCRETE MONUMENTS SHOWN THIS (■) SHALL BE PLACED WHERE INDICATED. IRON PINS SHOWN THIS (●) SHALL BE PLACED WHERE INDICATED. IN INSTANCES WHERE IRON PINS CANNOT BE SET AT LOT CORNERS DUE TO INLET OR MANHOLE STRUCTURE PLACEMENTS, A PERMANENT MARKING SHALL BE PLACED IN THE LOT CORNER FOR FUTURE REFERENCE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILTY USERS AT LEAST THREE DAYS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH ACTS 261, 172, AND 38 (AND ALL OTHER APPLICABLE AMENDMENTS), AS WELL AS CONFORM TO ALL APPLICABLE REGULATIONS OF SAID ACTS.
14. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
15. ALL WORKS TO BE PERFORMED ACCORDING TO THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND INSTRUCTIONS OF THE LOCAL GOVERNING AUTHORITY.
16. THE PROPERTY SURVEY SHALL BE CONSIDERED A PART OF THESE PLANS.
17. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISPARITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAD TO BE REDONE DUE TO DIMENSIONS NOT SHOWN OR NOT SHOWN ACCURATELY. CONTRACTOR SHALL NOT BE PAID FOR WORK NOT DONE.
18. SOLID WASTE TO BE DISPOSED OF BY CONTRACTOR IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
19. CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL PERFORM SUCH IN ACCORDANCE WITH CURRENT OS&S STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASURE STABILITY OF CONTOGEOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
20. ALL CONTRACTORS SHALL CARRY STANDARD WORKERS' COMPENSATION, EMPLOYER'S LIABILITY INSURANCE AND APPROPRIATE LIABILITY CONTRACTUAL LIABILITY INSURANCE (CL). ALL CONTRACTORS MUST HAVE THEIR CL POLICIES ENDORSED TO NAME CORNERSTONE CONSULTING, INC. AND ITS SUB CONSULTANTS AS ADDITIONAL INSURED AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE, SUFFICIENT TO INSURE THE HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH CORNERSTONE CONSULTING, INC. WITH CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON FURNISHING OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL TO THE EXTENT PERMITTED BY LAW, INDEMNITY AND HOLD HARMLESS THE GENERAL CONTRACTOR AND CORNERSTONE CONSULTING, INC. FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.
21. NEITHER THE PROFESSIONAL ACTIVITIES OF CORNERSTONE CONSULTING, INC., NOR THE PRESENCE OF CORNERSTONE CONSULTING, INC., OR ITS EMPLOYEES AND SUB CONSULTANTS AT A CONSTRUCTION/PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION DOCUMENTS, MEETINGS, COORDINATION, SUPERVISION, AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY THE AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOBSITE SAFETY. CORNERSTONE CONSULTING, INC. SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE MADE ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICY OF GENERAL LIABILITY INSURANCE.
22. THE CONTRACTOR SHALL NOT BE HELD LIABLE FOR ANY DAMAGES, LIABILITIES OR COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE CONTRACTOR'S SUBMISSIONS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMITY WITH THE DESIGN CONCEPT AND THE INFORMATION SHOWN IN THE CONSTRUCTION MEANS OR METHODS. COORDINATION OF THE WORK WITH OTHER TRADES OR CONSTRUCTION SAFETY PRECAUTIONS, ALONG WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CORNERSTONE CONSULTING, INC. SHALL NOT BE HELD LIABLE FOR ANY DAMAGES, LIABILITIES OR COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY THE AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. 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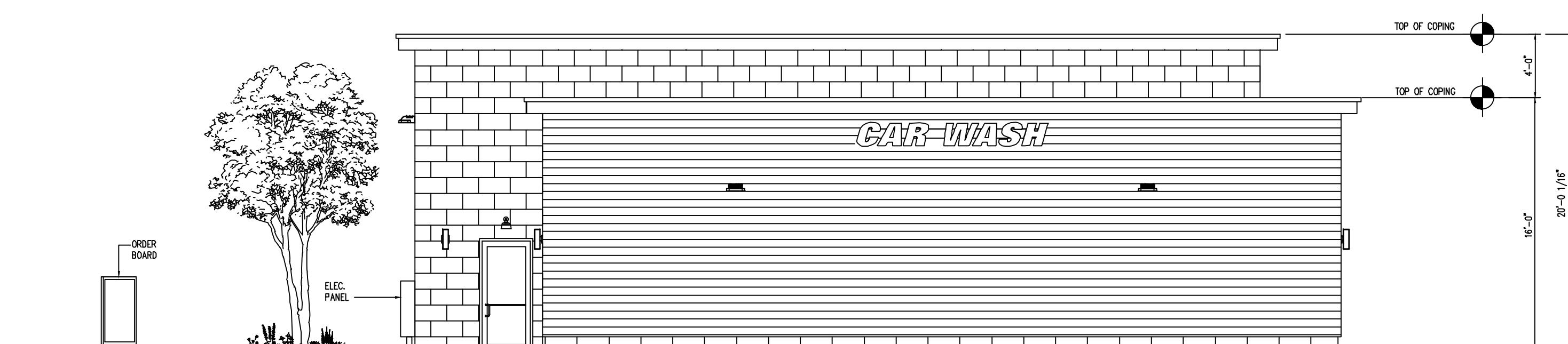
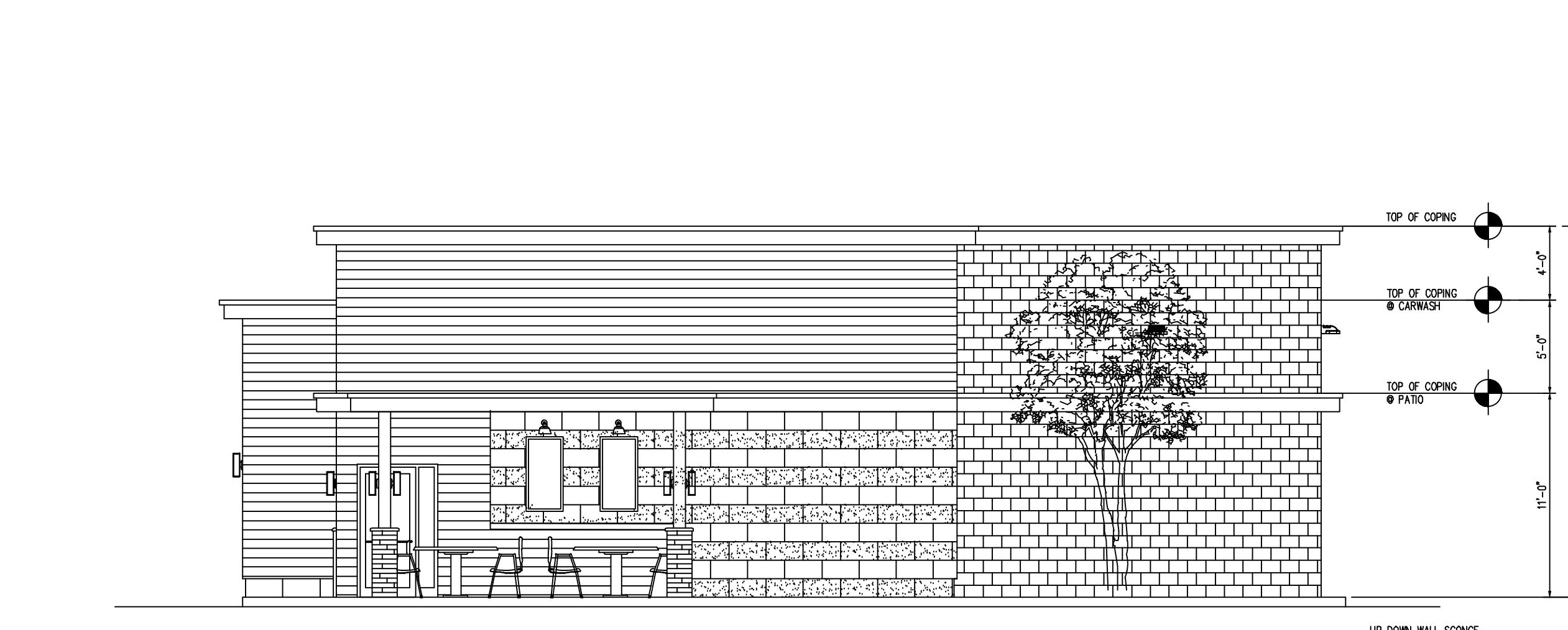
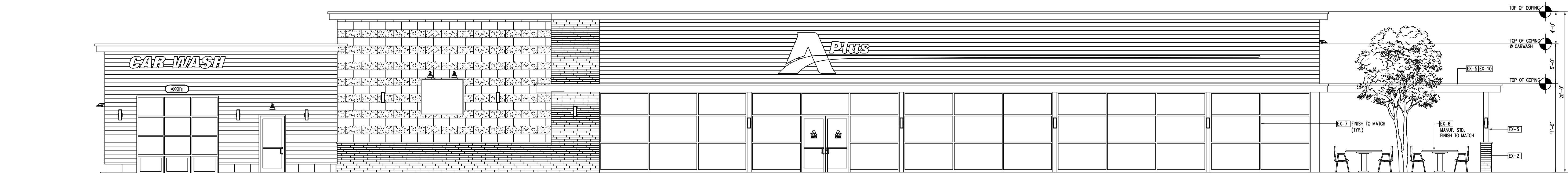
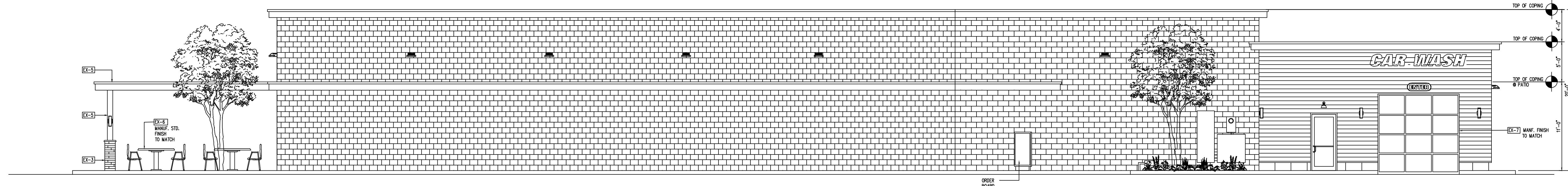
Cornerstone Consulting Engineers & Architectural, Inc.

213 West Main Street, Lansdale, PA 19446
Phone: 215-622-6000, Fax: 215-622-8400
www.cornerstonenet.com

Lehigh Valley Region
610-820-8200

Philadelphia Region
215-362-2600

Pocono Region
570-839-1770



REVISIONS		
NO	BY	DESCRIPTION
1	DN	REVISED PER TOWNSHIP COMMENTS 9/22/2021

PENNSYLVANIA
ONE CALL SYSTEM.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122-1078



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PENNSYLVANIA CALL 1-800-242-1776

NON-MEMBERS MUST BE
CONTACTED DIRECTLY

PA LAW REQUIRES THREE WORKING DAYS
NOTICE TO EXCAVATOR TO EXCAVATE
DITCH, BURST OR DEMOLISH

J.B. ANDERSON
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE055536
MARYLAND LICENSE No. 3913
NEW YORK LICENSE No. 2402030400
VIRGINIA LICENSE No. 0402 045725
DELAWARE LICENSE No. 1004
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS
"SUNOCO 1451 PROVIDENCE ROAD"

PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR
SIRHANDI ENTERPRISES, INC.

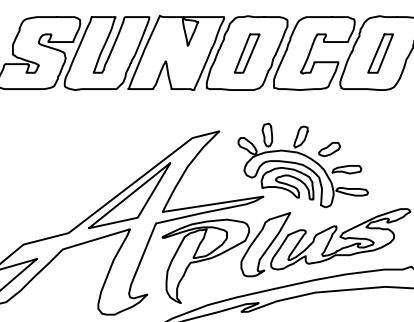
TITLE

PROPOSED BUILDING
ELEVATIONS

PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

SHEET 3 OF 27

REVISION 1



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Pocono Region

570-839-1770

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Lehigh Valley Region

610-820-8260

Philadelphia Region

215-562-2600

LEGEND & ABBREVIATIONS	
PROPERTY BOUNDARY	
ADJACENT BOUNDARY	
RIGHT OF WAY LINE	
EXISTING FENCE	
OH	
EXISTING OVERHEAD WIRE	
EXISTING CURB	
EXISTING DEPRESSED CURB (DC)	
EXISTING SIGN	
EXISTING UTILITY POLE (UP)	
GUY WIRE	
LAMP POST	
SEWER MANHOLE	
COMMUNICATION MANHOLE	
ELECTRIC MANHOLE	
WATER MANHOLE	
UNKNOWN MANHOLE	
STORM INLET	
GAS METER	
WATER METER	
GAS VALVE	
WATER VALVE	
CLEAN OUT	
TO BE REMOVED	
(TBR)	

EXISTING SIGNAGE TABLE*	
FREESTANDING SIGNAGE:	
ONE (1) "SUNOCO SIGN" (5'-4 3/8" x 9'-0") 48.3 SF EA. SD.	48.3 SF
ONE (1) "GAS SALES INSERT" (3'-10" x 6'-0") 23.0 SF EA. SD.	23.0 SF
ONE (1) "DIN INSERT" (3'-10" x 6'-0") 23.0 SF EA. SD.	23.0 SF
ONE (1) MIDDLE MOUNTED LIGHT POST SIGN (5'-0" x 3'-10") 19.2 SF EA. SD.	19.2 SF
TOTAL FREESTANDING SIGNAGE	113.5 SF
CANOPY SIGNAGE:	
TWO (2) "SUNOCO" ID CANOPY SIGN (12'-0" x 2'-0") 24.0 SF EA.	48.0 SF
TWO (2) "NASCAR" ID CANOPY SIGN (15'-0" x 2'-0") 23.6 SF EA.	47.2 SF
FOUR (4) "OPEN" CANOPY SIGN (5'-0 1/2" x 1'-6") 7.6 SF EA.	30.4 SF
TOTAL CANOPY SIGNAGE	123.6 SF
BUILDING SIGNAGE:	
ONE (1) "NO SMOKING" SIGN FRONT OF BUILDING (0'-10" x 1'-2") 1.0 SF	1.0 SF
TWO (2) "NO IDLING" SIGN SIDE OF BUILDING (2'-0" x 2'-0") 4.0 SF	8.0 SF
TOTAL BUILDING SIGNAGE	9.0 SF
TOTAL SIGNAGE	246.1 SF

NOTES:
1. PROPERTY KNOWN AS APN #35-00-01404-00 UPPER PROVIDENCE TOWNSHIP, DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. AREA OF PARCEL IS 78.872 SQUARE FEET OR 1.8082 ACRES.
3. REPRESENTATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE AND ARE NOT AS-BUILT LOCATIONS. ABOVE GROUND STRUCTURES THAT WERE VISIBLE & ACCESSIBLE IN THE FIELD ARE SHOWN. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, AND THE MAPS LISTED IN THE REFERENCES AVAILABLE AT THE TIME OF THE SURVEY. BEFORE ANY EXCAVATION IS TO BEGIN, ALL UNDERGROUND UTILITIES SHOULD BE VERIFIED AS TO THEIR LOCATION, SIZE AND TYPE.
4. THIS PLAN IS BASED ON INFORMATION PROVIDED BY A SURVEY IN THE FIELD BY CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON. SURVEY & TOPOGRAPHIC INFORMATION SHOWN HEREON DERIVED FROM A FIELD SURVEY PERFORMED BY CORNERSTONE CONSULTING ENGINEERS AND ARCHITECTURAL, INC. ALL RIGHTS RESERVED. NO PART OF THIS DRAWING MAY BE REPRODUCED BY PHOTOCOPYING, RECORDING OR BY ANY OTHER MEANS, OR STORED, PROCESSED, TRANSMITTED IN OR BY ANY COMPUTER OR OTHER SYSTEMS WITHOUT THE PRIOR WRITTEN PERMISSION OF THE SURVEYOR. COPIES OF THIS DRAWING WITHOUT A RAISED OR COLORED SEAL ARE NOT VALID.
5. THIS PLAN IS VALID ONLY WHEN SIGNED AND SEALED WITH A RAISED OR COLORED SEAL AND WAS PREPARED IN ACCORDANCE WITH THE MINIMUM STANDARDS OF ACCURACY OF THE STATE IN WHICH THE PROJECT IS LOCATED. THE WORD "CERTIFIED" MEANS AS SHOWN AND USED HEREON MEANS AN EXPRESSION OF PROFESSIONAL OPINION REGARDING THE FACTS OF THIS PLAN AND REFERENCED SURVEY AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EXCEPT AS PROVIDED.
6. DATUM BASED UPON PENNSYLVANIA STATE PLANE SOUTH ZONE 3702 USING HORIZONTAL VALUES FROM MARS3 AND VERTICAL VALUES FROM NAVD88.
7. SITE BENCHMARK IS MAG NAV. SET ELEVATION = 335.31 TO ENSURE THAT THERE HAS BEEN NO ALTERATION OF THE SURVEY BENCHMARK SINCE THE TIME OF THE FIELD SURVEY. IT IS RECOMMENDED THAT THE CONTRACTOR ESTABLISH A CONSTRUCTION BENCHMARK BASED ON THE SURVEY BENCHMARK AND ELEVATIONS OF OTHER EXISTING IMPROVEMENTS.
8. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A SITE REPORT AND SUBJECT THERETO.
9. SURVEY TOOK PLACE AND ALL ASSESSMENTS OF RECORD WHETHER SURVEYED OR NOT.
10. SURVEYOR TOOK NO PICTURES.
11. GRAPHIC PLANNING ONE (1) PROPERTY IS LOCATED FEMA FLOOD ZONE X AND OTHER AREAS/ZONE X. SEE MAP REFERENCE #2.
12. BOUNDARY RESTON BASED ON FOUND EVIDENCE AND OTHER REFERENCE MATERIALS AS LISTED HEREON AVAILABLE AT THE TIME OF SURVEY.

REFERENCES:

1. TAX MAPS OF DELAWARE COUNTY, COMMONWEALTH OF PENNSYLVANIA.
2. MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, DELAWARE COUNTY, PENNSYLVANIA (ALL JURISDICTIONS)," PANEL 92 OF 250, MAP NUMBER 42045C00925; REVISED NOVEMBER, 2009.
3. MAP ENTITLED IN PART "PLAN OF PROPERTY FOR V. C. FINDORE INC." PREPARED BY G. D. HOUTMAN & SON, DATED MAY 7, 1974.
4. MAP ENTITLED IN PART "FINAL MINOR SUBDIVISION PLAN OF PROPERTY OF CHARLES LEEDOM" PREPARED BY G. D. HOUTMAN & SON, DATED AUGUST 10, 1992.

UTILITY:

THE FOLLOWING COMPANIES WERE NOTIFIED BY THE PENNSYLVANIA ONE CALL SYSTEM (1-800-242-1776) AND REQUESTED TO MARK OUT UNDERGROUND FACILITIES AFFECTING AND SERVING THIS SITE. THE UNDERGROUND UTILITY INFORMATION SHOWN HEREON IS BASED UPON THE UTILITY COMPANIES RESPONSE TO THIS REQUEST.

UTILITY COMPANY	PHONE NUMBER
AQUA PA SOUTHEASTERN	610-649-0400
CONCAST CABLE	800-266-2278
PECO	215-62-2600
UPPER PROVIDENCE SEWER AUTHORITY	610-565-5376
VERIZON EASTERN	610-565-4944
	800-922-0204

76 ROSE TREE ROAD
APN #35-00-18-505
LANDS N/F
SMALL CHANGE INVESTMENTS LP
DB 4021, PG 1722
R-1 DISTRICT

78 ROSE TREE ROAD
APN #35-00-18-504
LANDS N/F
RICHARD & PRISCILLA HARTZELL
DB 1151, PG 2208
R-1 DISTRICT

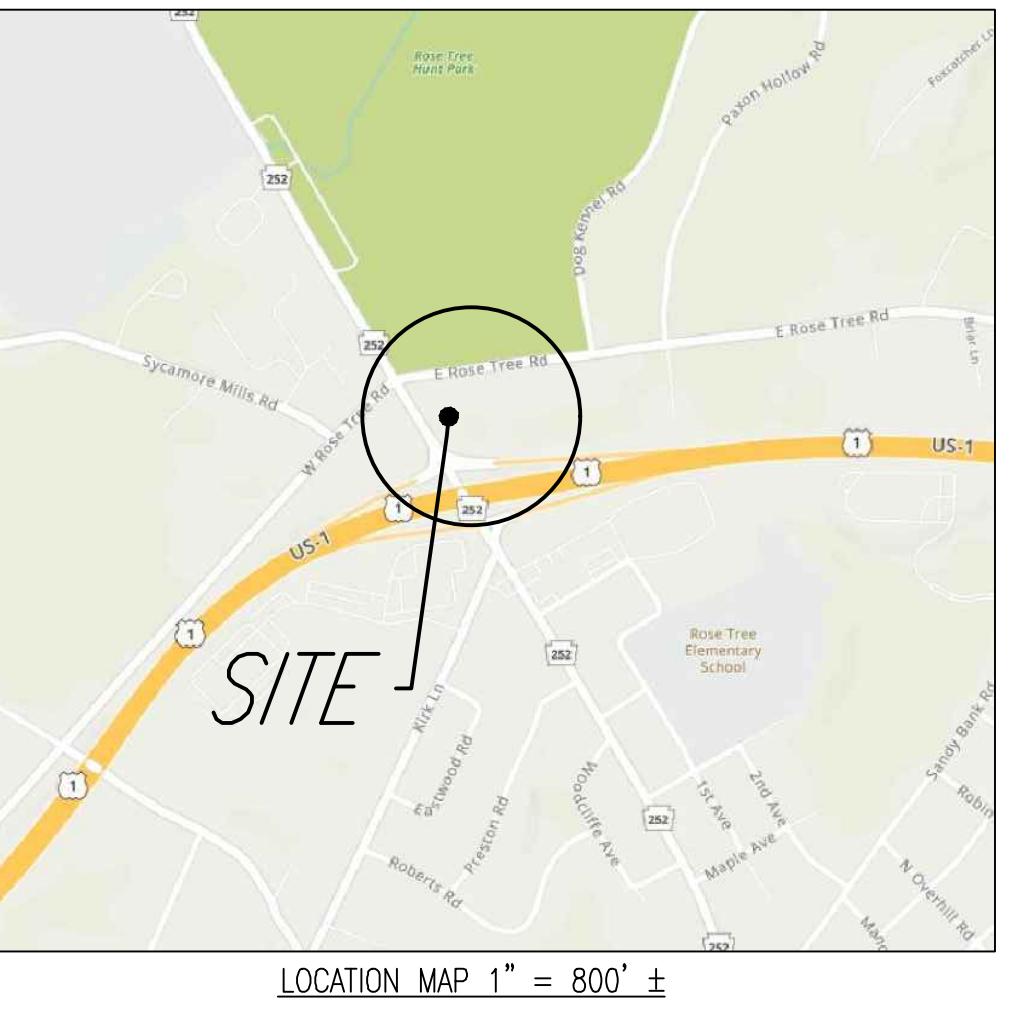
78 ROSE TREE ROAD
APN #35-00-18-504
LANDS N/F
RICHARD & PRISCILLA HARTZELL
DB 1151, PG 2208
R-1 DISTRICT

1451 PROVIDENCE ROAD
APN #35-00-18-400
LANDS N/F
SUNOCO LLC
DB 5592, PG 2388

1451 PROVIDENCE ROAD
APN #35-00-18-400
LANDS N/F
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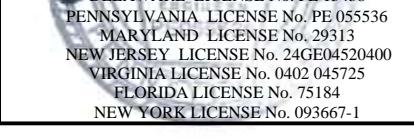
1451 PROVIDENCE ROAD
APN #35-00-18-400
LANDS N/F
SUNOCO LLC
DB 5592, PG 2388



LOCATION MAP 1" = 800' ±

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PENNSYLVANIA CALL 1-800-242-1776NON-MEMBERS MUST BE
CONTACTED DIRECTLYPA LAW REQUIRES THREE WORKING DAYS
NOTICE TO CONTRACTOR TO EXCAVATE
DITCH, BURST OR DEMOLISH

J.B. ANDERSON

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE-055536MARYLAND LICENSE NO. PE-055536
NEW JERSEY LICENSE NO. 240212004000VIRGINIA LICENSE NO. 0402 045725
NEW YORK LICENSE NO. 093667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS

"SUNOCO 1451 PROVIDENCE ROAD"

PROPOSED COMMERCIAL
RE-DEVELOPMENT

1451 PROVIDENCE ROAD

MEDIA, PENNSYLVANIA, 19063

DELAWARE COUNTY

PREPARED FOR

SIRHANDI ENTERPRISES, INC.

TITLE

EXISTING CONDITIONS &

DEMOLITION PLAN

PROJ. #	DATE
19-0425	05/21/2021

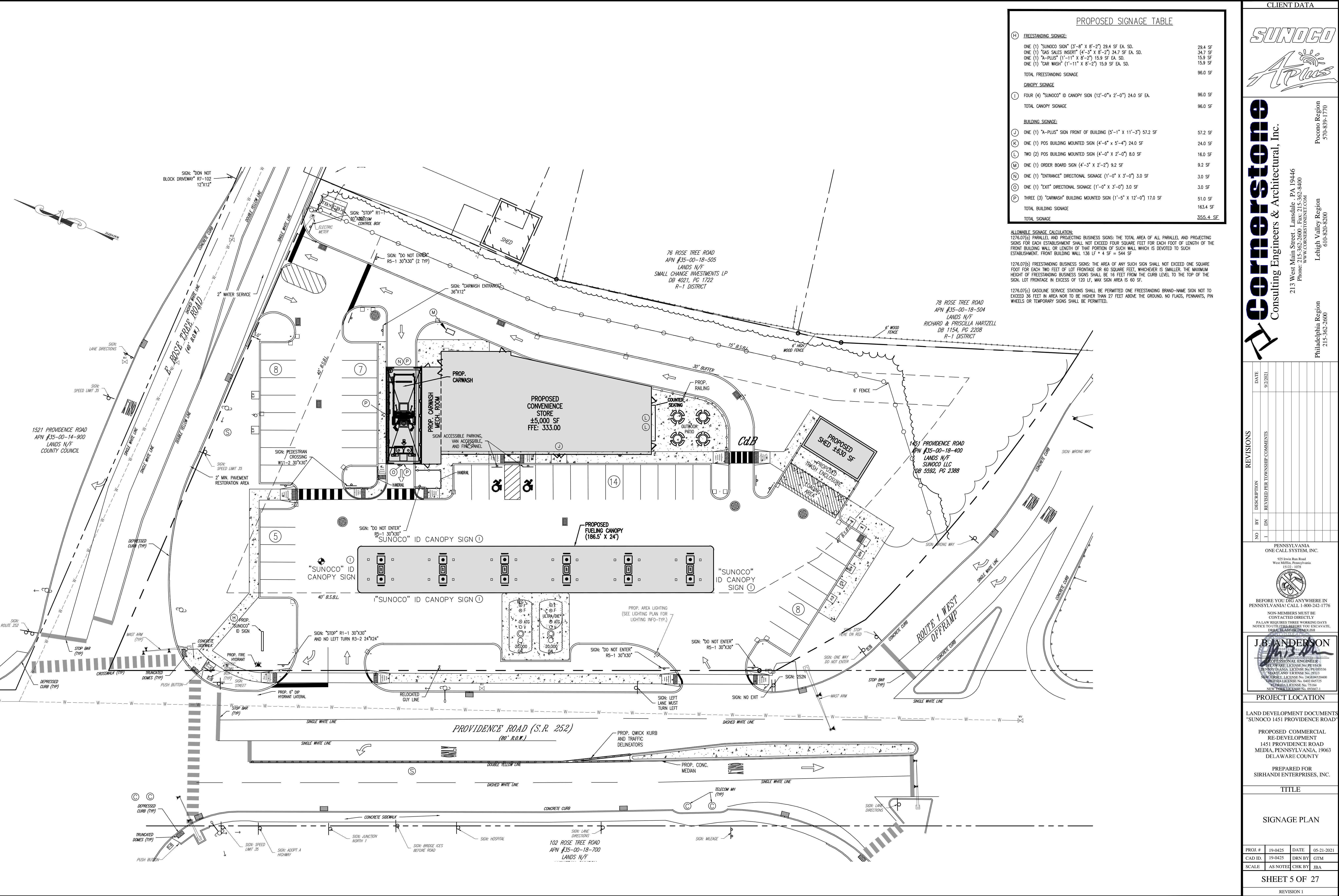
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19-0425	GTM

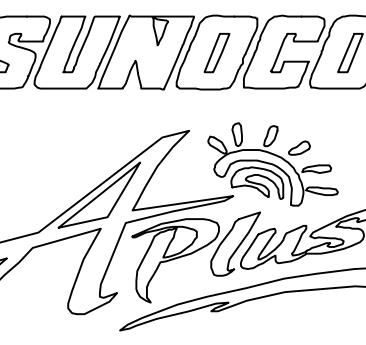
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REVISION 1

SHEET 4 OF 27

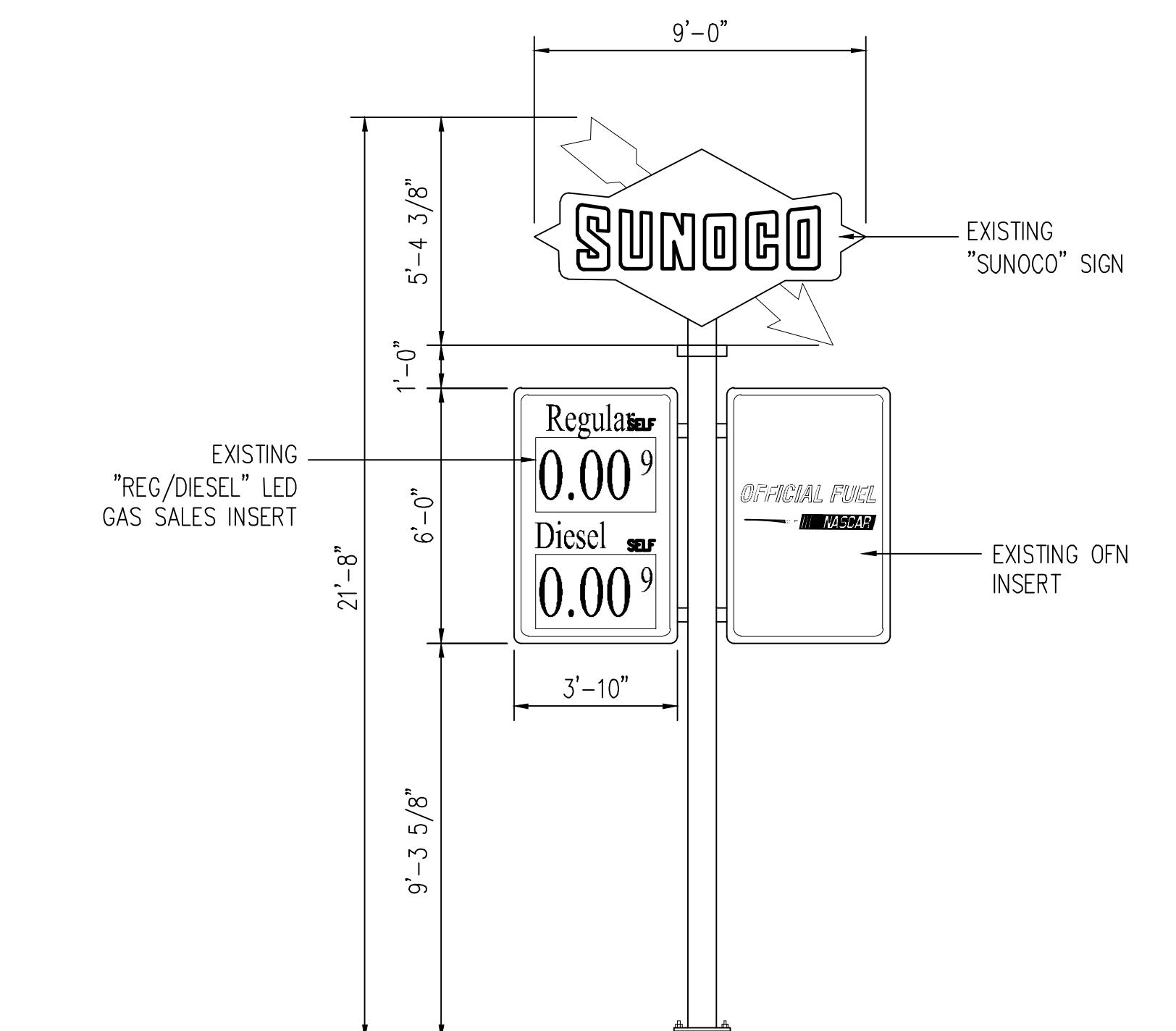
REVISION 1





Cornerstone

Consulting Engineers & Architectural, Inc.

215 West Main Street, Lansdale, PA 19446
www.cornerstonenet.comPocono Region
570-839-1770Lehigh Valley Region
610-820-8200Philadelphia Region
215-362-2600

EXISTING FREESTANDING SIGN®

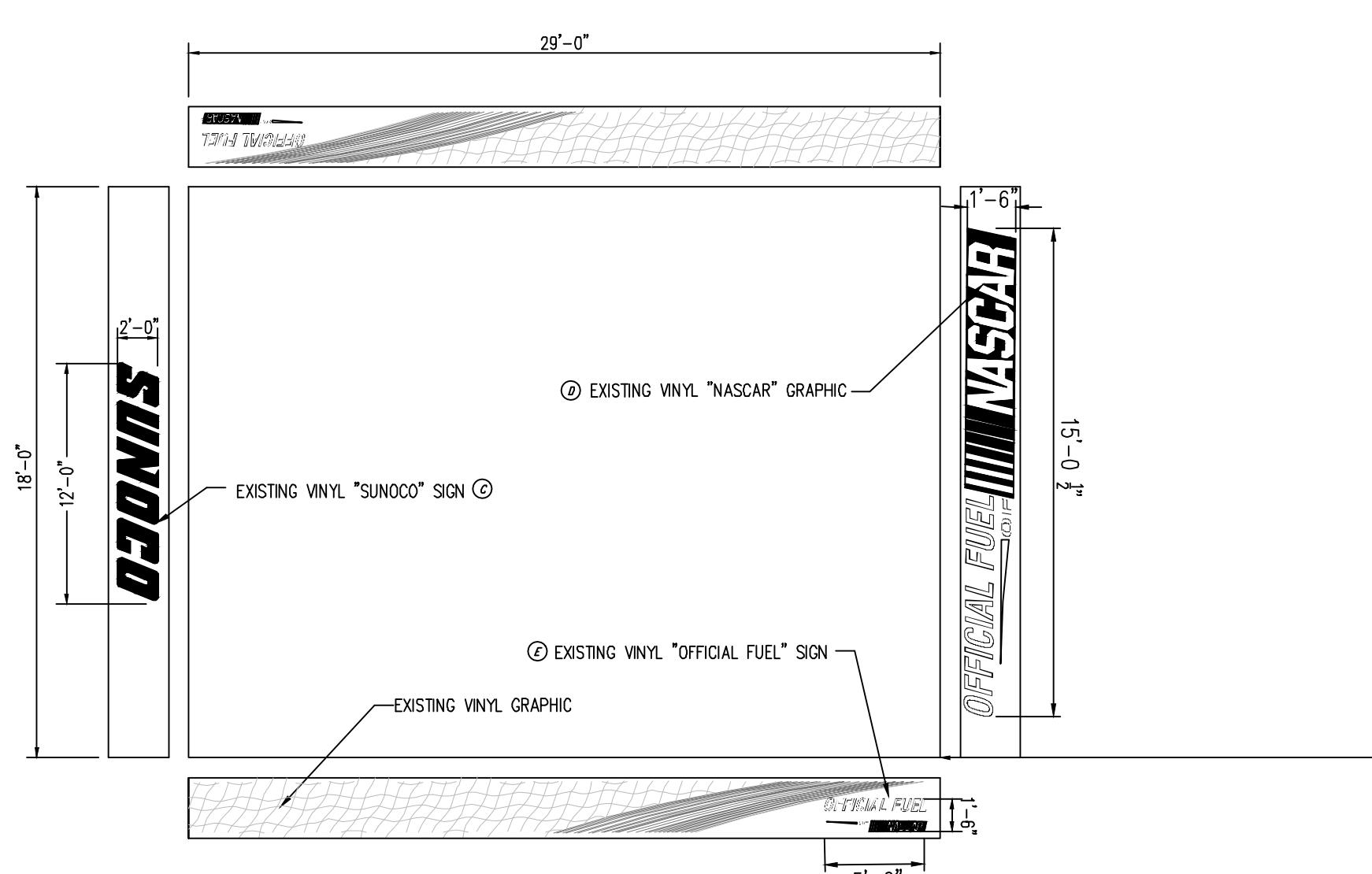
N.T.S.

SIGN A: THE 2 PRODUCT LED INSERT IS INTERNALLY ILLUMINATED WITH A CHANGING PRICE MESSAGE.
THE REMAINING INSERTS ("SUNOCO" AND "OFFICIAL FUEL OF NASCAR") ARE INTERNALLY ILLUMINATED AND WILL NOT CHANGE MESSAGES.

EXISTING LIGHT POST SIGN®

N.T.S.

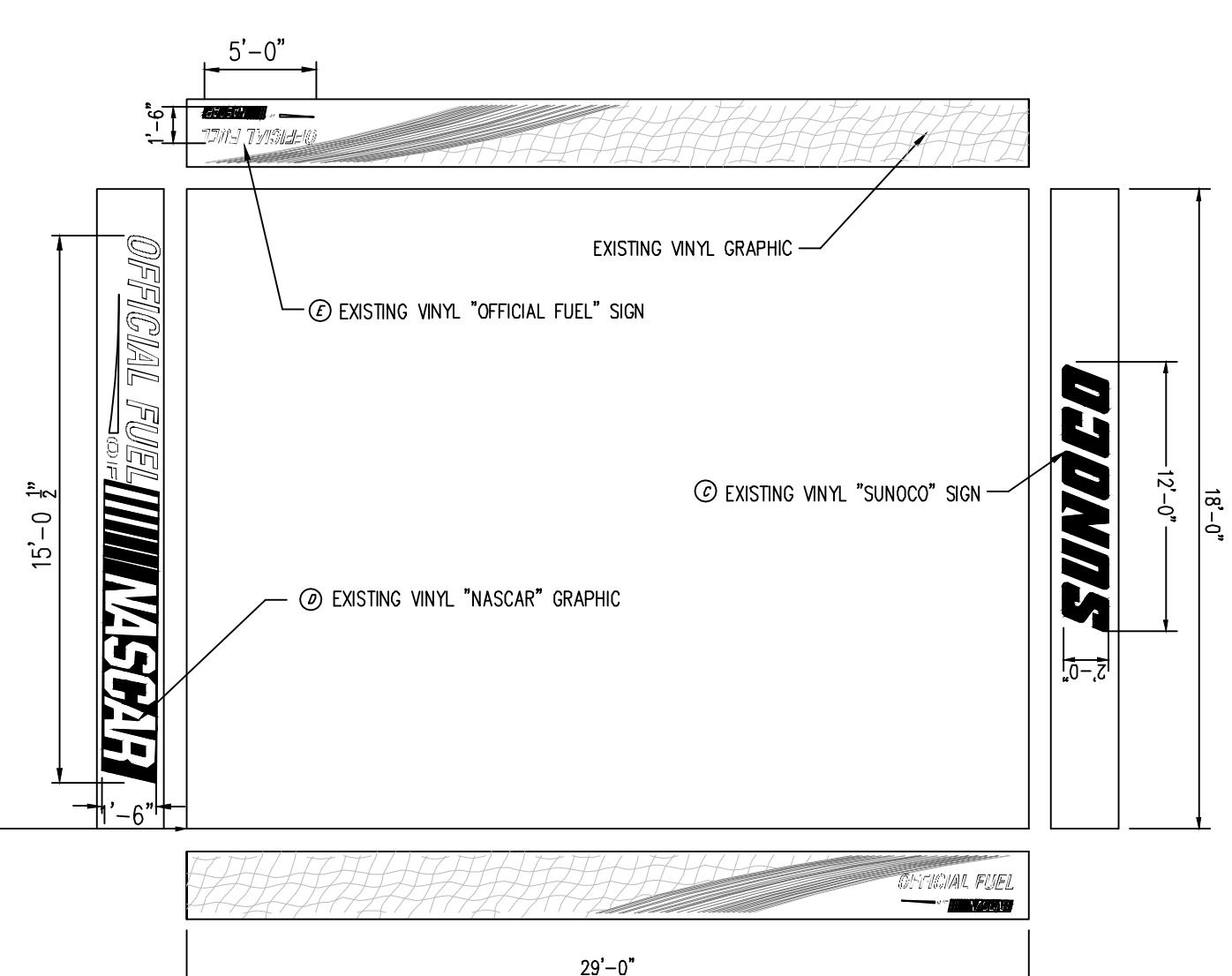
SIGN B: THE SIGN IS NOT ILLUMINATED AND THE CARDBOARD MESSAGE CHANGES PERIODICALLY.



EXISTING CANOPY SIGNAGE

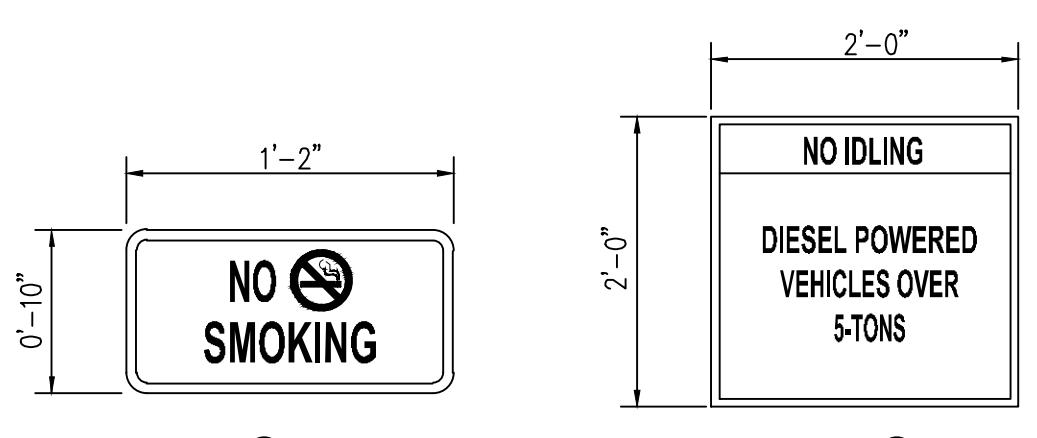
N.T.S.

SIGN C, D & E: THE "SUNOCO", "NASCAR" AND "OFFICIAL FUEL" CANOPY SIGNAGE IS INTERNALLY ILLUMINATED AND DOES NOT CHANGE MESSAGES.



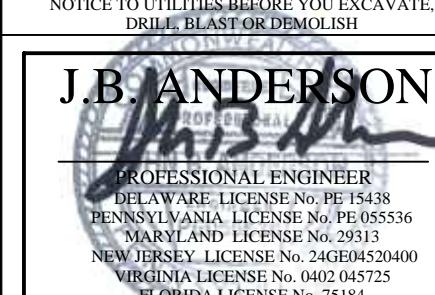
EXISTING CANOPY SIGNAGE

N.T.S.



EXISTING BUILDING SIGNAGE

N.T.S.



EXISTING SIGNAGE TABLE*

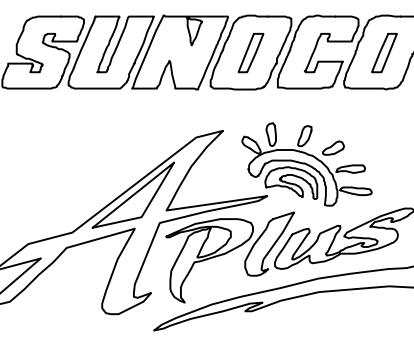
EXISTING SIGNAGE TABLE*		
FREESTANDING SIGNAGE:		
ONE (1) "SUNOCO" SIGN (5'-4 3/8" X 9'-0")	48.3 SF	
ONE (1) "GAS SALES INSERT" (3'-10" X 6'-0")	2.0 SF	
ONE (1) "OFN INSERT" (3'-10" X 6'-0")	2.0 SF	
ONE (1) MIDDLE MOUNTED LIGHT POST SIGN (3'-0" X 3'-10")	19.2 SF	
TOTAL FREESTANDING SIGNAGE	113.5 SF	
CANOPY SIGNAGE:		
TWO (2) "SUNOCO" 10 CANOPY SIGN (12'-0" X 2'-0")	24.0 SF	
TWO (2) "NASCAR" 10 CANOPY SIGN (15'-0 1/2" X 2'-0")	22.6 SF	
FOUR (4) "OFN" CANOPY SIGN (5'-0 1/2" X 2'-0")	7.6 SF	
TOTAL CANOPY SIGNAGE	123.6 SF	
BUILDING SIGNAGE:		
ONE (1) "NO SMOKING" SIGN FRONT OF BUILDING (0'-10" X 1'-2")	1.0 SF	
TWO (2) "NO IDLING" SIGN SIDE OF BUILDING (2'-0" X 2'-0")	4.0 SF	
TOTAL BUILDING SIGNAGE	9.0 SF	
TOTAL SIGNAGE	246.1 SF	

SIGNAGE PLAN DETAILS

PROJ. #	19-0425	DATE	05-21-2021
CAD ID	19-0425	DRN BY	GTM
SCALE	AS NOTED	CHK BY	JBA

SHEET 6 OF 27

REVISION 1



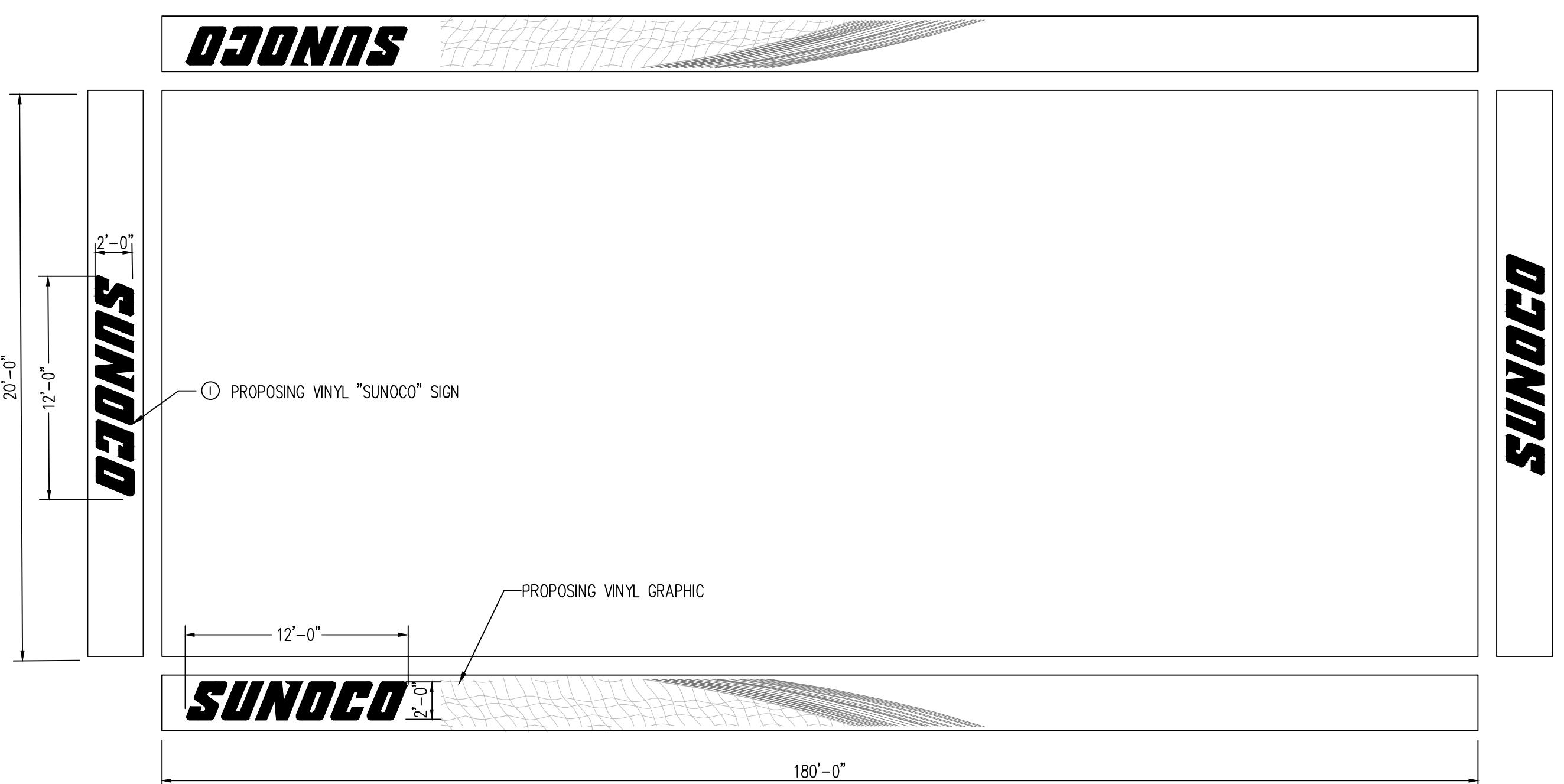
TY Cornerstone Consulting Engineers & Architectural, Inc.

213 West Main Street, Lansdale, PA 19446
www.cornerstonenet.com
Phone: 215-362-2600

Pocono Region
570-839-1770

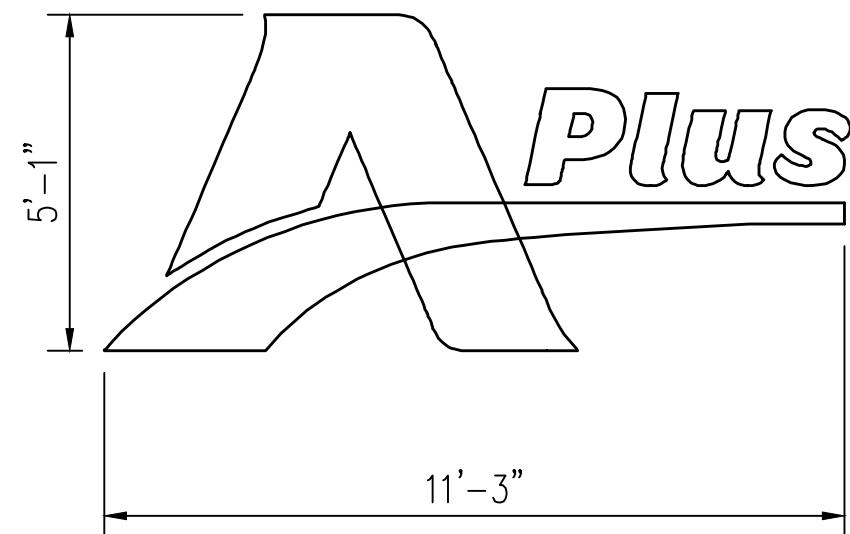
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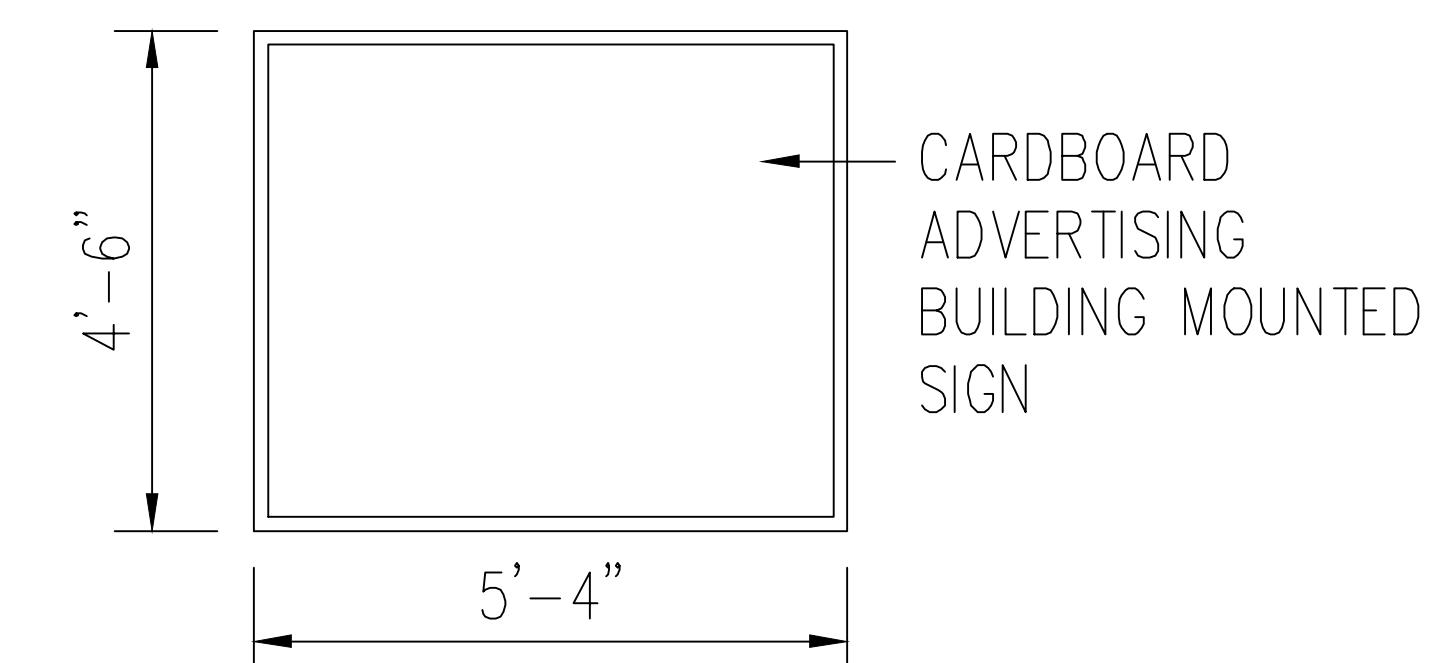
PROPOSING CANOPY SIGNAGE

SIGN C & D: THE "SUNOCO" AND "NASCAR" CANOPY SIGNAGE IS INTERNALLY ILLUMINATED AND DOES NOT CHANGE MESSAGES.



PROPOSED A-PLUS ® BUILDING SIGN

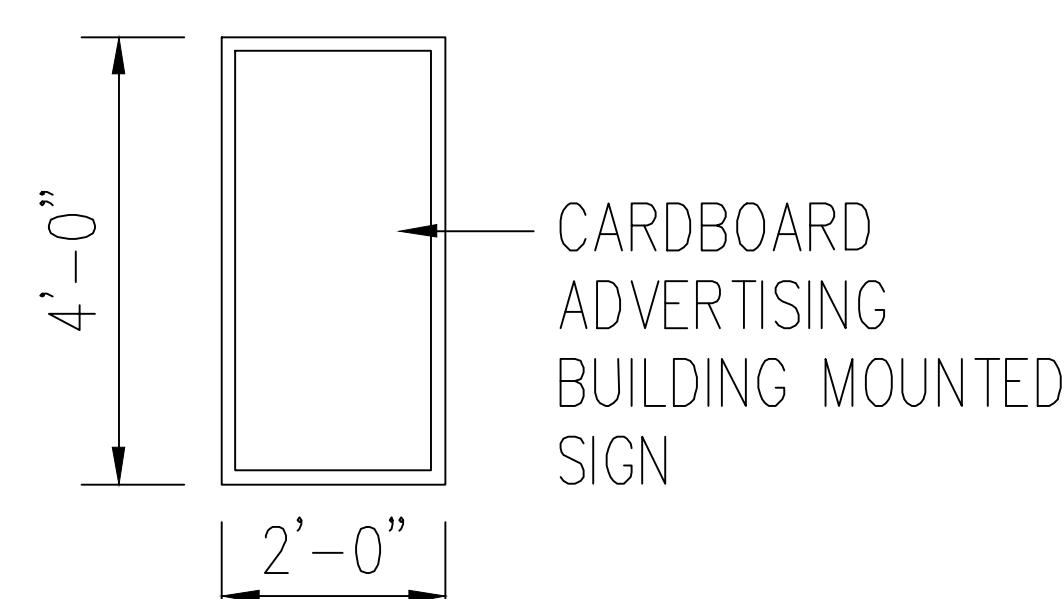
SIGN J: THE SIGN IS INTERNALLY ILLUMINATED AND DOES NOT CHANGE MESSAGES.



CARDBOARD
ADVERTISING
BUILDING MOUNTED
SIGN

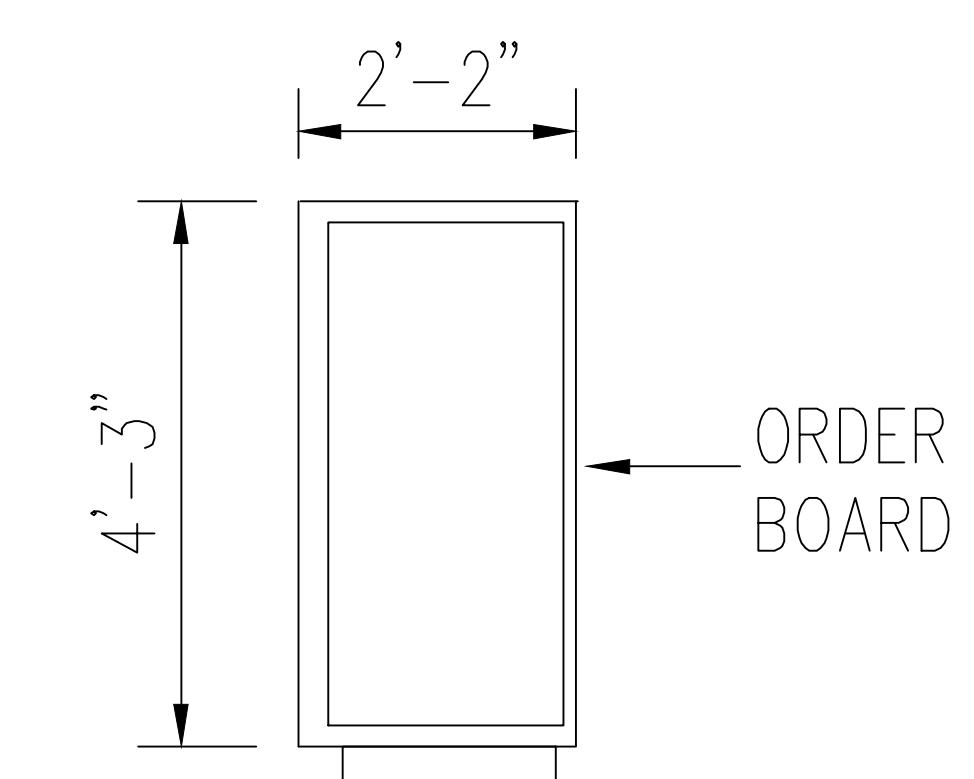
PROPOSED BUILDING MOUNTED POS SIGN ®

SIGN K: THE SIGN IS INTERNALLY ILLUMINATED AND THE
CARDBOARD MESSAGE CHANGES PERIODICALLY.



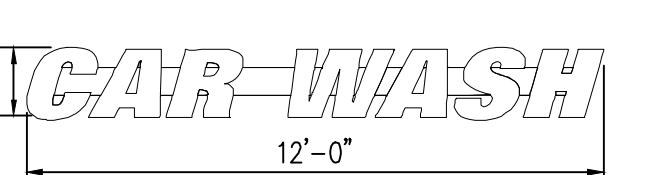
PROPOSED BUILDING MOUNTED POS SIGN ®

SIGN L: THE SIGN IS INTERNALLY ILLUMINATED AND THE
CARDBOARD MESSAGE CHANGES PERIODICALLY.



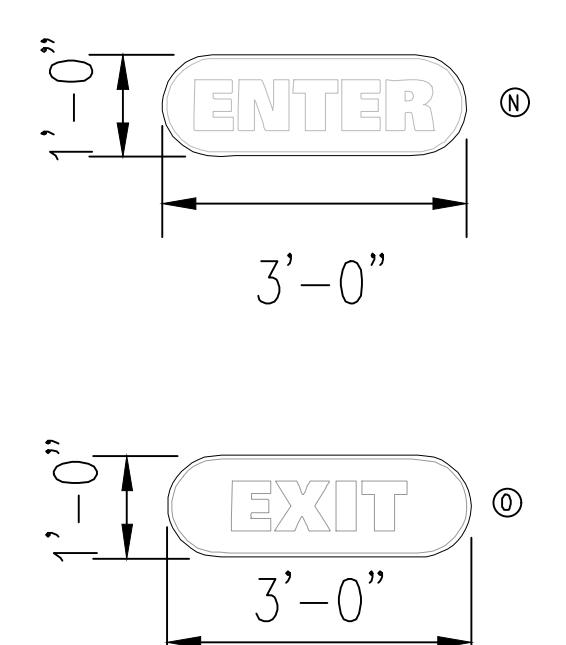
PROPOSED ORDER BOARD SIGN ®

SIGN M: THE SIGN IS INTERNALLY ILLUMINATED AND THE
CARDBOARD MESSAGE CHANGES PERIODICALLY.



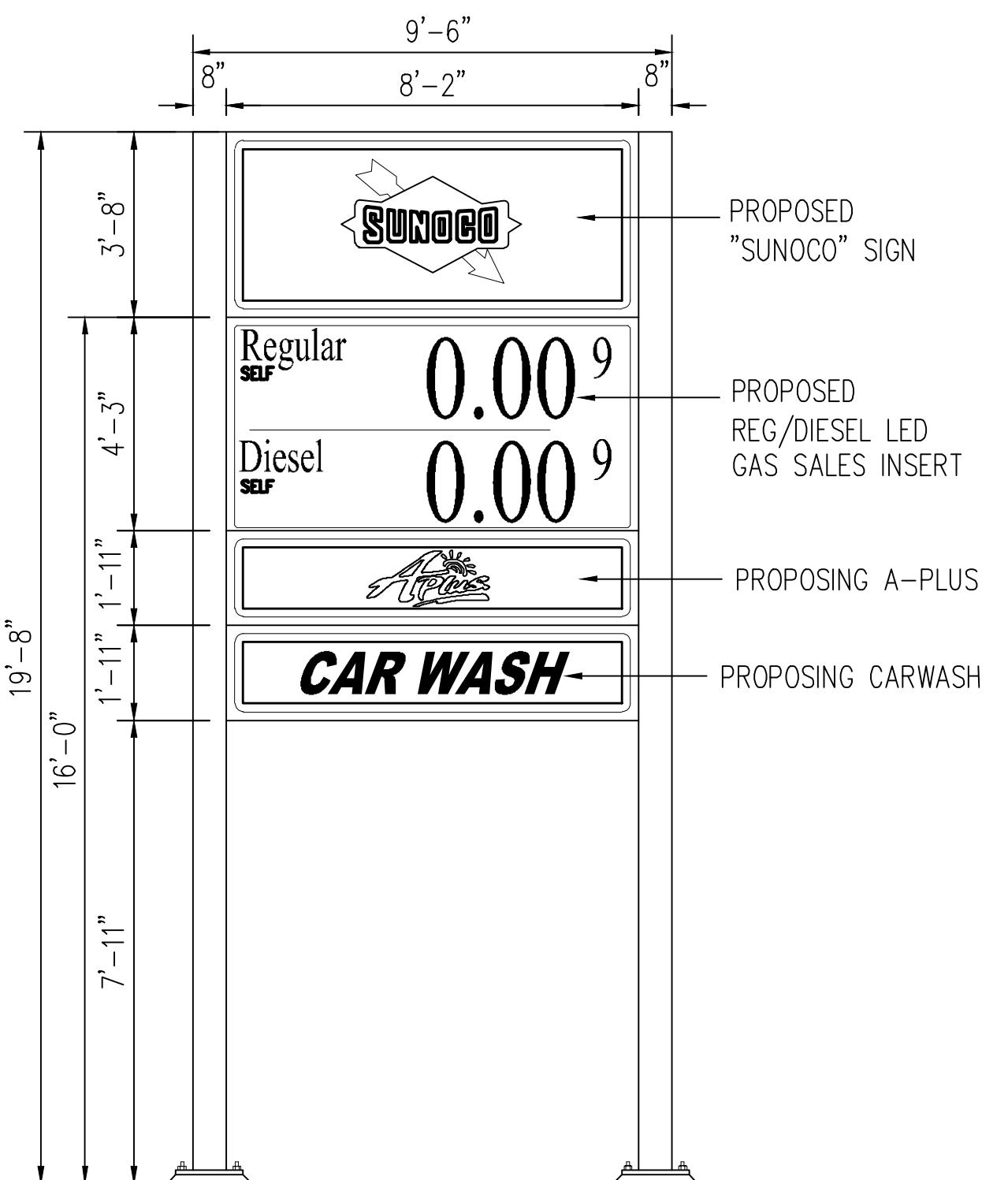
PROPOSING MOUNTED SIGN ®

N.T.S.



PROPOSING DIRECTIONAL SIGN

N.T.S.
SIGN N & O: THE SIGN IS INTERNALLY
ILLUMINATED AND DOES NOT CHANGE MESSAGES.



PROPOSED
"SUNOCO" SIGN

PROPOSED
REG/DIESEL LED
GAS SALES INSERT

PROPOSING A-PLUS

PROPOSING CARWASH

PROPOSING FREESTANDING SIGN ®

SIGN H: THE 2 PRODUCT LED INSERT IS INTERNALLY ILLUMINATED WITH A CHANGING
PRICE MESSAGE. THE REMAINING INSERTS ("SUNOCO" AND "A-PLUS") ARE
INTERNALLY ILLUMINATED AND WILL NOT CHANGE MESSAGES.

REVISIONS			
NO	BY	DESCRIPTION	DATE
1	DN	REVISED PER TOWNSHIP COMMENTS	9/2/2021

PENNSYLVANIA
ONE CALL SYSTEM, INC.
925 Irwin Street, Road
West Mifflin, Pennsylvania
15222-1078

BEFORE YOU DIG ANYWHERE IN
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PLACARD YOUR WORKSITES
NOTICE TO UTILITIES & REQUEST YOU EXCAVATE
DUE TO BLAST OR DEMOLISH



J.B. ANDERSON
PROFESSIONAL ENGINEER
STATE OF PENNSYLVANIA
LICENSE NO. PE-055536
MARYLAND LICENSE NO.
NEW JERSEY LICENSE NO. 24043452400
VIRGINIA LICENSE NO. 0402 045725
CONNECTICUT LICENSE NO. 0936671
NEW YORK LICENSE NO. 0936671

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS

"SUNOCO 1451 PROVIDENCE ROAD"

PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR

SIRHANDI ENTERPRISES, INC.

TITLE

SIGNAGE PLAN
DETAILS

PROJ. #	19-0425	DATE	05-21-2021
CAD ID	19-0425	DRN BY	GTM
SCALE	AS NOTED	CHK BY	JBA

SHEET 7 OF 27

REVISION 1

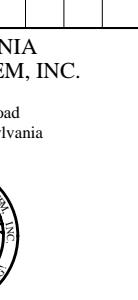


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570-839-1770

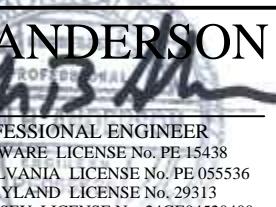
Phone: 215-562-2600, Fax: 215-562-8400
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Lehigh Valley Region
610-820-8200

Philadelphia Region
215-562-2600



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NOTICE TO EXCAVATOR TO EXCAVATE
DITCH, BURST OR DEMOLISH



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PENNSYLVANIA LICENSE No. PE 055536
MARYLAND LICENSE No. 3913
NEW YORK LICENSE No. 24027000
VIRGINIA LICENSE No. 0402 045725
DELAWARE LICENSE No. 1444
NEW YORK LICENSE No. 099667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS
"SUNOCO 1451 PROVIDENCE ROAD"
PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY
PREPARED FOR
SIRHANDI ENTERPRISES, INC.

TITLE

UTILITY PLAN

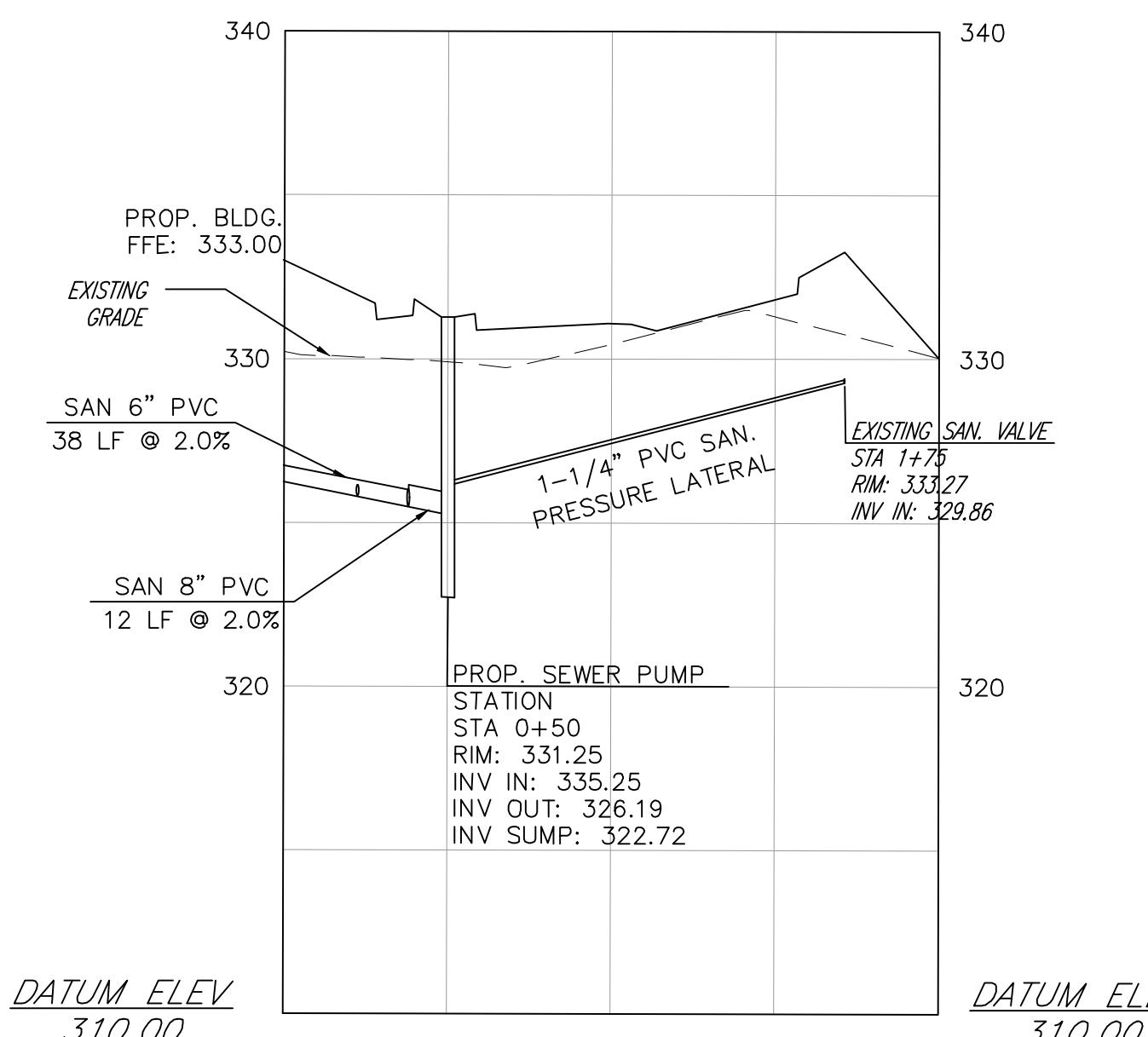
PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

SHEET 8 OF 27

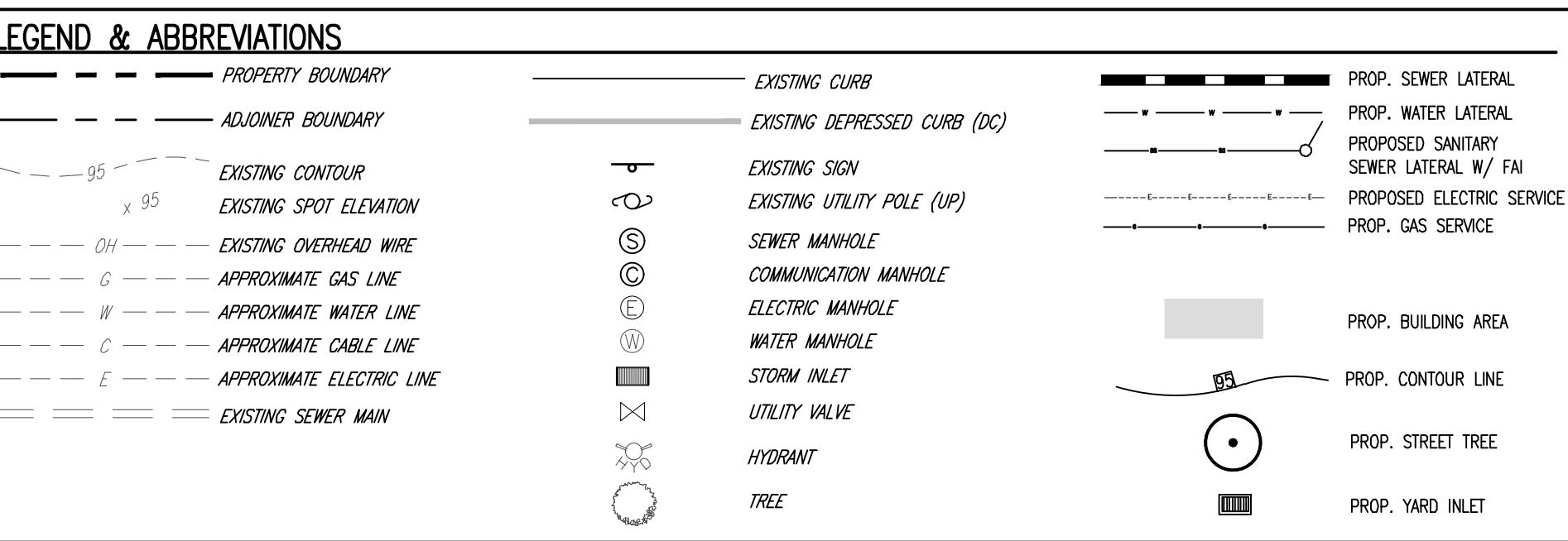
REVISION 1

UTILITY NOTES:

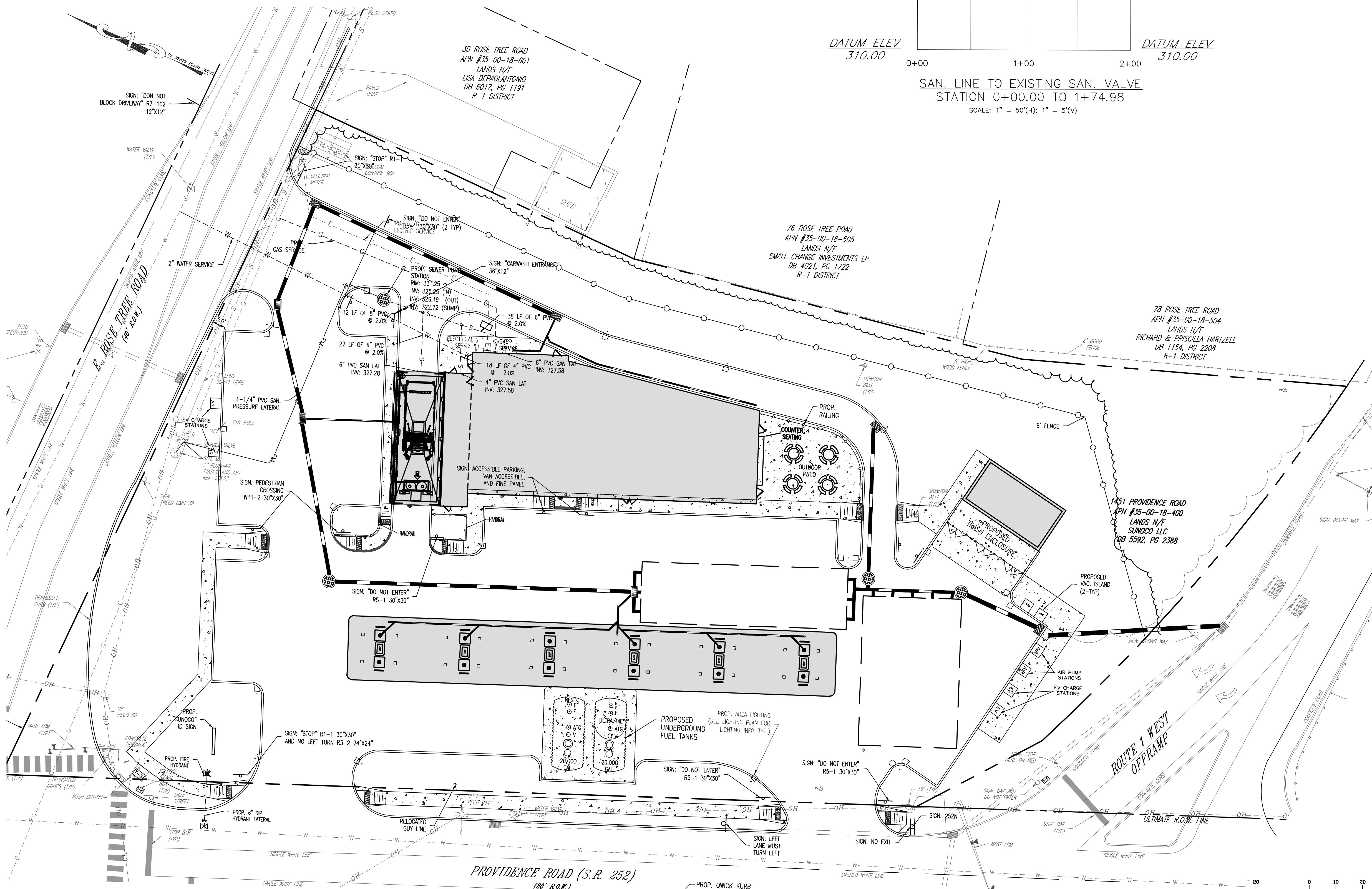
1. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERSEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICT.
2. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER.
3. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OR CONSTRUCTION.
4. REFER TO ARCHITECTURAL DRAWINGS FOR EXISTING BUILDINGS AND STRUCTURES. WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SIZE AND SIZES TO BE DETERMINED BY ARCHITECT.
5. ALL EXISTING CAPS, LIDS, RIMS, ETC. TO REMAIN SHALL BE RESET FLUSH WITH PROPOSED GRADE.
6. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
8. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
9. CONTRACTOR IS RESPONSIBLE FOR ALL SHORNS REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
10. CONTRACTOR IS RESPONSIBLE FOR ALL SHORNS REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
11. CONTRACTOR SHALL PROVIDE A PLAN MARK-UP SHOWING AS-BUILT CONDITIONS OF SCOPE ITEMS COMPLETE FOR SUNOCO. CAD FILES CAN BE PROVIDED AS LONG AS A PDF FILE OF THE PLAN, LAYERING SYSTEM AND THE FILE DATED BACK TO AUTOCAD 2018 IS PROVIDED.
12. CONTRACTOR SHALL PROVIDE A PLAN, LAYERING SYSTEM AND THE FILE DATED BACK TO AUTOCAD 2018 IS PROVIDED BY SUNOCO. ANY DEVIATIONS BETWEEN THE SUNOCO SCOPE OF WORK AND THESE PLANS SHALL BE IDENTIFIED BY THE CONTRACTOR TO OUR OFFICE AND THE SUNOCO CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION TO ENSURE PROPER COORDINATION WITH THE SUNOCO CONSTRUCTION MANAGER BEFORE CONSTRUCTION BEGINS.
13. CONTRACTOR, AND THEIR SUB-CONSULTANTS, SHALL RETAIN A COPY OF THE STANDARD SUNOCO DRAWINGS FOR REFERENCE AND SPECIFICATION OF SUNOCO WORK ITEMS AT THE JOB SITE.
14. CONTRACTOR SHALL REFER TO SUNOCO SCOPE OF WORK DOCUMENT.
15. CLEANOUT LID, GRATE ASSEMBLIES LOCATED IN PAVEMENT AREAS SHALL BE TRAFFIC RATED.



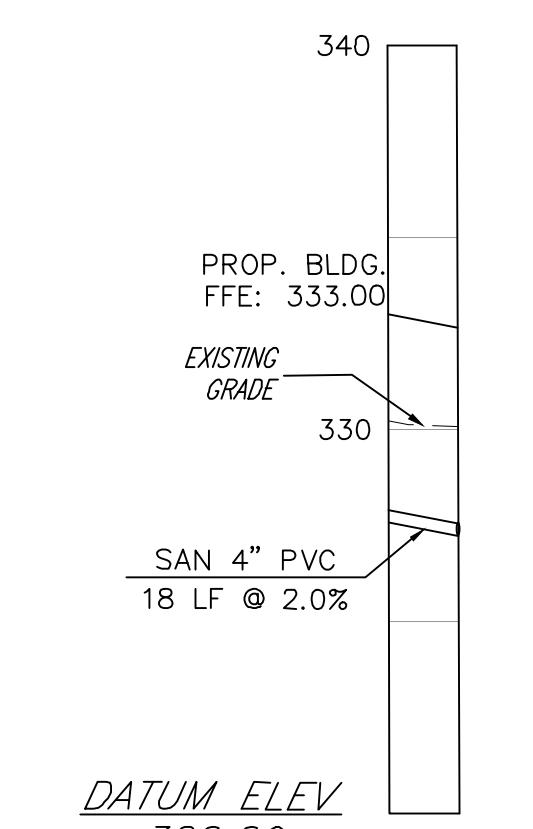
SAN. LINE TO EXISTING SAN. VALVE
STATION 0+00.00 TO 1+74.98
SCALE: 1" = 50'(H); 1" = 5'(V)



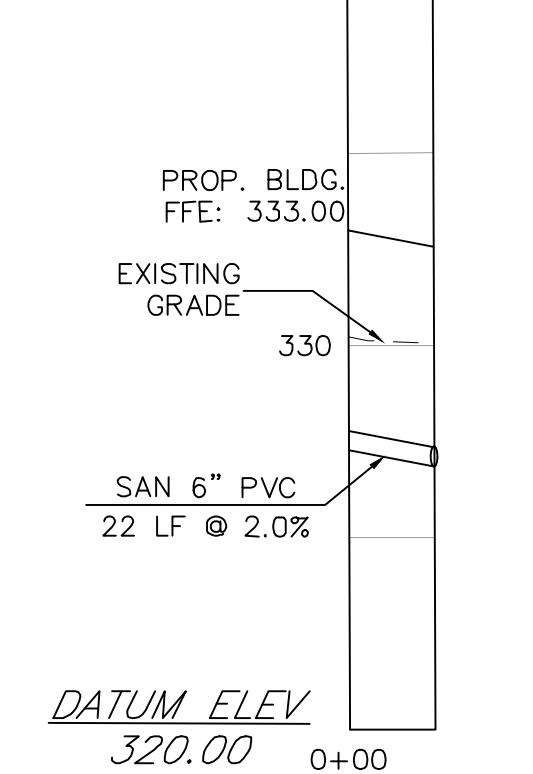
GRAPHIC SCALE



(IN FEET)
1 inch = 20 ft.



SAN. LATERAL TO SAN. LINE
STATION 0+00.00 TO 0+18.06
SCALE: 1" = 50'(H); 1" = 5'(V)

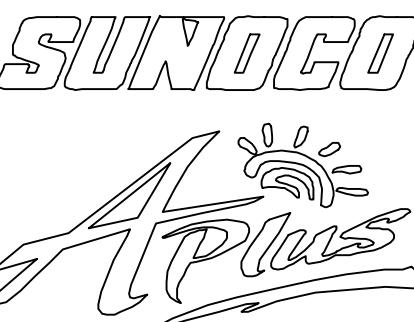


SAN. LATERAL TO SAN. LINE
STATION 0+00.00 TO 0+22.24
SCALE: 1" = 50'(H); 1" = 5'(V)

PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

SHEET 8 OF 27

REVISION 1



Cornerstone Consulting Engineers & Architectural, Inc.

Pocono Region
570-839-1770

213 West Main Street, Lansdale, PA 19446
Phone: 215-622-6000, Fax: 215-622-8400
www.cornerstoneinc.com
Lehigh Valley Region
610-820-8200

Philadelphia Region
215-362-2600

GRADING AND DRAINAGE NOTES

1. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT REFERENCED IN THIS PLAN SET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ALL SOIL, YIELDING OR UNSUITABLE MATERIAL AND REPAIRING WITH SUITABLE MATERIALS AS SPECIFIED. THE SOILS REPORT IS FOR INFORMATION ONLY. THE CONTRACTOR SHALL NOT PLACE SOILS WHICH EXCEED 2% MODIFIED MOISTURE CONTENT AT TIME OF U.S.T.M. TEST D-1557 PROCTOR MAXIMUM DENSITY PER PLACEMENT SHALL NOT EXCEED 2% ABOVE NOR 3% BELOW OPTIMUM. CONTRACTOR SHALL SUBMIT A COMPACTION REPORT PREPARED BY A QUALIFIED SOILS ENGINEER, REGISTERED WITHIN THE STATE WHERE THE WORK IS PERFORMED, VERIFYING THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTION IN ACCORDANCE WITH THESE PLANS AND SPECS AND THE RECOMMENDATIONS SET FORTH IN THE SOILS REPORT.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVESTIGATIONS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. CONTRACTOR TO ENSURE MIN. 12" DEPTH FOR ALL GRAVITY DRAINS, DRAINS, DITCHES, CULVERTS, SURFACES, AND 2.0% MIN. ON ASPHALT, EXCEPT AS NOTED ON PLANS. ANY DISCREPANCIES THAT MAY EFFECT THE PUBLIC SAFETY OR PROJECT COST, MUST BE IDENTIFIED TO THE ENGINEER IN WRITING IMMEDIATELY, PROCEEDING WITH CONSTRUCTION WITH DESIGN DISCREPANCIES IS DONE SO AT CONTRACTOR'S OWN RISK.
3. SUBGRADE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT SHALL BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SUBGRADE SHALL BE DEMOLISHED. SUBGRADE IS TO BE REMOVED AND FILLED MATERIAL COMPACTED TO 95% OPTIMUM DENSITY (AS DETERMINED BY MODIFIED PROCTOR METHOD).
4. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERSEDE IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICT.
5. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION PLACEMENT SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY UTILITY "ONE-CALL" NUMBER 72 HOURS PRIOR TO ANY EXCAVATION ON THIS SITE. CONTRACTOR SHALL ALSO NOTIFY LOCAL WATER AND SEWER DEPARTMENTS TO MARK OUT THEIR UTILITIES.
7. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATION, WHERE CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO RESOLVE SAME. SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
8. ALL PAVEMENT SLOPES WITHIN HANDICAP PARKING AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION AS WELL AS SIDEWALK CROSS SLOPES.
9. ALL EXISTING CAPS, LIDS, RIMS, ETC. TO REMAIN SHALL BE RESET FLUSH WITH PROPOSED GRADE.
10. SITE IS LOCATED OUTSIDE OF THE 100 YR. AND 500 YR. FLOOD ZONE.
11. THE CONTRACTOR SHALL ADHERE TO ALL TERMS AND CONDITIONS AS OUTLINED IN THE GENERAL NPDES PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
12. THE PROPOSED GRADING SHOWN ON THIS PLAN HAS BEEN USED TO DESIGN THE STORMWATER MANAGEMENT FACILITIES. THE CONTRACTOR SHALL COMPLY WITH THE GENERAL GRADING SCHEME INDICATED UNLESS OTHERWISE APPROVED BY THE TOWNSHIP ENGINEER.
13. INLETS SHALL BE PENNDOT TYPE M, OR TYPE C, INLETS EXCEDING 5 FT. IN DEPTH SHALL BE EQUIPPED WITH STEPS IN ACCORDANCE WITH PENNDOT PUB. 408.
14. CONTRACTOR SHALL NOT ENCROACH ONTO ADJOINING PROPERTIES UNLESS A TEMPORARY CONSTRUCTION EASEMENT HAS BEEN GRANTED BY THE ADJOINING PROPERTY OWNER. CONTRACTOR SHALL HAVE PROPERTY LINES CLEARLY MARKED AND SHALL CONSTRUCT SUCH BARRIERS WHICH ARE NECESSARY TO PREVENT ENCROACHMENT ONTO ADJOINING PROPERTIES.
15. NO EXCAVATION OR FILL ON LOTS SHALL BE MADE WITH A FACE STEEPER THAN THREE (3) HORIZONTAL TO ONE (1) VERTICAL (3:1). SPECIAL SLOPE REQUIREMENTS APPLY TO THE DETENTION POND. SEE APPROPRIATE DETAILS.
16. ALL CONTRACTORS WORKING ON THIS PROJECT SHALL BE RESPONSIBLE FOR INSURING THAT ALL CONSTRUCTION ACTIVITIES RELATED TO THIS PROJECT ARE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE OSHA (OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION) STANDARDS.
17. THE PROPOSED CONCRETE CURB REVEAL IS 8" (INCH).
18. RAINWATER CONDUCTORS (RWC) SHALL BE HIGH DENSITY POLYETHYLENE (HDPE) FOR PIPING BEYOND PLUMBING CONTRACTOR'S LIMIT OF WORK.
19. ALL STORMPIPE SHALL BE SMOOTH BORE HIGH DENSITY POLYETHYLENE PIPE UNLESS OTHERWISE SHOWN. MINIMUM PIPE SIZE SHALL BE 18" EXCEPT FOR ROOF LEADERS.
20. CLENOTS AND CURB BOXES WITHIN PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS MEETING H-5-25 LIVE LOAD.
21. CONTRACTOR SHALL NOT CONNECT PIPES INTO THE CORNER OF INLET BOXES.

LEGEND

- EXISTING CONTOURS
- EXISTING TREES
- PROPOSED CONTOURS
- EXISTING SPOT ELEVATION
- EXIST. TOP OF CURB ELEVATION
- EXIST. GUTTER ELEVATION
- EXISTING WATER MAIN
- EXISTING ELECTRICAL LINE
- EXISTING SANITARY LINE
- EXISTING GAS LINE
- EXISTING UTILITY POLE
- PROPOSED STORM SEWER
- PROPOSED SANITARY SEWER
- PROPOSED WATER LINE
- PROPOSED ELECTRICAL LINE
- PROPOSED TELEPHONE LINE
- PROPOSED SANITARY SEWER CLEANOUT
- EXISTING TREE TO REMAIN

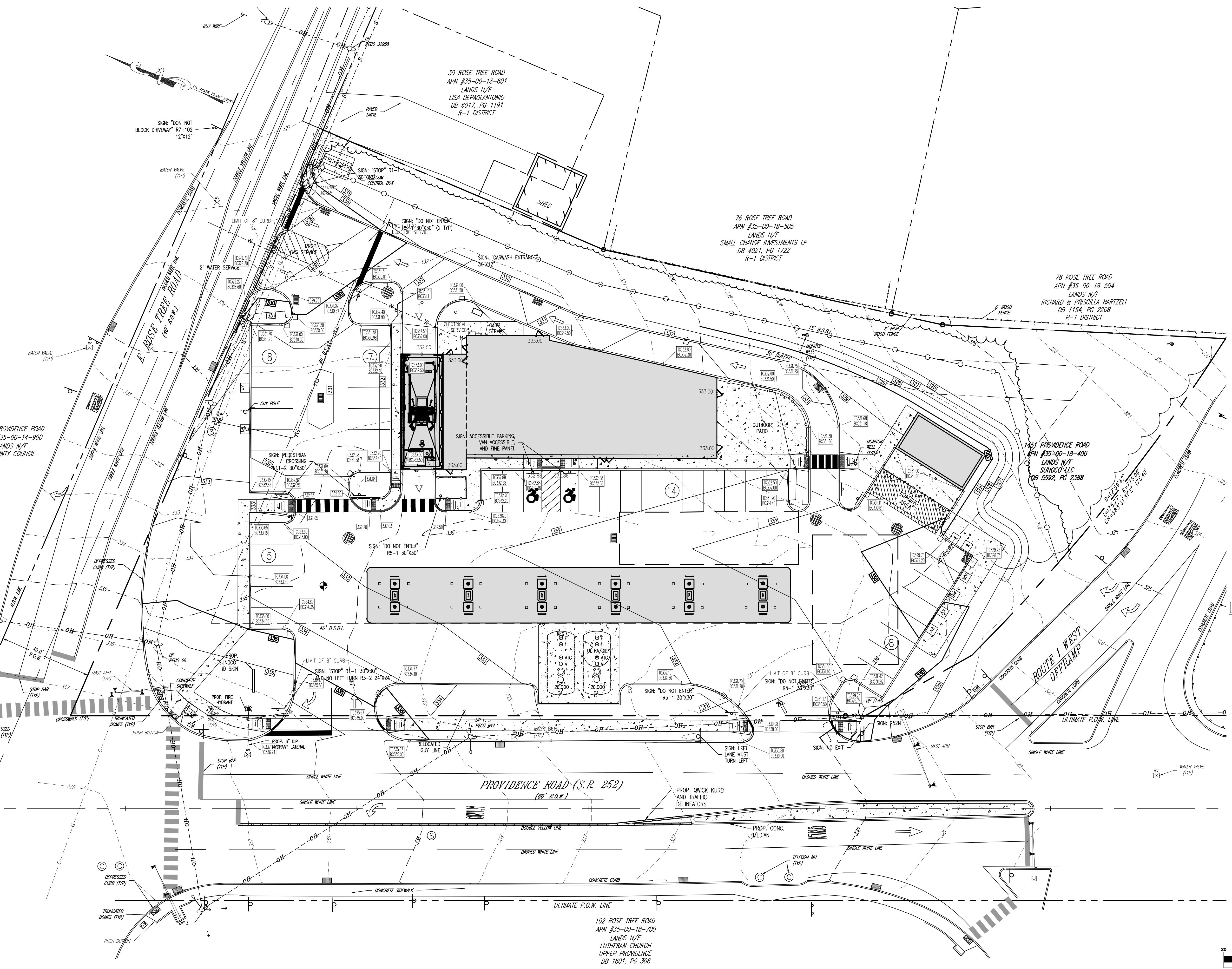
J.B. ANDERSON
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. PE-10038
MARYLAND LICENSE No. 39131
NEW YORK LICENSE No. 2402720400
VIRGINIA LICENSE No. 0402 045725
DELAWARE LICENSE No. 093667-1
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS "SUNOCO 1451 PROVIDENCE ROAD"
PROPOSED COMMERCIAL RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY
PREPARED FOR
SIRHANDI ENTERPRISES, INC.

TITLE

GRAPHIC SCALE
PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA
(IN FEET)
1 inch = 20 ft.
SHEET 9 OF 27
REVISION 1



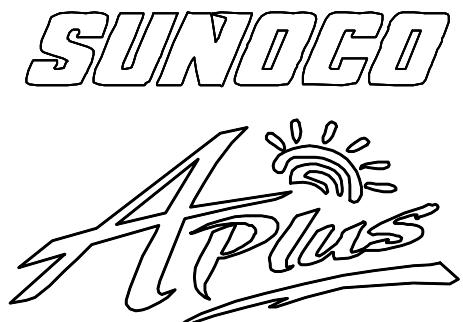
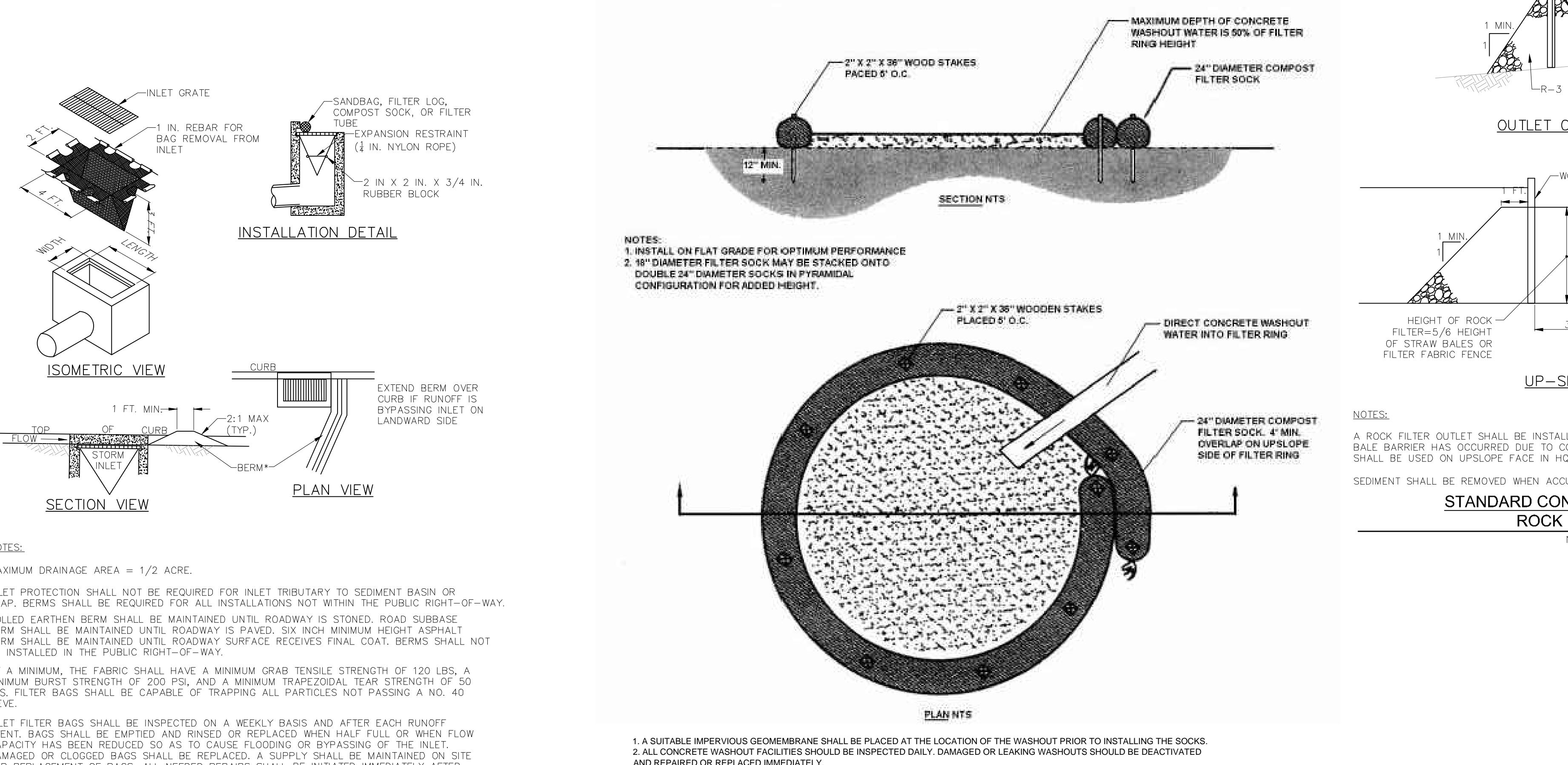


FIGURE 3.18
Typical Compost Sock Washout Installation



NOTES:
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT WITHIN THE PUBLIC RIGHT-OF-WAY.

ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT. BERMS SHALL NOT BE INSTALLED IN THE PUBLIC RIGHT-OF-WAY.

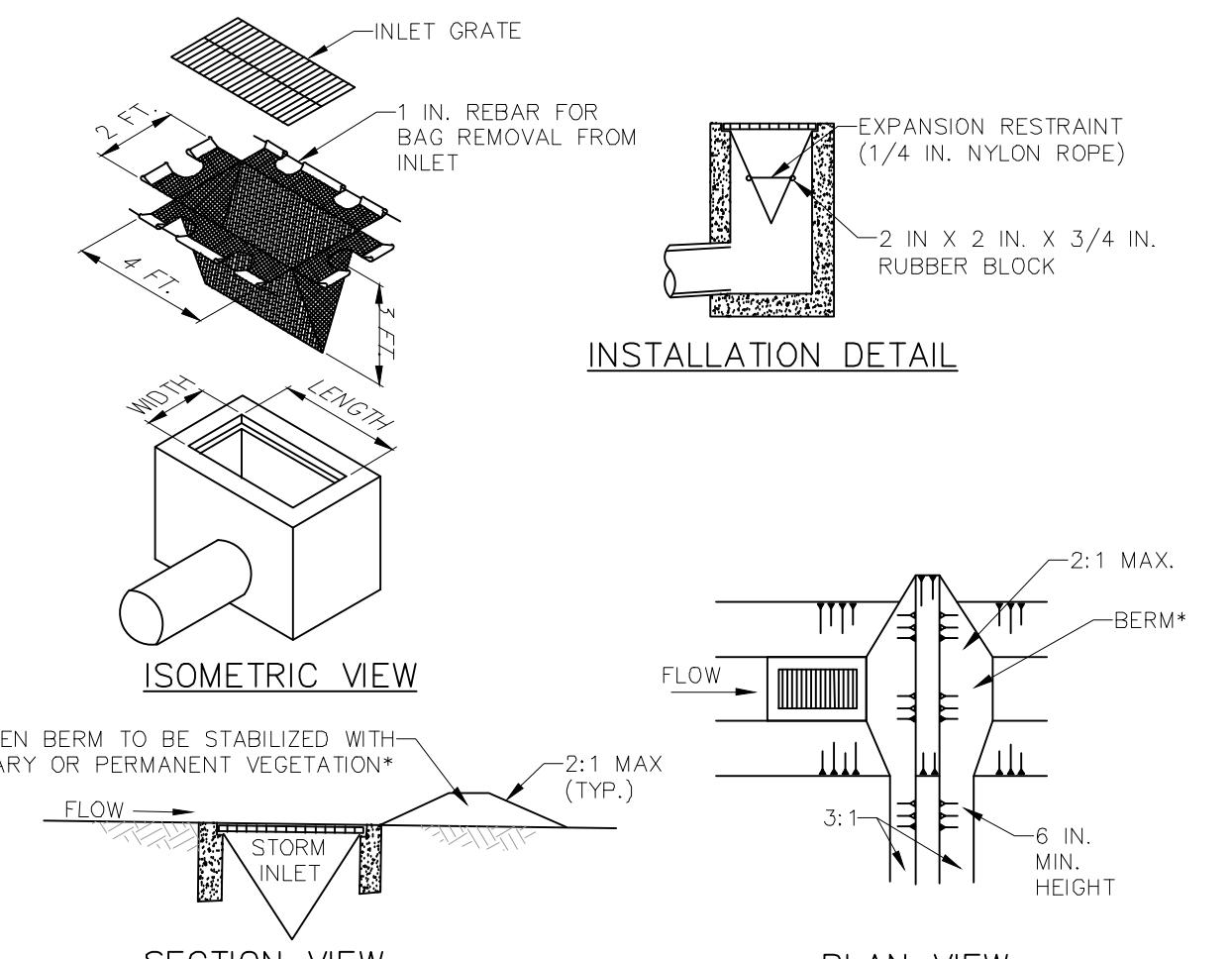
AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPAVED. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

DO NOT USE ON MAJOR PAVED ROADWAYS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.
* BERMS SHALL NOT BE PLACED WITHIN THE PUBLIC RIGHT-OF-WAY.

STANDARD CONSTRUCTION DETAIL #4-15
FILTER BAG INLET PROTECTION - TYPE C INLET

NOT TO SCALE



NOTES:
MAXIMUM DRAINAGE AREA = 1/2 ACRE.

INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS NOT WITHIN THE PUBLIC RIGHT-OF-WAY.

ROLLED EARTHEN BERM IN ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM ON ROADWAY SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. EARTHEN BERM IN CHANNEL SHALL BE MAINTAINED UNTIL PERMANENT STABILIZATION IS COMPLETED OR REMAIN PERMANENTLY. BERMS SHALL NOT BE INSTALLED IN THE PUBLIC RIGHT-OF-WAY.

AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.

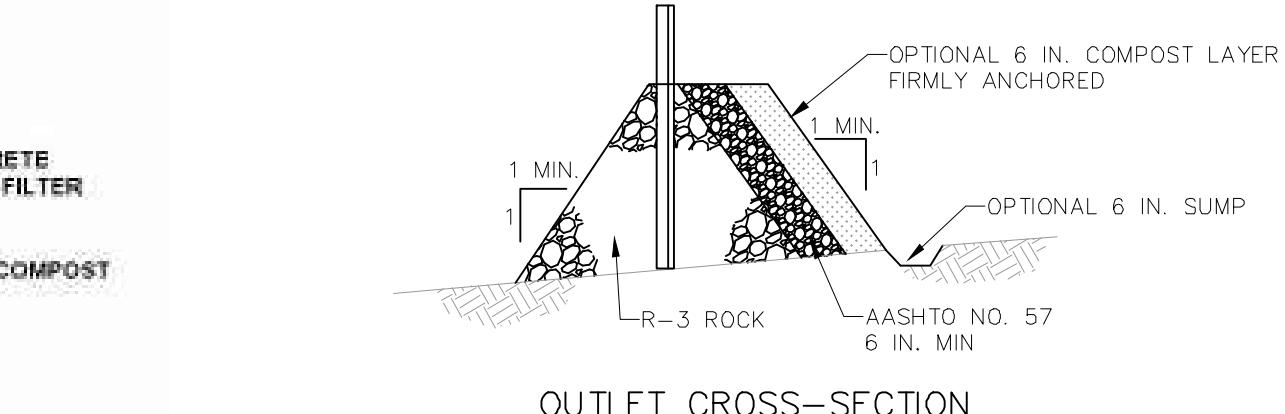
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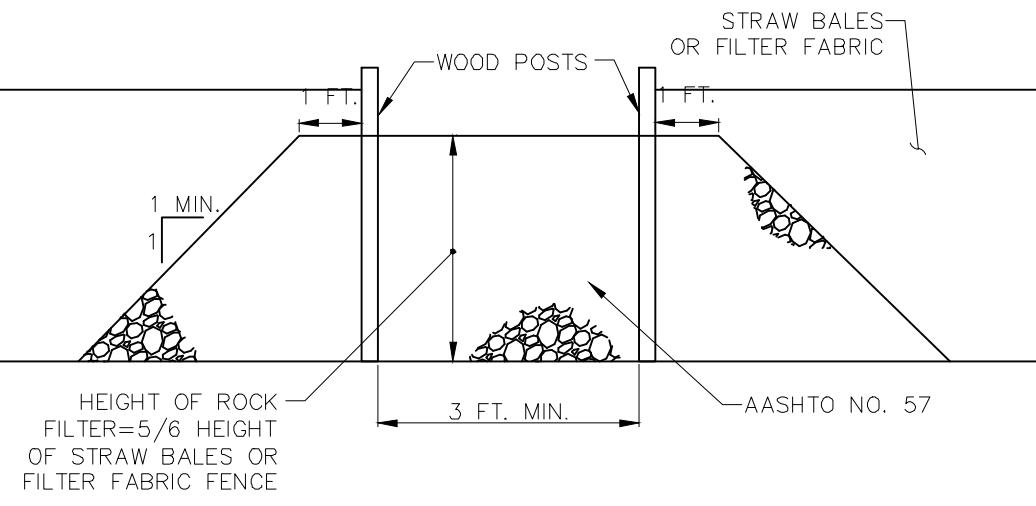
STANDARD CONSTRUCTION DETAIL #4-16
FILTER BAG INLET PROTECTION - TYPE M INLET

NOT TO SCALE

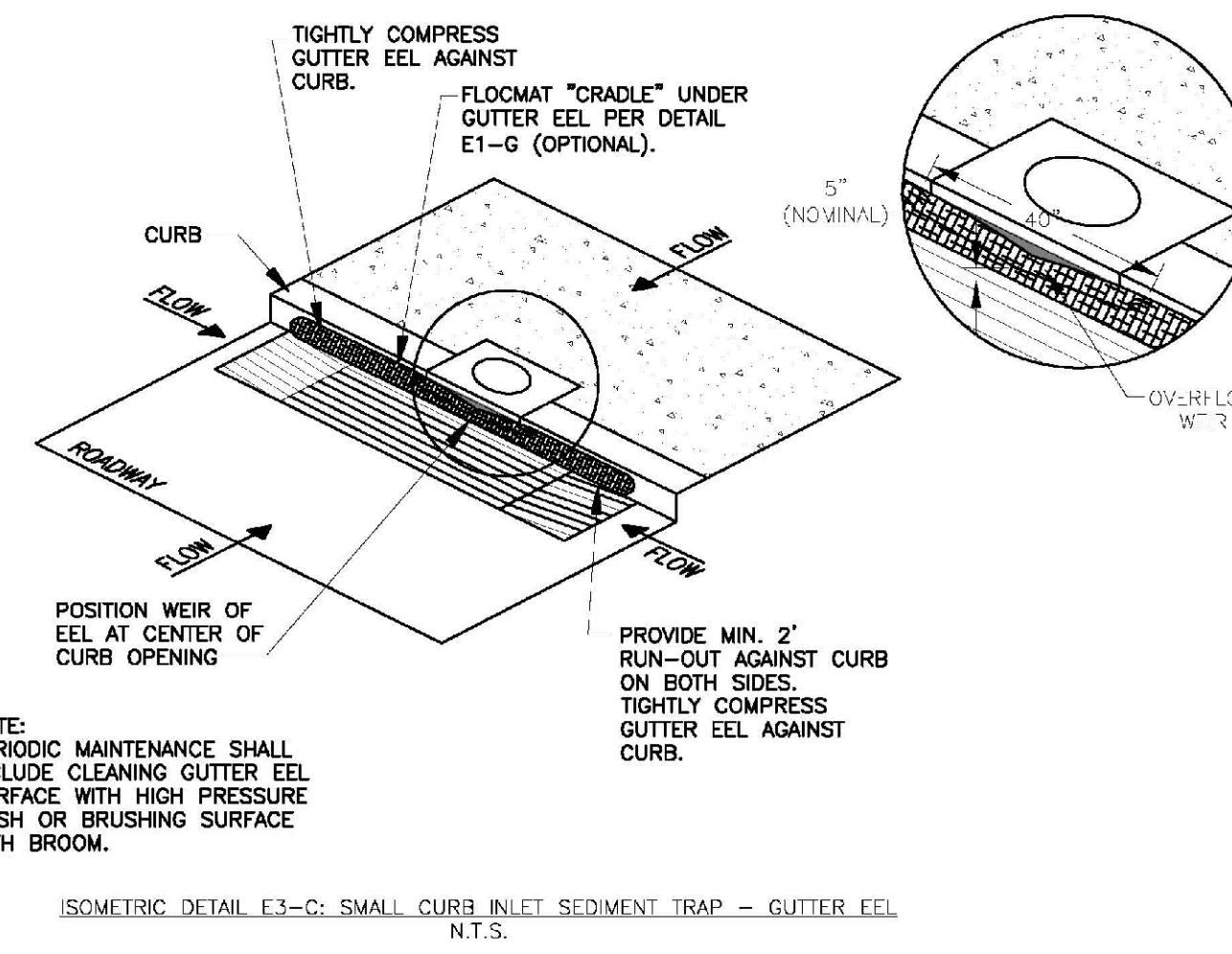
STANDARD CONSTRUCTION DETAIL #4-1
COMPOST FILTER SOCK



OUTLET CROSS-SECTION



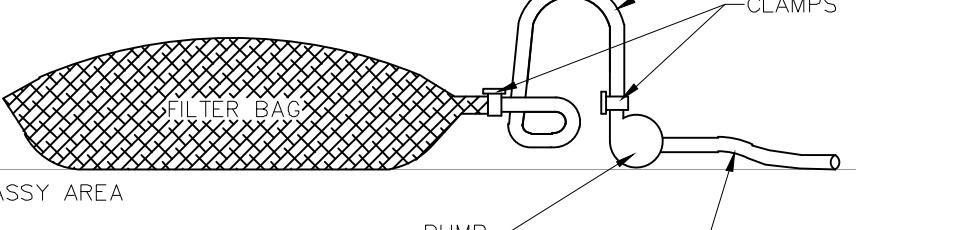
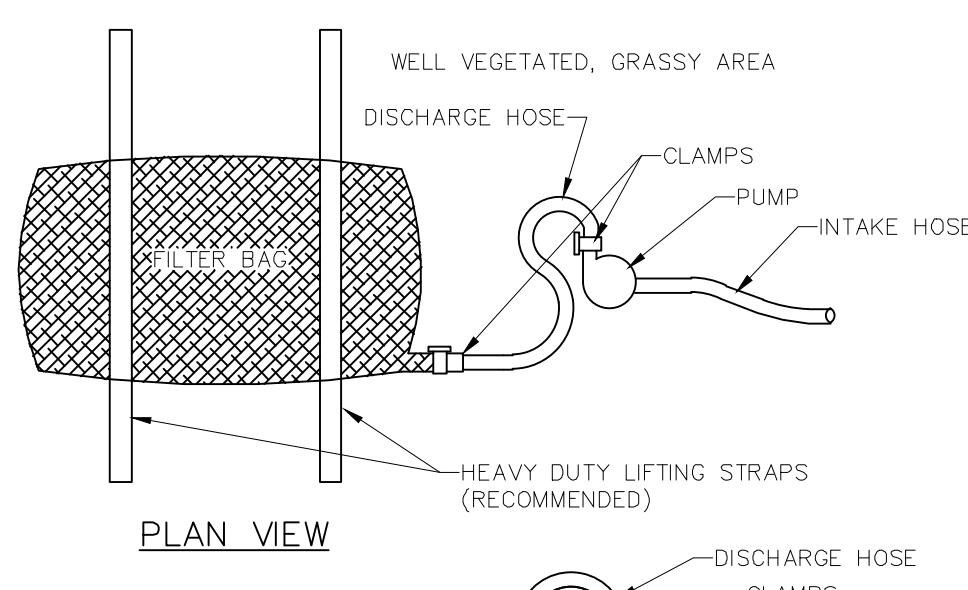
UP-SLOPE FACE



ISOMETRIC DETAIL E3-C: SMALL CURB INLET SEDIMENT TRAP - GUTTER EEL N.T.S.

NOTES:
1. Install the GutterEEL in front of the curb inlet opening. Each end of the GutterEEL should overlap the curb inlet approximately 12".
2. Overflow will should be cleaned on curb inlet. If more than 1 unit is required, units should be placed with each end flush against each other.
3. The GutterEEL should be cleaned if a visual inspection shows silt and debris build up in front of the unit.
4. The GutterEEL is reusable. Once the construction project is complete and it is no longer needed for sediment control, remove, clean and store out of the sunlight.
5. Pounding is possible if sediment is not removed regularly. Inspection of GutterEEL should be on a regular basis and immediately after major storm events.

ACF ENVIRONMENTAL GUTTER EEL



NOTES:
LOW VOLUME FILTER BAGS SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL SEWN WITH HIGH STRENGTH, DOUBLE STITCHED "J" TYPE SEAMS. THEY SHALL BE CAPABLE OF TRAPPING PARTICLES LARGER THAN 150 MICRONS. HIGH VOLUME FILTER BAGS SHALL BE MADE FROM WOVEN GEOTEXTILES THAT MEET THE FOLLOWING STANDARDS:

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4864	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLETS BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.

BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5% FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.

NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.

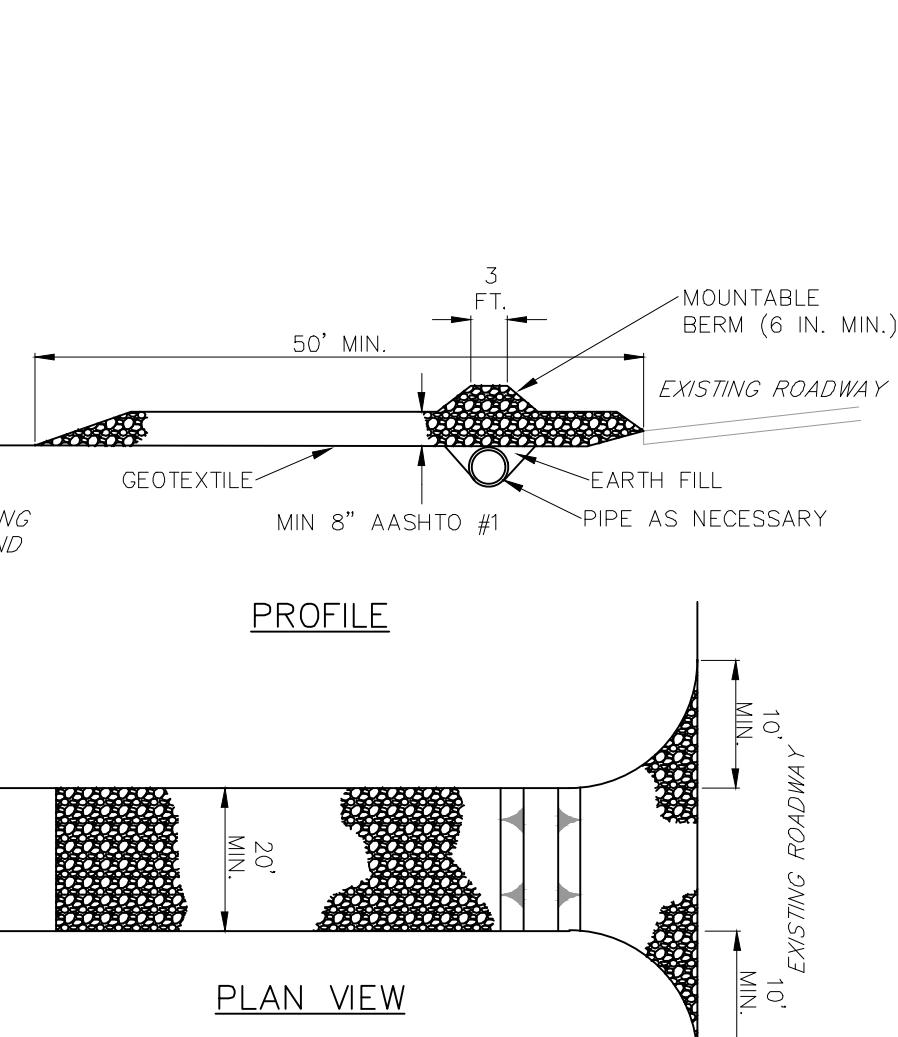
THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.

THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.

FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.

STANDARD CONSTRUCTION DETAIL #3-16
PUMPED WATER FILTER BAG

NOT TO SCALE



PROFILE

* MOUNTABLE BERM USED TO PROVIDE PROPER COVER FOR PIPE

NOTES:
REMOVE TOPSOIL PRIOR TO INSTALLATION OF ROCK CONSTRUCTION ENTRANCE. EXTEND ROCK OVER FULL WIDTH OF ENTRANCE.

RUNOFF SHALL BE DIVERTED FROM ROADWAY TO A SUITABLE SEDIMENT REMOVAL BMP PRIOR TO ENTERING ROCK CONSTRUCTION ENTRANCE.

MOUNTABLE BERM SHALL BE INSTALLED WHEREVER OPTIONAL CULVERT PIPE IS USED AND PROPER PIPE COVER AS SPECIFIED BY MANUFACTURER IS NOT OTHERWISE PROVIDED. PIPE SHALL BE SIZED APPROPRIATELY FOR SIZE OF DITCH BEING CROSSED.

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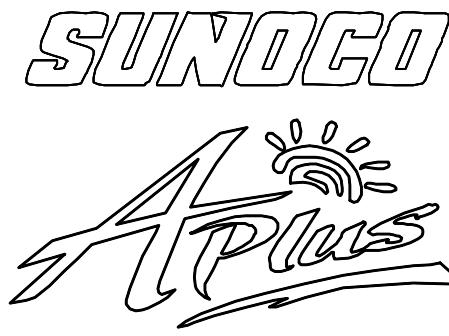
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FERTILIZATION, SEEDING, AND MULCHING NOTES

1. DISTURBED AREAS WHICH WILL NOT BE REDISTURBED IMMEDIATELY SHALL BE TEMPORARY SEEDED AND MULCHED. SITE PREPARATION OF MULCH AND MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH PENN STATE UNIVERSITY'S STAGGERED FORMULA FOR SPECIFICATIONS OF RECENT EROSION CONTROL AND UNFORESEEN EROSION CONDITIONS. REPORTS SHALL BE PROVIDED FOR THE RECOMMENDED PATES OF DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADES AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR. MUST BE TEMPORARY SEEDED AND MULCHED AS INDICATED ON THIS PLAN. DISTURBED AREAS WHICH ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE (1) YEAR MUST PERMANENTLY SEEDED AND MULCHED AS INDICATED ON THIS PLAN.

TEMPORARY SEEDING REQUIREMENTS:

FORMULA E - ANNUAL RYE GRASS

PERMANENT SEEDING REQUIREMENTS:

FORMULA D - 70% KENTUCKY 31 FESCUE

20% PENNLAWN RED FESCUE

10% WEEDING ALKAU GRASS

SEEDING RATE FOR THE ABOVE MIXTURES: 21 lbs/1000 S.Y.

HAY OR STRAW MULCH SHALL BE APPLIED AT THE RATES OF AT LEAST 3.0 TONS PER ACRE AND AT LEAST 4.0 TONS PER ACRE DURING WINTER MONTHS (DEC. 1 TO MARCH 1) DUE TO COLD WEATHER SOIL EROSION PROBLEMS. STRAW MULCH SHALL BE APPLIED IN LONG STRANDS, NOT CHOPPED OR FINELY BROKEN

PULVERIZED AGRICULTURAL LIMESTONE AND COMMERCIAL FERTILIZER SHALL BE APPLIED TO ALL DISTURBED AREAS WHICH ARE TO BE USED EXCEPT FOR TEMPORARY SEEDED AREAS AT THE FOLLOWING RATES:

PULVERIZED AGRICULTURAL LIMESTONE: 2 TONS/ACRE

1 TON/ACRE FOR TEMPORARY USE

10-20-20 ANALYSIS COMMERCIAL FERTILIZER 1000 lbs/ACRE

5-5-5 ANALYSIS COMMERCIAL FERTILIZER 1000 lbs/ACRE

2. AREAS THAT FAIL TO GERMINATE MUST BE RESEDED.

3. SEDED AREAS THAT WASH OUT MUST BE FILLED AND GRADED AS NECESSARY, THEN RESEDED. SOME TYPE OF ANCHORING METHOD SHOULD BE UTILIZED TO HOLD SEED AND MULCH IN PLACE. THIS IS CONCENTRATED FLUIDS, AND ON SLOPES, ALL SLURRY APPLICATIONS FOR SEEDING WITH A CELLOULOSE TACKIFIER MUST BE ACCOMPANIED BY A TACKIFIER AT THE RATE OF ONE TON PER ACRE. DURING NON-GROWING SEASONS, MULCHING CAN BE USED AS AN INTERNAL STABILIZATION CONTROL. CONSTRUCTION AND MAINTENANCE WILL BE INSTANCED IN CONSTRUCTION, CONSTRUCTION AND MAINTENANCE WILL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED IN SECTION 805, PENNDO.T. PUBLICATION 408. GRADING WILL BE TEMPORARILY HALTED WHEN SOIL BECOMES FROSTED.

UNFORESEEN EROSION CONDITIONS

1. SHOULD ANY UNFORESEEN EROSION CONDITIONS DEVELOP DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE THE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUNOFF AND/OR SEDIMENT DISPLACEMENT. STOCKPILES OF WOOD SHIPS, HAY BALES, CRUSHED STONE, AND OTHER ACCEPTABLE MULCHES SHALL BE PLACED IN A MANNER AS TO NOT CAUSE ADDITIONAL EROSION OR DAMAGE TO ADJACENT PROPERTIES.

2. THE CONTRACTOR IS ADVISED TO BECOME THOROUGHLY FAMILIAR WITH ALL OF THE PROVISIONS OF APPENDIX 64, "EROSION CONTROL RULES AND REGULATIONS", TITLE 25, PART 1, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SUB-PART C, PROTECTION OF NATURAL RESOURCES, ARTICLE III, WATER RESOURCES, CHAPTER 102, EROSION CONTROL".

3. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT ALL EROSION & AIR AND WATER POLLUTION IS MINIMIZED. STATE & LOCAL LAWS CONCERNING POLLUTION ABATEMENT SHALL BE OBSERVED.

4. MEASURES FOR THE PROTECTION OF EXISTING TREES AND SHRUBS SHALL BE TAKEN BY THE CONTRACTOR TO ELIMINATE UNNECESSARY DAMAGE.

*A COPY OF THESE EROSION & SEDIMENT POLLUTION CONTROL PLANS MUST BE POSTED AND AVAILABLE AT THE CONSTRUCTION SITE IN ACCORDANCE WITH STATE AND FEDERAL LAW.

EROSION CONTROL REVISION NOTE

* BEFORE INITIATING ANY REVISION TO THE APPROVED EROSION AND SEDIMENT CONTROL PLAN OR REVISIONS TO OTHER PLANS WHICH MAY AFFECT THE EFFECTIVENESS OF THE APPROVED E & S CONTROL PLAN, THE OPERATOR MUST RECEIVE APPROVAL OF THE REVISIONS FROM THE CONSERVATION DISTRICT/ADEP. THE OPERATOR SHALL ASSURE THAT THE APPROVED EROSION AND SEDIMENT CONTROL PLAN IS PROPERLY AND COMPLETELY IMPLEMENTED. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO ELIMINATE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION.

SOIL AND BORROW AREAS NOTE

* THE OPERATOR SHALL ASSURE THAT AN EROSION AND SEDIMENT CONTROL PLAN HAS BEEN PREPARED, APPROVED BY THE CONSERVATION DISTRICT, AND IS BEING IMPLEMENTED AND MAINTAINED FOR ALL SOIL AND/OR ROCK SPOIL AND BORROW AREAS, REGARDLESS OF THEIR LOCATIONS.

CONSTRUCTION WASTE DISPOSAL NOTE

ALL BUILDING MATERIALS AND WASTES SHALL REMOVE FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

DUST CONTROL MEASURES

DURING CONSTRUCTION, THE CONTRACTOR SHALL NOT CAUSE OR PERMIT ANY MATERIALS OR PROPERTY TO BE HANDLED, TRANSPORTED, STORED, USED, CONSTRUCTED, ALTERED, REPAIRED, OR DEMOLISHED WITHOUT TAKING REASONABLE PRECAUTIONS TO PREVENT PARTICULATE MATTER FROM BECOMING AIRBORNE. REASONABLE PRECAUTIONS TO CONTROL FUGITIVE DUST EMISSIONS MAY INCLUDE THE FOLLOWING:

WATERING

WATER TRUCKS WILL BE THE PRIMARY MEANS OF DUST ABATEMENT. THE CONTRACTOR WILL BE REQUIRED TO FURNISH AND TO USE WATER TRUCKS WITH APPROPRIATE SPRAY DISPERSAL SYSTEMS ON THE FRONT AND/OR BACK AND SIDES OF THE TRUCK THAT WILL EFFECTIVELY WATER THE CONSTRUCTION CORRIDOR, CONTRACTOR/PIPE YARDS, AND PUBLIC ROADWAYS TO CONTROL DUST GENERATED FROM CONSTRUCTION ACTIVITIES. FUEL POINTS FOR THE TRUCK WILL BE DETERMINED AND PROPERLY PERMITTED WITH LOCAL AUTHORITIES. WATERING FREQUENCY WILL BE DEPENDENT ON WEATHER AND TRAFFIC CONDITIONS. WATER SPRAY WILL BE CONTROLLED TO AVOID OVER-SPRAY AND POOLING.

OTHER METHODS

- COVER OPEN-BODY TRUCKS LOADING AND HAULING CONSTRUCTION DEBRIS ON OR FROM THE ROW.
- MAINTAIN CONSTRUCTION ENTRANCES (TRACK-OUT AND/OR CARRY-OUT AREAS) AT PAVED ROAD ACCESS POINTS.
- SWEEP PUBLIC ROADWAYS AS NECESSARY TO REDUCE DUST AND TRACKED DIRT FROM THE CONSTRUCTION ROW.
- PROVIDE WASH BAYS STATIONS AS NECESSARY.
- TEMPORARY MULCHING AND STABILIZATION.
- TILLAGE / SURFACE ROUGHENING.
- WIND BREAKS.

THERMAL IMPACTS NOTE:

CONSTRUCTION OF THE PROJECT WILL EXPOSE THE MAJORITY OF THE DISTURBED AREA TO INCREASED SURFACE TEMPERATURES AND THEREFORE INCREASED RUNOFF TEMPERATURES. THERMAL IMPACTS TO THE RECEIVING WATERCOURSE WILL BE MITIGATED BY PRESERVING EXISTING VEGETATION AT THE PERIMETER OF DISTURBANCE AND DOWNSTREAM OF DISTURBED AREAS TO THE MAXIMUM EXTENT POSSIBLE AND BY DIRECTING CONSTRUCTION RUNOFF TO THE PERIMETER COMPOST FILTER SOCKS AND INLET PROTECTION FILTERS. EXPOSED SOILS ARE TO BE STABILIZED AND SEEDED OR SOODED IMMEDIATELY UPON COMPLETION OF GRADING TO KEYSTABILIZE VEGETATIVE COVER. THESE MEASURES WILL REDUCE THE TEMPERATURE OF SURFACE RUNOFF PRIOR TO IT REACHING THE RECEIVING STREAM.

CONSTRUCTION WASTE DISPOSAL NOTE

THE OPERATOR SHALL REMOVE FROM THE SITE, RECYCLE, OR DISPOSE OF ALL BUILDING MATERIALS AND WASTE PRODUCTS IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. THE CONTRACTOR SHALL NOT BURY, DUMP, OR DISCHARGE ANY BUILDING MATERIALS OR WASTE PRODUCTS AT THE SITE. THE GROWING MEDIA WILL BE DISPERSED ON SITE ONCE DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED, CONSTRUCTION ACTIVITY HAS CEASED, OR AS DETERMINED BY THE ENGINEER.

POTENTIAL FOR POLLUTION NOTE:

THE PROJECT AREA DOES NOT CONTAIN ANY GEOLOGIC OR SOIL CONDITIONS WITH THE POTENTIAL TO CAUSE POLLUTION. EROSION CONTROL BMP'S SPECIFIED IN THESE PLANS ARE PROVIDED TO LIMIT EARTH DISTURBANCE AND PREVENT DENUDED SOIL FROM REACHING THE RECEIVING WATERCOURSE.

SITE INSPECTION LOG REQUIREMENTS:

UNTIL THIS SITE IS STABILIZED, ALL EROSION AND SEDIMENTATION POLLUTION CONTROL (E&SPC) FACILITIES MUST BE MAINTAINED PROPERLY. MAINTENANCE SHALL INCLUDE INSPECTIONS OF ALL E&SPC FACILITIES AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. SITE INSPECTIONS SHALL BE DOCUMENTED IN AN INSPECTION LOG KEPT FOR THIS PURPOSE. THE LOG SHALL INCLUDE THE DATE, AND TIME OF THE INSPECTIONS, DESCRIPTIONS OF ANY E&SPC FACILITY DEFICIENCIES, AND THE NAME THE PERSON CONDUCTING THE INSPECTION. THE INSPECTION LOG SHALL BE KEPT ON SITE AT ALL TIMES AND MADE AVAILABLE TO THE DISTRICT UPON REQUEST. AFTER FINAL SITE STABILIZATION HAS BEEN ACHIEVED, TEMPORARY EROSION AND SEDIMENT BMP'S MUST BE REMOVED. AREAS DISTURBED DURING REMOVAL OF THE BMP'S MUST BE STABILIZED IMMEDIATELY.

ALL PREVENTIVE AND REMEDIAL MAINTENANCE WORK, INCLUDING SEDIMENT BASIN AND TRAP CLEANOUT, E&SPC FACILITY REPAIR OR REPLACEMENT, AND ANY STABILIZATION SATISFACTORILY, REPLACEMENT FACILITIES OR MODIFICATIONS OF THOSE INSTALLED WILL BE REQUIRED.

WHERE E&SPC FACILITIES FAIL TO ALLEViate EROSION OR SEDIMENT POLLUTION THE INSPECTION LOG SHALL INCLUDE THE FOLLOWING INFORMATION:

- THE LOCATION & SEVERITY OF E&SPC FACILITY FAILURE AND ANY POLLUTION EVENTS RESULTING FROM THE FAILURE.
- REMEDIAL STEPS TAKEN TO REDUCE, ELIMINATE, AND PREVENT THE RECURRANCE OF THE FACILITY FAILURE AND/OR POLLUTION EVENT.
- A TIMEFRAME TO CORRECT THE FACILITY FAILURE AND/OR POLLUTION EVENT, INCLUDING THE APPROXIMATE FUTURE DATE WHEN THE ACTIVITY WILL RETURN TO COMPLIANCE.

MAINTENANCE PROGRAM

RECORD KEEPING: THE SITE OPERATOR SHOULD KEEP WRITTEN REPORTS OF WHEN EROSION CONTROL BMP'S ARE INSPECTED, CLEANED, REPAIRED, OR OTHERWISE ALTERED. REPORTS SHALL NOTE THE DATE AND TIME OF INSPECTION AND REPAIR, THE NAME OF THE PERSON CONDUCTING THE WORK, TIME SINCE LAST RAINFALL EVENT AND DESCRIPTION OF ANY REPAIRS. RECEIPTS, REPORTS AND RECORDS SHALL BE FILED SHOULD DEP OR THE MUNICIPALITY REQUIRE DOCUMENTATION OF BMP IMPLEMENTATION.

ROCK CONSTRUCTION ENTRANCE:

ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOCKPILE SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE. ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE IMMEDIATELY, IF EXCESSIVE AMOUNTS OF SEDIMENT ARE BEING DEPOSITED ON ROADWAY, LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL LEVELLED OR INSTALL WASH RACK. WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

COMPOST FILTER SOCKS:

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE ABOVE GROUND HEIGHT OF THE SOCK AND DISPOSED OF IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.

COMPOST FILTER SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS WITHIN 24 HOURS OF INSPECTION.

BIOGRADABLE COMPOST FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCK, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

INLET PROTECTION:

INLETS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES 1/2 THE DEPTH OF A FILTER BAG OR WHEN FLOW CAPACITY IS REDUCED SO AS TO CAUSE FLOODING OR BYPASS OF THE INLET.

DAMAGED OR CLODED BAGS SHALL BE REPLACED IMMEDIATELY FOLLOWING INSPECTION.

TOPSOIL STOCKPILE:

GIL FENCE MUST BE PLACED AROUND THE PERIMETER OF ALL STOCKPILES. UPON COMPLETION OR TEMPORARY CESSION OF DISTURBANCE ACTIVITY, OR ANY STAGE THEREOF, THE PROJECT SITE SHALL BE IMMEDIATELY STABILIZED.

Dewatering Bag:

LIMIT PUMPING RATE TO 1/2 THE MANUFACTURER'S MAXIMUM PUMPING RATE.

WHEN SEDIMENTS FILL 1/2 THE VOLUME OF FILTER BAG, IMMEDIATELY REMOVE FROM SERVICE. PROPERLY DISPOSE OF SPENT BAGS AND SEDIMENT.

Concrete Washout:

CONCRETE WASHOUT SHALL BE INSPECTED DAILY. DAMAGED OR LEAKING WASHOUTS SHOULD BE DEACTIVATED AND REPAIRED OR REPLACED IMMEDIATELY. ACCUMULATED MATERIALS SHOULD BE REMOVED WHEN THEY REACH 75% OF THE WASHOUT CAPACITY. ANY PLASTIC LINERS USED SHOULD BE REPLACED WITH EACH CLEANING OF THE WASHOUT FACILITY.

STANDARD E&S PLAN NOTES

1. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, SIGNED AND DATED BY THE REVIEWING AGENCY) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES. THE REVIEWING AGENCY SHALL NOTICe OF ANY CHANGES TO THE APPROVED PLAN PRIOR TO IMPLEMENTATION OF THOSE CHANGES. THE REVIEWING AGENCY MAY REQUIRE A WRITTEN SUBMITAL OF THOSE CHANGES FOR REVIEW AND APPROVAL AT ITS DISCRETION.

2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROVED MUNICIPAL OFFICIALS, THE E&S PLAN PREPARED, A LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE E&S PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE CONSTRUCTION MEETING.

3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL NOTIFY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT PRIOR TO IMPLEMENTATION.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THAT SEQUENCE MUST BE APPROVED IN WRITING FROM THE LOCAL CONSERVATION DISTRICT OR BY THE DEPARTMENT PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED, AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. CLEARING, GRUBBING, AND TOPSOIL STRIPPING SHALL BE LIMITED TO BEING PERFORMED IN EACH STAGE IN THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED IN THE E&S PLAN.

7. AT NO TIME SHALL CONSTRUCTION VEHICLES BE ALLOWED TO ENTER AREAS OUTSIDE THE LIMIT OF DISTURBANCE BOUNDARIES SHOWN ON THE PLAN MAPS.

8. TOPSOIL REQUIREMENTS TO ERECT THE FINISH GRADE OF STOCKPILE AREAS THAT ARE TO BE STABILIZED IN EACH STOCKPILE SHALL BE PROTECTED IN THE MANNER SHOWN ON THE PLAN DRAWINGS. STOCKPILE HEIGHTS SHALL NOT EXCEED 35 FEET. STOCKPILE SLOPES SHALL BE 2H:1V OR FLATTER.

9. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY THE LOCAL CONSERVATION DISTRICT AND/OR THE REGIONAL OFFICE OF THE DEPARTMENT.

10. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED IN ACCORDANCE WITH THE DEPARTMENT'S SOLID WASTE MANAGEMENT REGULATIONS AT 25 PA CODE 260.1 ET SEQ., 271.1 ET SEQ., AND 287.1 ET SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

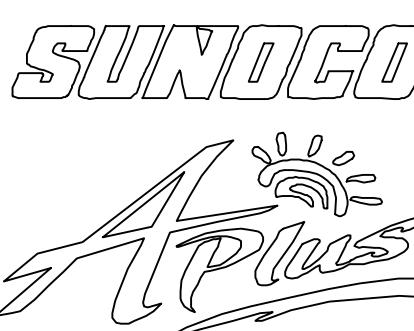
11. ALL OFF-SITE AND BORROW BORROW AREAS MUST HAVE AN E&S PLAN APPROVED BY THE LOCAL CONSERVATION DISTRICT OR THE DEPARTMENT FULLY IMPLEMENTED PRIOR TO BEING USED.

12. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ON SITE IS CLEAN FILL. FORM #P-1001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL DUE TO ANALYTICAL TESTING.

13. ALL PUMPING OF WATER FROM ANY WORK AREA SHALL BE DONE ACCORDING TO THE PROCEDURE DESCRIBED IN THIS PLAN, OVER UNDISTURBED VEGETATED AREAS.

14. VEHICLES AND EQUIPMENT MAY NEITHER ENTER DIRECTLY FROM THE PROPERTY INTO TOWNSHIP AVENUE.

15. UNTIL THE SITE IS STABILIZED, ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION SHALL INCLUDE INSPECTIONS OF ALL EROSION AND SEDIMENT BMP'S AFTER EACH RUNOFF EVENT AND ON A WEEKLY BASIS. ALL PREVENTIVE AND REM



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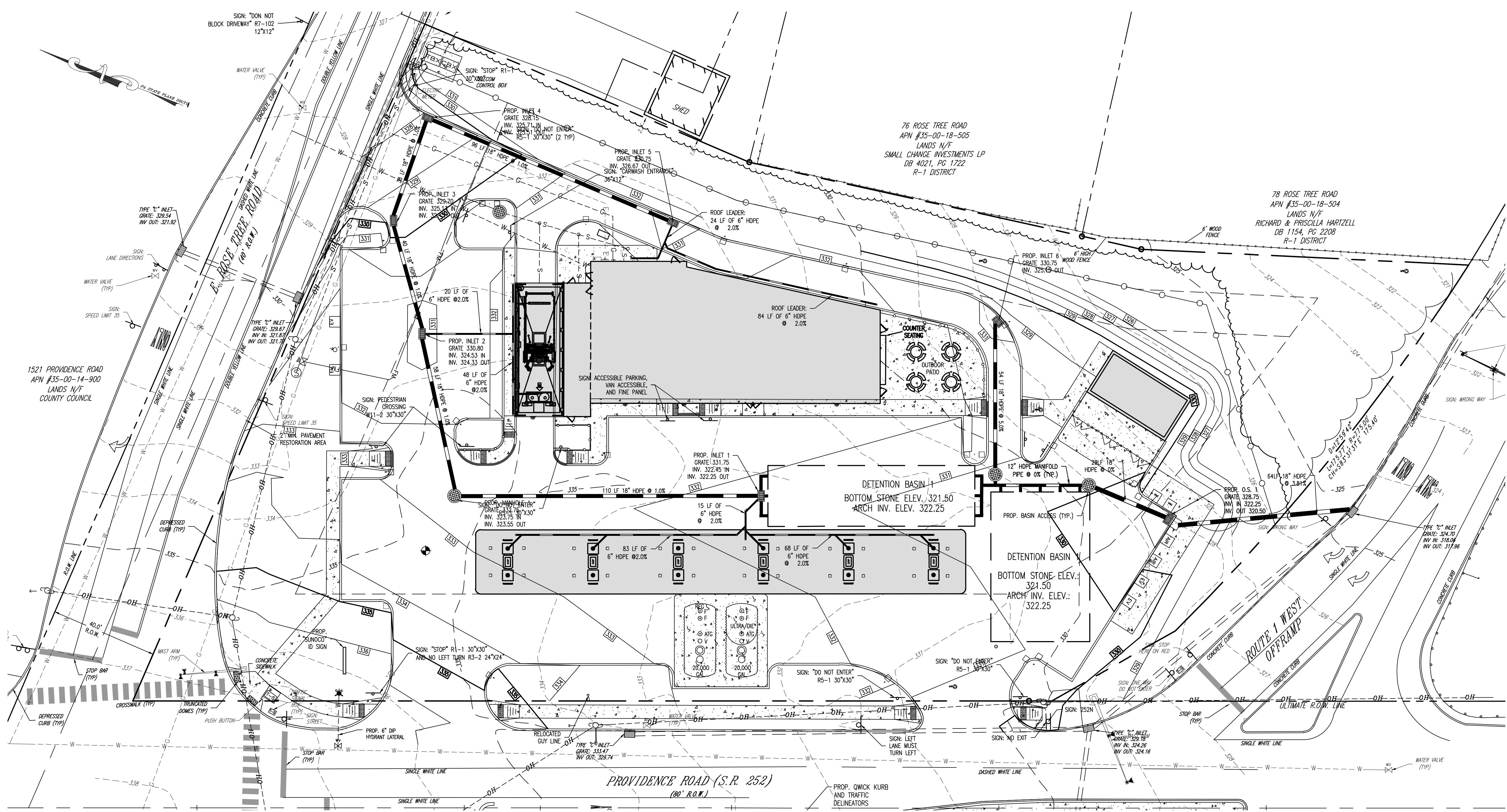
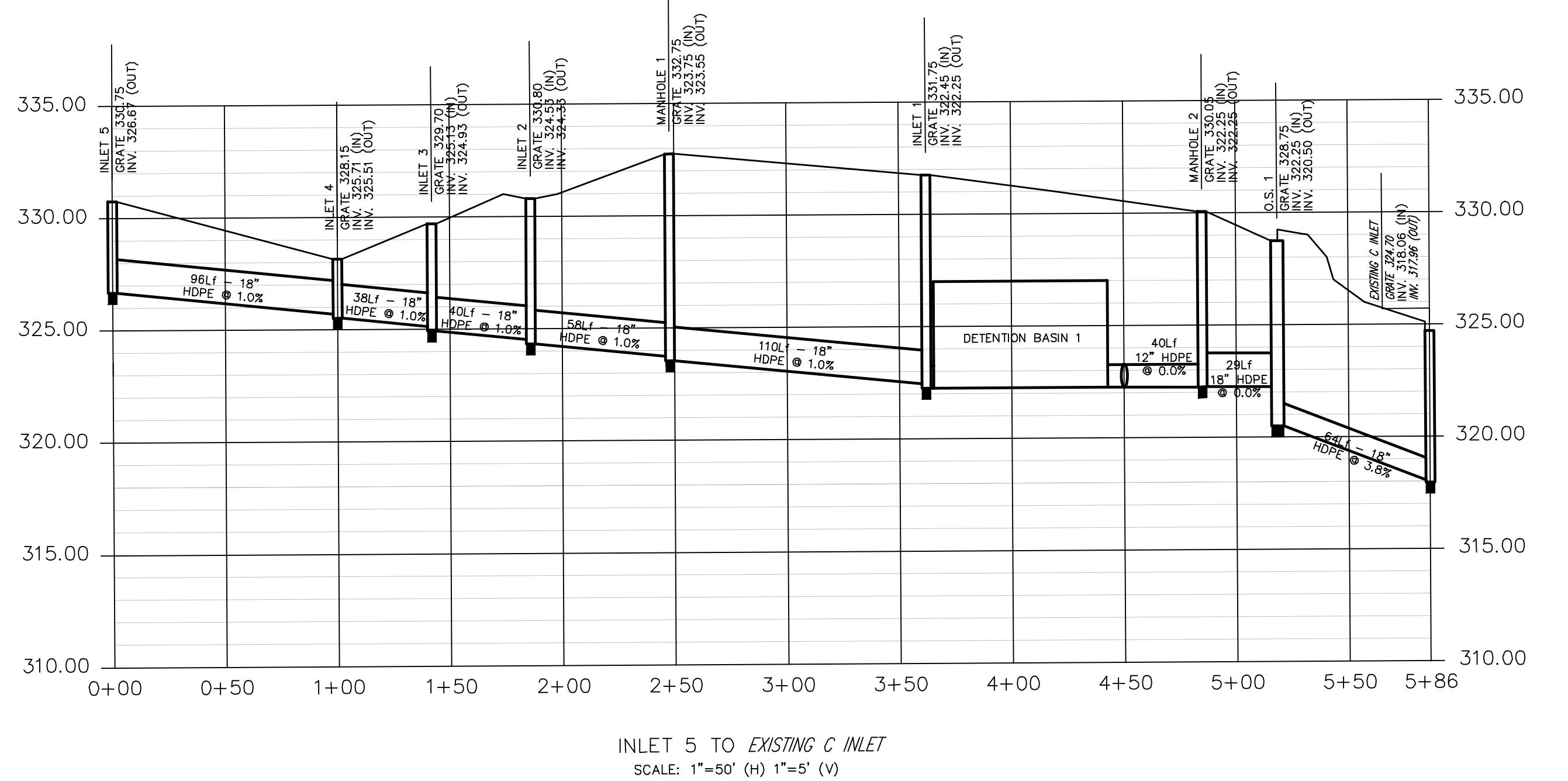
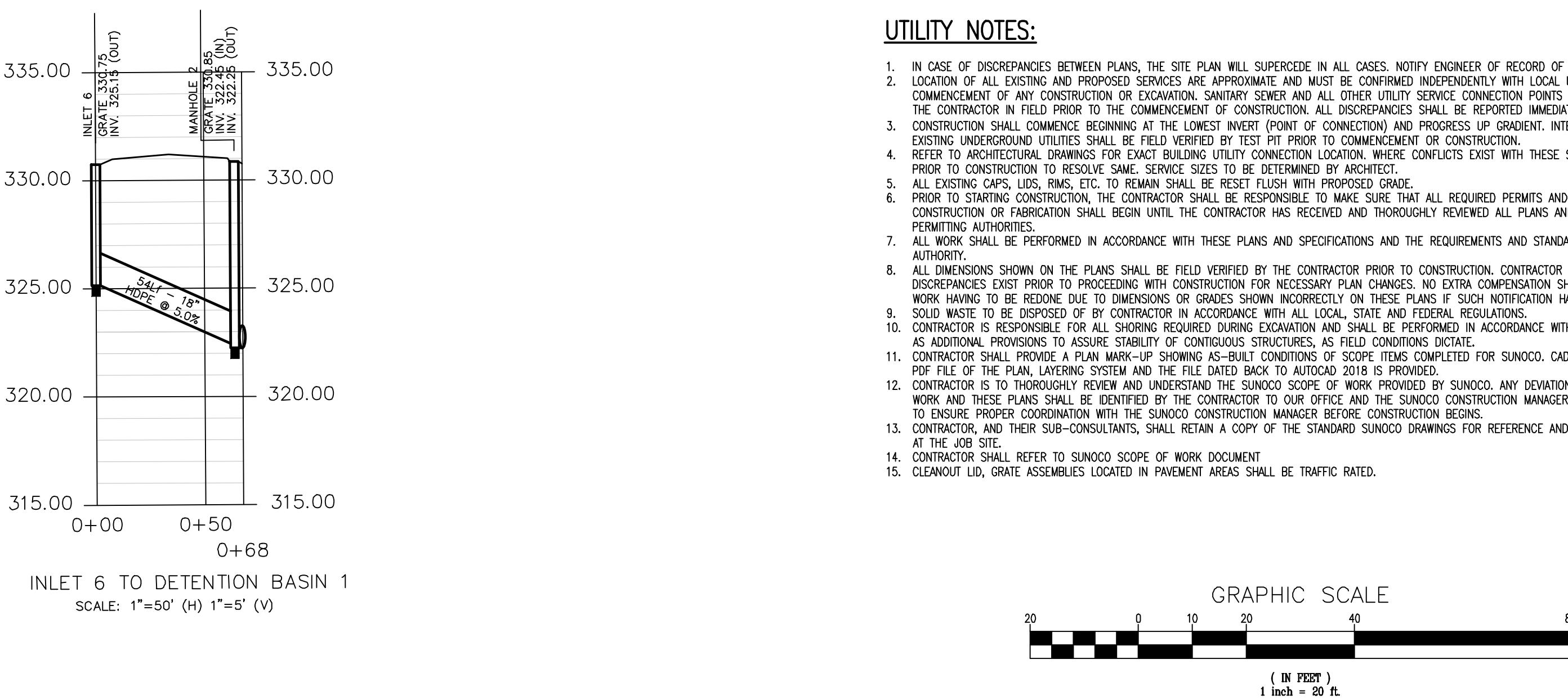
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UTILITY NOTES:

1. IN CASE OF DISCREPANCIES BETWEEN PLANS, THE SITE PLAN WILL SUPERcede IN ALL CASES. NOTIFY ENGINEER OF RECORD OF ANY CONFLICT.
2. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION.
3. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
4. REFER TO EXISTING DRAWINGS FOR EXACT LOCATION AND DIA. OF EXISTING UTILITIES. IF CONFLICTS EXIST WITH THESE SITE PLANS, ENGINEER IS TO BE NOTIFIED PRIOR TO CONSTRUCTION TO REQUEST SAME.
5. ALL EXISTING CAPS, LIDS, RMS, ETC. TO REMAIN SHALL BE RESET FLUSH WITH PROPOSED GRADE.
6. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED ALL PLANS AND OTHER DOCUMENTS BY ALL OF THE PERMITTING AUTHORITIES.
7. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS AND STANDARDS OF THE LOCAL GOVERNING AUTHORITY.
8. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADE INCORRECTLY SHOWN ON THE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
9. CONTRACTOR IS TO BE RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS.
10. CONTRACTOR IS RESPONSIBLE FOR ALL SHEARING REQUIRED DURING EXCAVATION AND SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS, AS WELL AS ADDITIONAL PROVISIONS TO ASSURE STABILITY OF CONTIGUOUS STRUCTURES, AS FIELD CONDITIONS DICTATE.
11. CONTRACTOR SHALL PROVIDE A PLAN MARK-UP SHOWING AS-BUILT CONDITIONS OF SCOPED ITEMS COMPLETED FOR SUNOCO. CAD FILES CAN BE PROVIDED AS LONG AS A PDF FILE OF THE PLAN, LAYERING SAME AND THE FILE DATED BACK TO AUTOCAD 2016 IS PROVIDED.
12. CONTRACTOR IS TO PROVIDE A REVIEW AND APPROVAL OF THE CONSTRUCTION DRAWINGS FOR THE PROJECT BY SUNOCO. ANY DEVIATIONS BETWEEN THE SUNOCO SCOPE OF WORK AND THESE PLANS SHALL BE IDENTIFIED BY THE CONTRACTOR TO OUR OFFICE AND THE SUNOCO CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
13. CONTRACTOR, AND THEIR SUB-CONSULTANTS, SHALL RETAIN A COPY OF THE STANDARD SUNOCO DRAWINGS FOR REFERENCE AND SPECIFICATION OF SUNOCO WORK ITEMS AT THE JOB SITE.
14. CONTRACTOR SHALL REFER TO SUNOCO SCOPE OF WORK DOCUMENT.
15. CLEANOUT LID, GRATE ASSEMBLIES LOCATED IN PAVEMENT AREAS SHALL BE TRAFFIC RATED.



REVISIONS		DATE
NO	BY	DESCRIPTION
1	DN	REVISED PER TOWNSHIP COMMENTS
9/22/2021		

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MARYLAND LICENSE NO. PE-000036
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DELAWARE LICENSE NO. 00000000
NEW YORK LICENSE NO. 099667-1

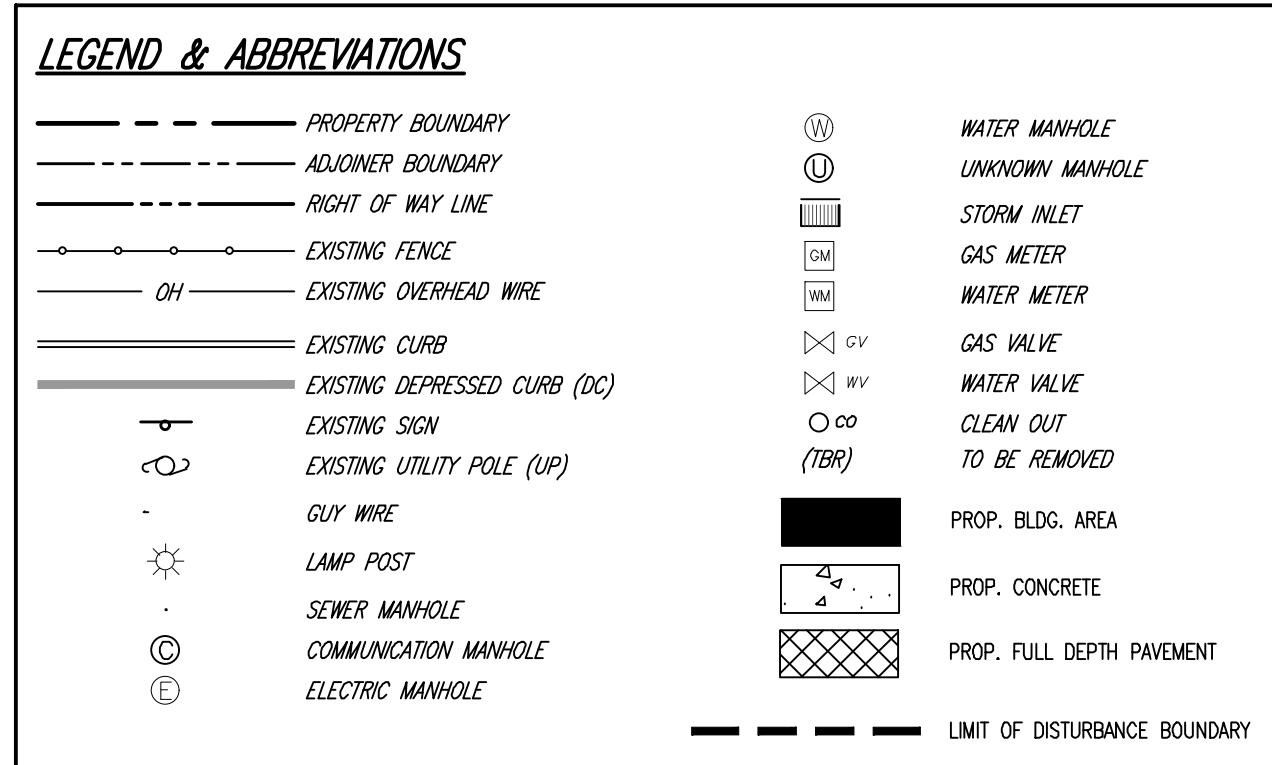
PROJECT LOCATION
LAND DEVELOPMENT DOCUMENTS "SUNOCO 1451 PROVIDENCE ROAD"
PROPOSED COMMERCIAL RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY
PREPARED FOR
SIRHANDI ENTERPRISES, INC.

TITLE
STORMWATER & DRAINAGE PLAN

PROJ. # 19-0425 DATE 05/21/2021
CAD ID. 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

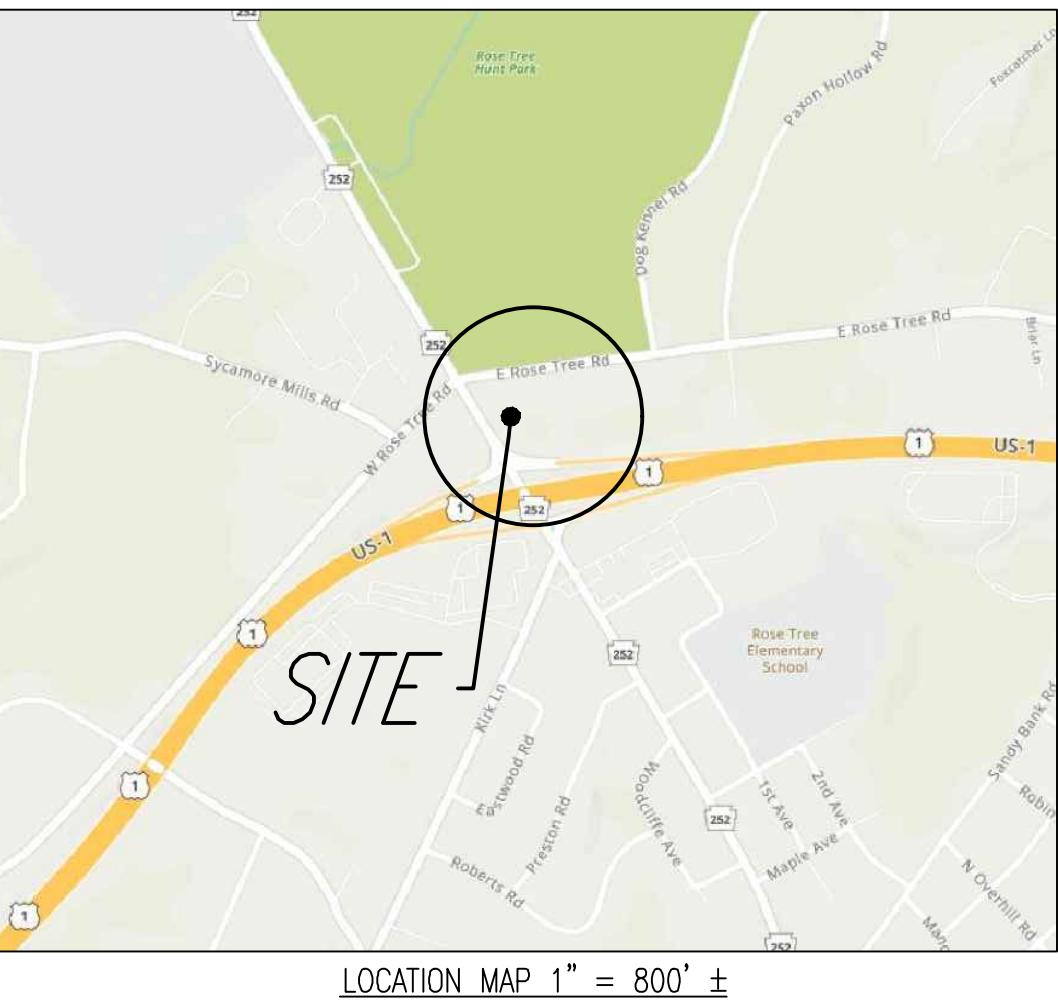
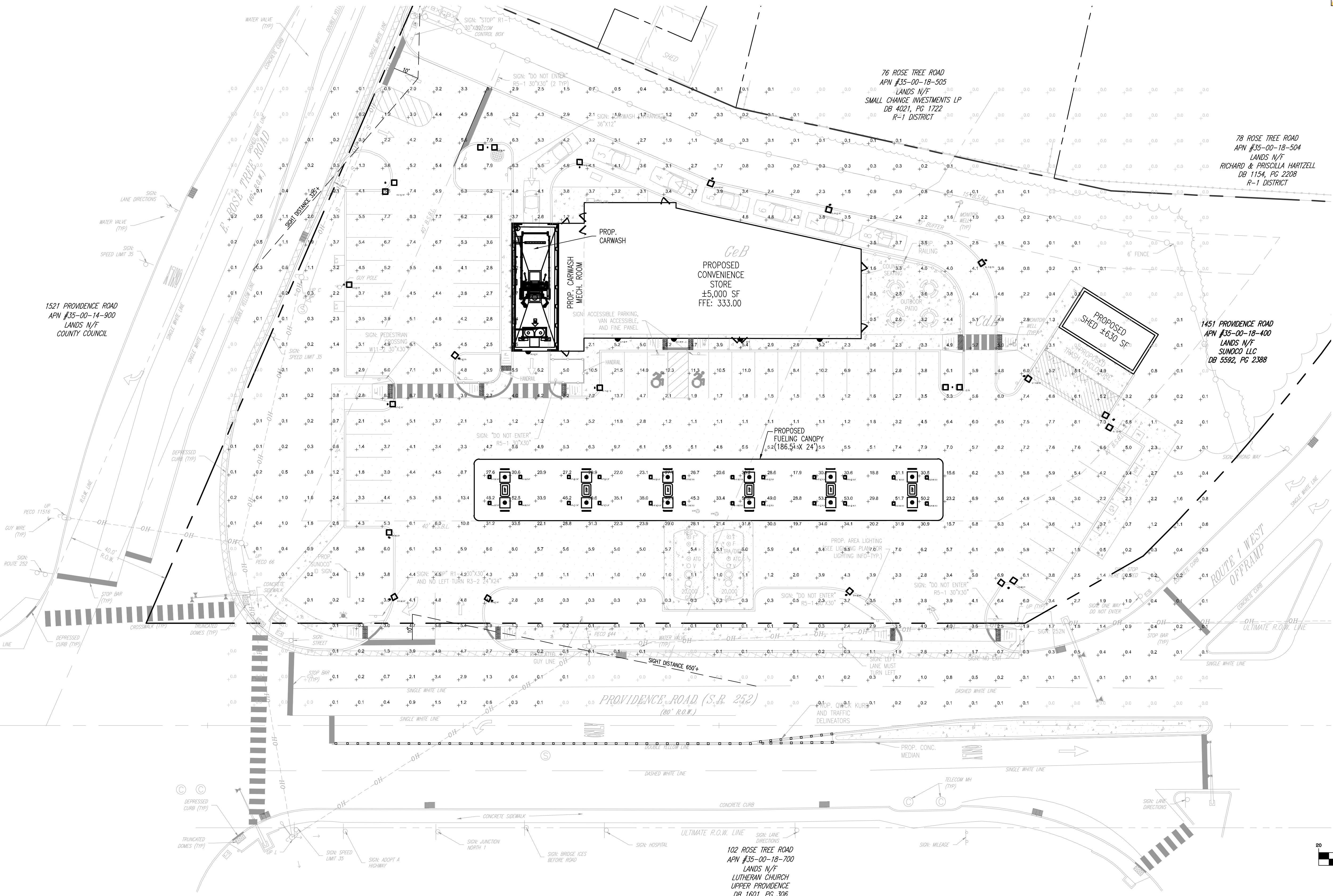
SHEET 13 OF 27

REVISION 1



Schedule								
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Lumens Per Lamp	Light Loss Factor
□	B	24	LSI INDUSTRIES, INC.	SCV-LED-10L-SC-30	LSI - SCOTTSDALE VERTEX (SCV) 3000K, 10,000 LUMENS		10315	0.85
□	D	13	LSI INDUSTRIES, INC.	SLM-LED-09L-SIL-2-30-70CR-IH	LSI - SLICE MEDIUM (PXSIL) 3000K, 9,000 LUMENS		7455	1
□	A	2	LSI INDUSTRIES, INC.	SLM-LED-09L-SIL-2-30-70CR-IH	LSI - SLICE MEDIUM (PXSIL) 3000K, 9,000 LUMENS		7455	1
□	C	3	LSI INDUSTRIES, INC.	SLM-LED-09L-SIL-2-30-70CR-IH	LSI - SLICE MEDIUM (PXSIL) 3000K, 9,000 LUMENS		7455	1
■	E	5	EATON - McGRAW-EDDIE (FORMER COOPER LIGHTING)	GALLEON WALL LUMINAIRE (1) 70 CRI, 3000K, 10500A LIGHTS, 160W EACH, 16 LEDS EACH AND TYPE III OPTICS	GALLEON WALL LUMINAIRE (1) 70 CRI, 3000K, 10500A LIGHTS, 160W EACH, 16 LEDS EACH AND TYPE III OPTICS		352	1

Statistics				
Description	Symbol	Avg	Max	Min
Overall Calc	+	4.2 fc	53.2 fc	0.0 fc



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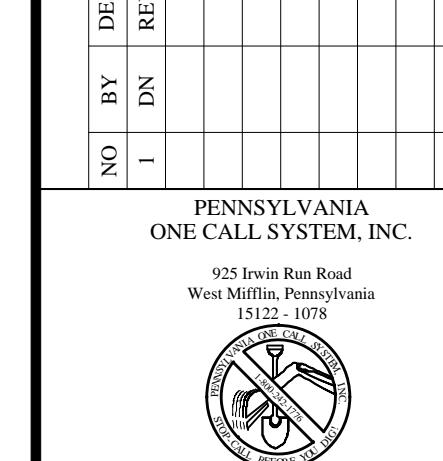
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Philadelphia Region 215-362-2600



PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS

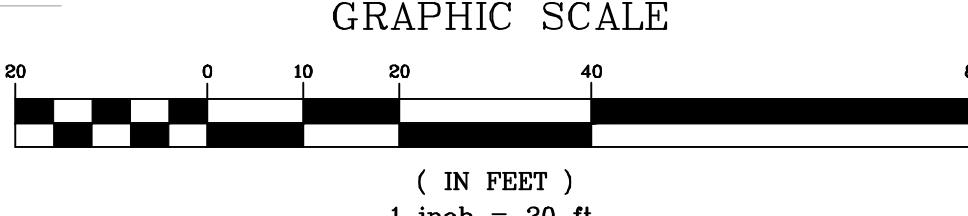
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MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR
SIRHANDI ENTERPRISES, INC.

TITLE

LIGHTING PLAN



PROJ. #	DATE
19-0425	05-21-2021
CAD ID: 19-0425	DRN BY: GTM
SCALE: AS NOTED	CHK BY: JBA

SHEET 14 OF 27

REVISION 1



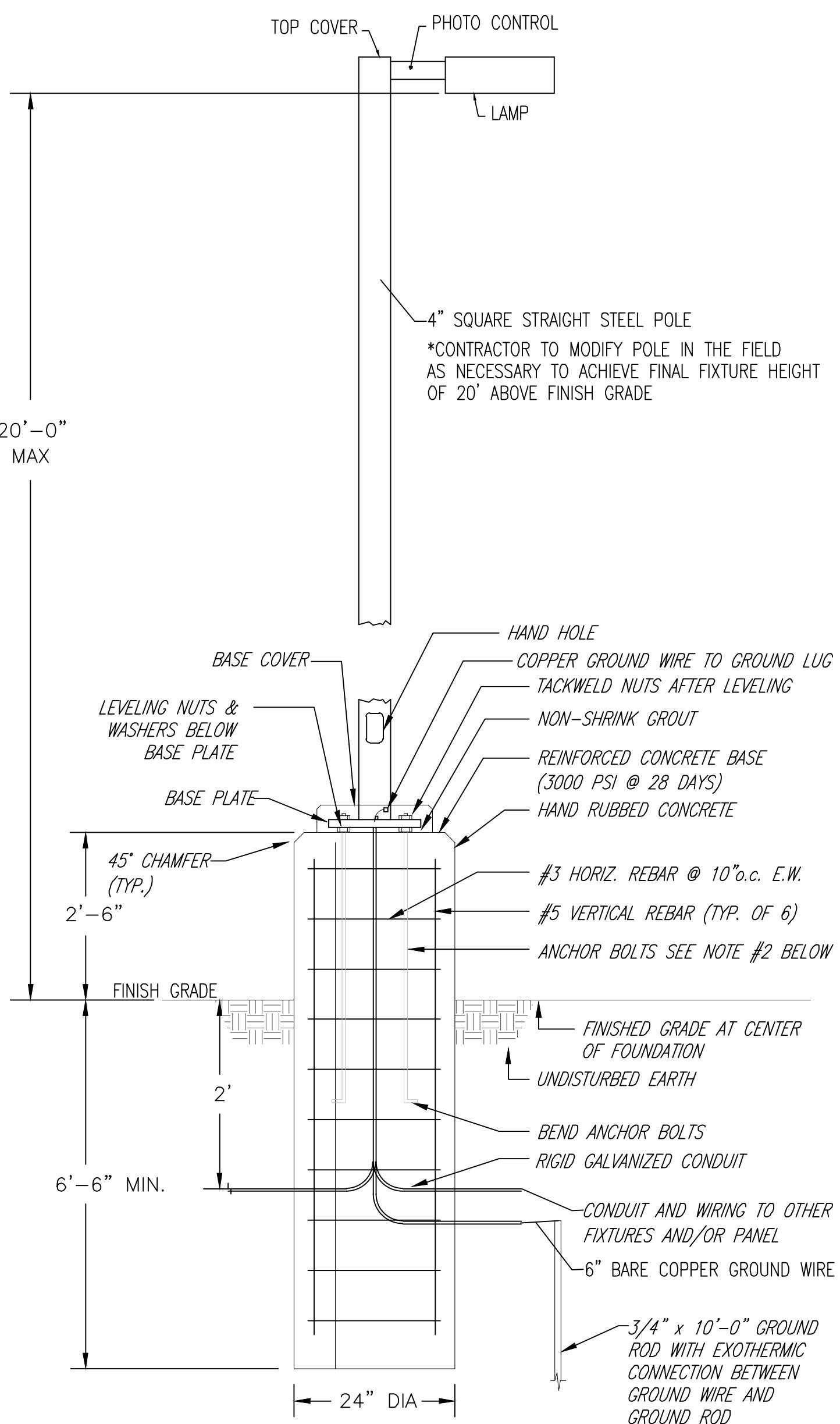
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NOTES:
 1. SUBMIT FOUNDATION SHOP DRAWINGS TO ENGINEER.
 2. ANCHOR BOLTS FURNISHED WITH POLE. BOLT PATTERN, SIZE AND LENGTH AS SPECIFIED BY MANUFACTURER.

12 LIGHT POST FOUNDATION

NO SCALE

Project	Catalog #	Type
Prepared by	Notes	Date



McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Typical Applications

Exterior Wall • Walkway

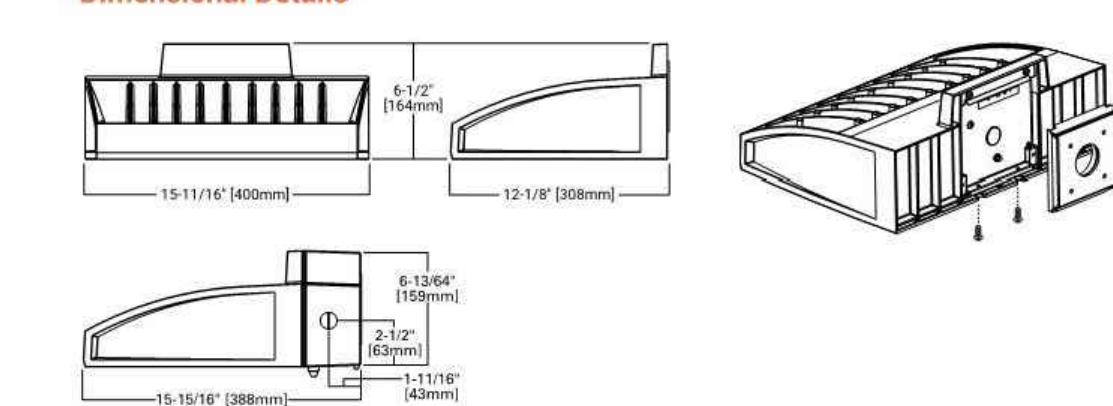
Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6

Quick Facts

- Choice of thirteen high-efficiency, patented AccuLum Optics™
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Dimensional Details



COOPER

Lighting Solutions

LSI

Slice Medium - PXSLM

Outdoor LED Area Light & Pole



The Slice area light's unique, sleek design and technologically advanced features renders it ideal for Commercial & Industrial applications. Paired with our poles, this complete lighting solution provides our customers the highest quality manufacturing coupled with a dedicated quick-ship program.

Fixture Features & Specifications

Optical System

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 3, 5, 8 and 10.

- Silicone optical material does not yellow or crack with age and provides a typical light transmission of 93%.
- Zero uplight.

- Available in 5000K and 4000K color temperatures per ANSI C78.377.
- Minimum CRI of 70.

Electrical

- High-performance driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- 0-10V dimming (10% - 100% standard).
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac)

- L80 Calculated Life: >100K Hours (See Lumen Maintenance on Page 3)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F)

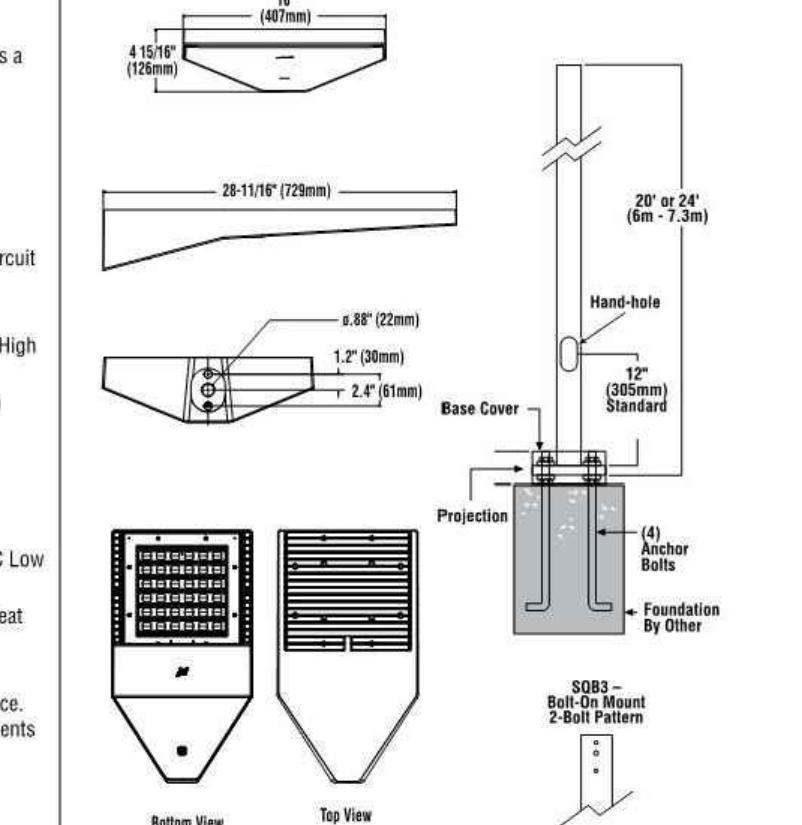
- Power factor: >90
- Input power stays constant over life.

- Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

- High-efficiency LEDs mounted to metal-core circuit board to maximize heat dissipation
- Terminal block provided accepts up to 10ga wire.

- Components are fully encased in potting material for moisture resistance. Driver complies with FCC standards. Driver and key electronic components can easily be accessed.

Product Dimensions

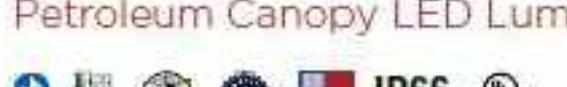


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Scottsdale Vertex™ (SCV)

Petroleum Canopy LED Luminaire



OVERVIEW

Lumen Package	9,000 - 23,000
Wattage Range	67 - 168
Efficacy Range (LPW)	109 - 154
Weight (lbs/kg)	18.5 (8.4)

FEATURES & SPECIFICATIONS

Construction

- Rugged low-profile die-cast aluminum housing, unit, and driver cover.
- Below canopy access to optical chamber and driver.
- IP66 rated luminaire protects integral components from dust and water.
- Fixtures are finished with LSI's Duragrip® polyester powder coat finishing process.
- Combination Forward Throw distribution.
- Optical lens is clear tempered glass and optical grade PMMA acrylic lens.
- Optical system utilizes an industry leading unique distribution pattern to illuminate the area under the gas canopy and the area between the gas canopy and cover store eliminating the need for extra lighting.
- Available in 5000K, 4000K and 3000K color temperatures.
- Minimum CRI of 80.

Electrical

- High-performance programmable driver features over-voltage, under-voltage, short-circuit and over temperature protection.
- Custom lumen and wattage packages available.



QUICK LINKS

[Ordering Guide](#) [Performance](#) [Photometrics](#) [Dimensions](#)

Installation

- 0-10V dimming (10% - 100% standard).
- Standard Universal Voltage (120-277 Vac) Input 50/60 Hz or optional High Voltage (347-480 Vac)
- L80 Calculated Life: >100K Hours (See Lumen Maintenance on Page 2)
- Total harmonic distortion: <20%
- Operating temperature: -40°C to +50°C (-40°F to +122°F)
- Power factor: >90
- Field replaceable surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

Warranty

- LSI LED Fixtures carry a 5-year warranty or 10-year warranty with registration for petroleum applications only (contact your LSI representative for details).

Listings

- Listed to UL 1598 and UL 8750.
- Meets Buy American Act requirements.
- State of California Title 24 Compliant with L1, Division 2, with the exception of gas canopies.
- DesignLight Consortium (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/DPL to confirm which versions are qualified.
- IDA compliant with 3000K or lower color temperature.

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VIRGINIA LICENSE NO. 0402 045725
IDAHO LICENSE NO. 1444
NEW YORK LICENSE NO. 093667-1

LAND DEVELOPMENT DOCUMENTS
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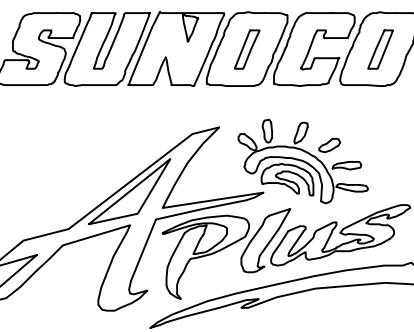
TITLE

LIGHTING DETAILS

PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

SHEET 15 OF 27

REVISION 1



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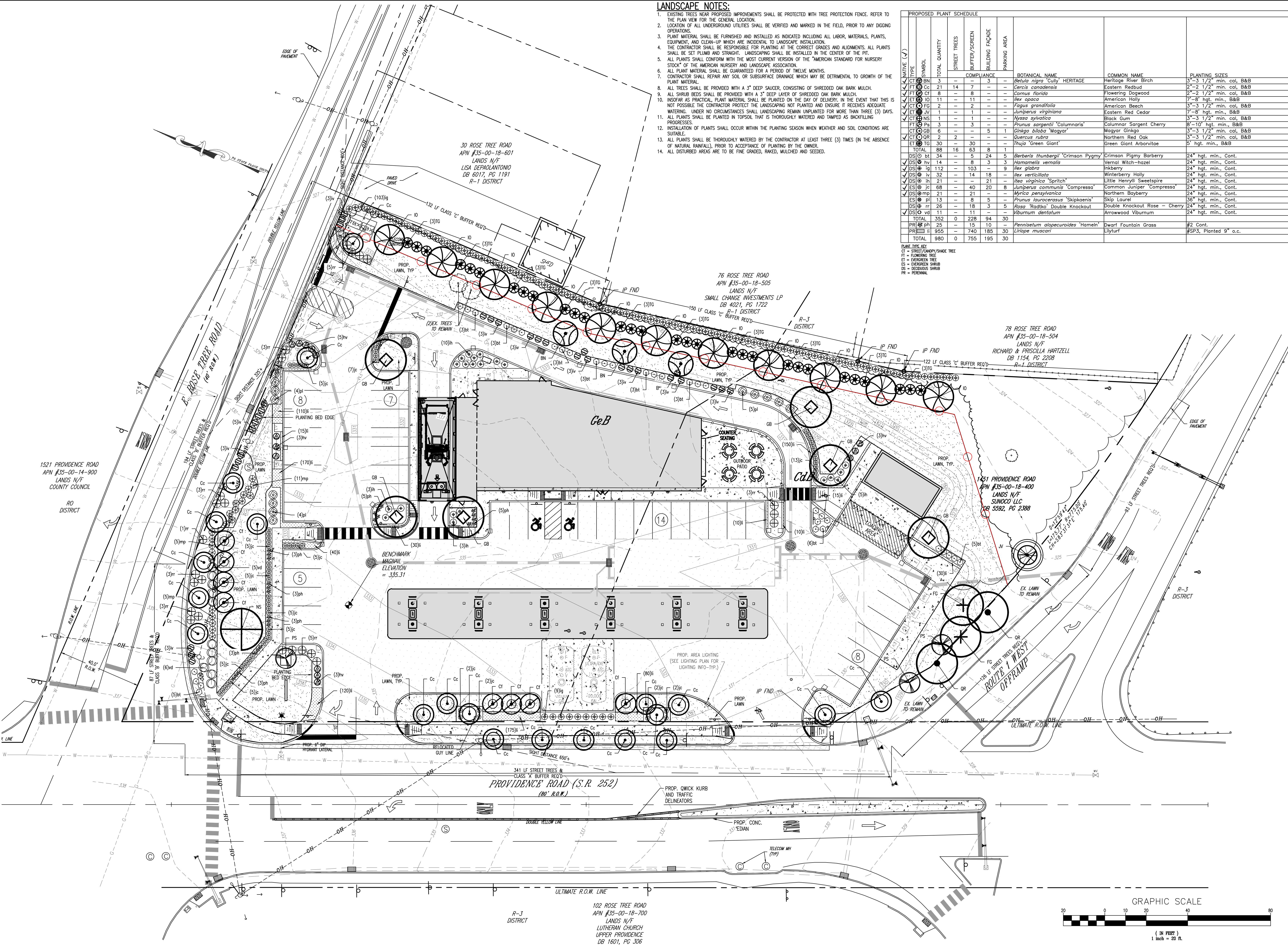
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LANDSCAPE NOTES:

- EXISTING TREES NEAR PROPOSED IMPROVEMENTS SHALL BE PROTECTED WITH TREE PROTECTION FENCE. REFER TO THE PLAN VIEW FOR THE GENERAL LOCATION.
- LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE VERIFIED AND MARKED IN THE FIELD, PRIOR TO ANY DIGGING OPERATIONS.
- PLANT MATERIAL SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, AND CLEAN-UP WHICH ARE INDETERMINATE TO LANDSCAPE INSTALLATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT THE CORRECT GRADES AND ALIGNMENTS. ALL PLANTS SHALL BE SET PLUMB AND STRAIGHT. LANDSCAPING SHALL BE INSTALLED IN THE CENTER OF THE PIT.
- ALL PLANTS SHALL CONFORM TO THE MOST CURRENT VERSION OF THE "AMERICAN STANDARD FOR NURSERY STOCK" OF THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
- ALL PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF TWELVE MONTHS.
- CONTRACTOR SHALL REPAIR ANY SOIL OR SUBSURFACE DRAINAGE WHICH MAY BE DETERIMENTAL TO GROWTH OF THE PLANT MATERIAL.
- ALL TREES SHALL BE PROVIDED WITH A 3" DEEP SAUCER, CONSISTING OF SHREDDED OAK BARK MULCH.
- ALL SHRUB BEDS SHALL BE PROVIDED WITH A 3" DEEP LAYER OF SHREDDED OAK BARK MULCH.
- INsofar AS PRACTICAL, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR PROTECT THE LANDSCAPING NOT PLANTED AND ENSURE IT RECEIVES ADEQUATE WATERING. UNDER NO CIRCUMSTANCES SHALL LANDSCAPING REMAIN UNPLANTED FOR MORE THAN THREE (3) DAYS.
- ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROGRESSES.
- INSTALLATION OF PLANTS SHALL OCCUR WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE.
- ALL PLANTS SHALL BE THOROUGHLY WATERED BY THE CONTRACTOR AT LEAST THREE (3) TIMES (IN THE ABSENCE OF NATURAL RAINFALL), PRIOR TO ACCEPTANCE OF PLANTING BY THE OWNER.
- ALL DISTURBED AREAS ARE TO BE FINE GRADED, RAKED, MULCHED AND SEDED.

PROPOSED PLANT SCHEDULE			
STREET TREES	BUFFER/SCREEN	BUILDING FAÇADE	PARKING AREA
STREET NATIVE (4)			
CT TYPE SYMBOL			
CT Cc BN	3	3	
✓ CT Cc	21	14	7
✓ CT Cf	8	8	
✓ CT IO	11	11	
✓ CT FG	2	2	
✓ CT JV	1	1	
✓ CT NS	—	—	
CT Pg	3	3	
CT Or	6	5	
✓ CT TG	30	30	
TOTAL	88	16	63
DS (S) ht	34	5	24
✓ DS (S) hv	14	8	3
✓ DS (S) ig	112	103	—
✓ DS (S) iv	32	14	18
✓ DS (S) ih	21	—	21
✓ DS (S) jc	68	40	20
✓ DS (S) mp	21	21	
ES (S) pl	13	8	5
✓ DS (S) rr	29	18	3
✓ DS (S) rd	11	11	
TOTAL	352	0	228
PR (S) ph	25	15	10
PR (S) II	955	740	185
TOTAL	980	0	755
	195	30	

PLANT TYPE KEY
CT = STREET/CANOPY/SHADE TREE
FT = FLOWERING TREE
EV = EVERGREEN
ES = DECIDUOUS SHRUB
PR = PERENNIAL



REVISIONS	
NO	BY
1	DN REVISED PER TOWNSHIP COMMENTS

PENNSYLVANIA
ONE CALL SYSTEM, INC.
925 Irwin Run Road
West Mifflin, Pennsylvania
15122-1078

BEFORE YOU DIG ANYWHERE IN
PENNSYLVANIA CALL 1-800-242-1776
NON-MEMBERS MUST BE
CONTACTED DIRECTLY
PA LAW REQUIRES THREE WORKING DAYS
NOTICE TO THE UTILITY TO EXCAVATE,
DRILL, BLAST OR DEMOLISH

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE-1438
PENNSYLVANIA LICENSE No. PE-055536
MARYLAND LICENSE No. 20131
NEW YORK LICENSE No. 2402730400
VIRGINIA LICENSE No. 0402 045725
LOUISIANA LICENSE No. 144
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

LANDSCAPE PLAN

PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR
SIRHANDI ENTERPRISES, INC.

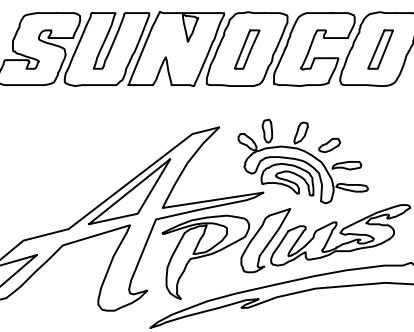
TITLE

LANDSCAPE
PLAN

PROJ. # 19-0425 DATE 05-21-2021
CAD ID. 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA

SHEET 16 OF 29

REVISION 1



Cornerstone Consulting Engineers & Architectural, Inc.

Pocono Region

570-839-1770

213 West Main Street, Lansdale, PA 19446
www.cornerstoneinc.com

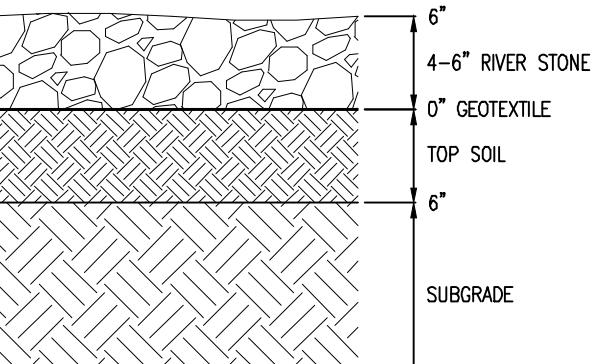
Phone: 215-62-2600

Lehigh Valley Region
610-820-8200

UPPER PROVIDENCE TOWNSHIP - LANDSCAPE COMPLIANCE CHART		
	REQUIRED	PROPOSED
ZONING: B - BUSINESS DISTRICT		
ZONING:		
§1230.18(b) PLANT SPECIES VARIETY		
(1) SHADE AND STREET TREES; 60% MIN. NATIVE TREES PROPOSED: 28 TREES \times 0.6 = 16.8 TREES		
(2) ORNAMENTAL AND FLOWERING TREES; 50% MIN. NATIVE ORN. FLOWERING TREES PROPOSED: 32 TREES \times 0.5 = 16 TREES		
(4) SHRUBS; 50% NATIVE SHRUBS PROPOSED: 352 SHRUBS \times 0.5 = 176 NATIVE SHRUBS		
(6) WHEN 50 OR MORE TREES ARE REQUIRED, NO MORE THAN 50% MAY BE OF ONE SPECIES. TOTAL REQUIRED TREES: 72 TREES ¹ 72 \times 0.3 = 21.6 MAX. AMOUNT TREE PER SPECIES		
§1230.18(c) TREE REPLACEMENT		
TOTAL INCHES TBR: 121.5 ² 122" \times 3" (MIN. CAL.) = 40.7 TREES		
§1230.18(d) STREET TREES		
ONE STREET TREE (3.5" DBH MIN.) PER 50 LF OF STREET FRONTOAGE, OR FRACTION THEREOF, WITHOUT DEDUCTING THE AREAS OF DRIVEWAY CUTS OR CROSSWALKS.		
ROSE TREE RD: 281 LF 281/50=5.62 TREES		
PROVIDENCE RD: 341 LF 341/50=6.82 TREES		
ROUTE 1 WEST OFFRAMP: 219 LF 291/50=5.82 TREES		
§1230.18(e) PROPERTY SCREEN PLANTINGS		
WESTERN BOUNDARY USE: ARTERIAL STREET (PROVIDENCE RD; S.R. 252) REQUIRED SCREEN: NONE		
NORTHERN BOUNDARY USE: LOCAL STREET (ROSE TREE RD) REQUIRED SCREEN: NONE		
EASTERN BOUNDARY USE: RESIDENTIAL 404.56 LF REQUIRED SCREEN: SCREENING; 1 SHADE TREE PER 50 FT 404.56/50=8.09 TREES		
SOUTHERN BOUNDARY USE: COLLECTOR STREET, 228.89 LF (ROUTE 1 WEST OFF-RAMP) REQUIRED SCREEN: NONE		
§1230.18(f) BUILDING FAÇADE PLANTING		
ONE SHADE TREE PER 50 FT OF BUILDING FAÇADE PLUS FIVE SMALL SHRUBS PER 20 FT BUILDING FAÇADE. PROPOSED FAÇADE PERIMETER: 375 FT 375/50=7.5 SHADE TREE 375/20=18.75 ³ SMALL SHRUBS		
§1260 BUFFER REQUIREMENTS		
PROPOSED USES: E3 (TYPE 3) CONVENIENCE STORE, E13 (TYPE 5) FUEL DISPENSING SERVICE STATION, AND E17 CAR WASH WESTERN BOUNDARY USE: ARTERIAL STREET (PROVIDENCE RD; S.R. 252) REQUIRED BUFFER: CLASS 'A', 1 CANOPY TREE PER 40 FEET PROVIDENCE RD: 275 LF 341/40=8.5 TREES		
NORTHERN BOUNDARY USE: LOCAL STREET (ROSE TREE RD) REQUIRED BUFFER: CLASS 'B', 1 CANOPY TREE PER 40 FT + 1 HEDGE ALONG BOUNDARY (3 FT CENTERS) ROSE TREE RD: 281 LF 281/40=7.01 TREES		
281/3=93.7 SHRUBS FOR HEDGE EASTERN BOUNDARY USE: B-6 (TYPE 2) SINGLE HOUSEHOLD DWELLING/APT. REQUIRED BUFFER: CLASS 'C', 1 EVERGREEN PER 30 FT + 1 HEDGE ALONG BOUNDARY (3 FT CENTERS) RESIDENTIAL BOUNDARY: 404.56 LF 404/30=13.5 EVERGREEN TREES		
404/3=134.7 SHRUBS FOR HEDGE SOUTHERN BOUNDARY USE: COLLECTOR STREET (ROUTE 1 WEST OFF-RAMP) REQUIRED BUFFER: CLASS 'B', 1 CANOPY TREE PER 40 FT + 1 FLOWERING TREE PER 60 FT + 1 EVERGREEN PER 60 FT 219/40=5.5 CANOPY TREES 219/60=3.7 FLOWERING TREES 219/60=3.7 EVERGREEN TREES		
§1262.04.G. OFF-STREET PARKING LANDSCAPING		
NO LESS THAN 10% OF THE ENTIRE PAVED AREA USED FOR PARKING AND DRIVE AREAS MUST BE LANDSCAPED WITH APPROPRIATE TREES AND SHRUBS AND CONTINUALLY MAINTAINED.		
TOTAL PAVED AREA: 35,525 SF REQUIRED LANDSCAPE AREA: 35,525 \times 0.10 = 3,552.5 SF PROPOSED LANDSCAPE AREA: 6,014 SF / 35,525 SF = 0.1693		

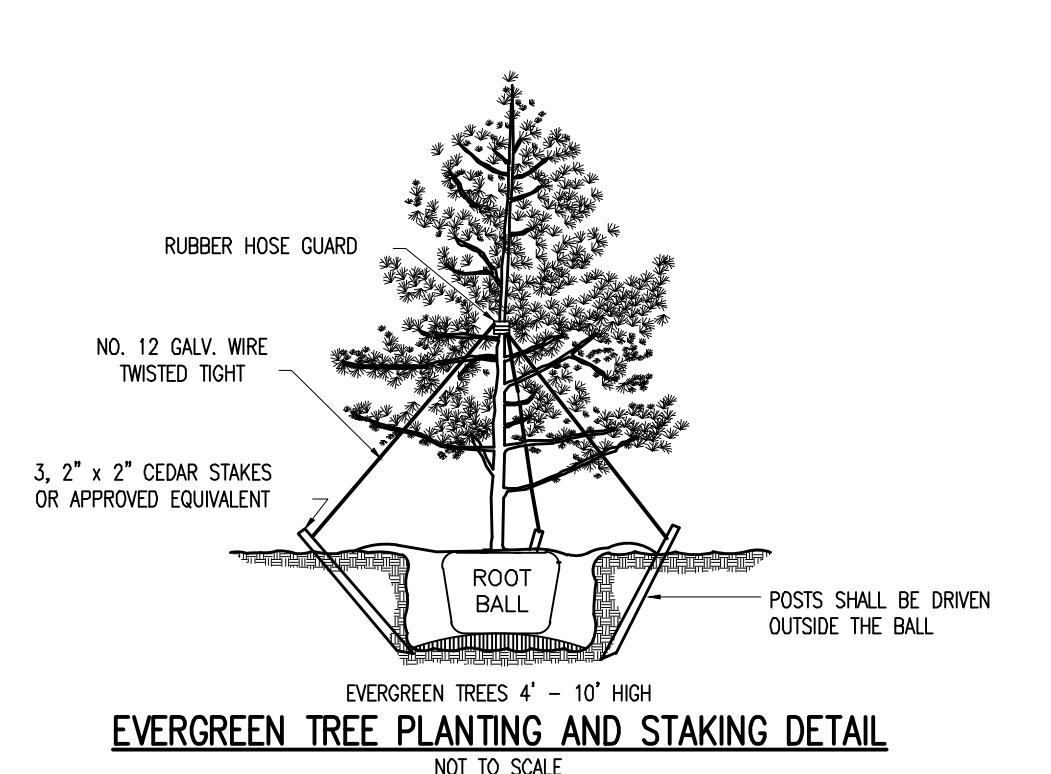
NOTES:
¹ DOES NOT INCLUDE TREES BEING PROPOSED FOR PLANTING OFF-SITE TO SATISFY §1230.18(c) MATURE TREE REPLACEMENT.
² REQUIRED REPLACEMENT TREES WILL BE PROVIDED OFF-SITE DUE TO LACK OF PLANTING SPACE ON-SITE.
³ EXEMPTION WILL BE REQUESTED FROM PLANNING COMMISSION. THE REQUIRED TREES WILL BE LOCATED UNDER EXISTING OVERHEAD POWERLINES, THEREFORE A SMALLER TREE SPECIES WILL BE PROVIDED INSTEAD.

TREE INVENTORY				
NO.	CAL.	MULT.(IN)	REQ.(IN)	M
1	16	6	2.7	
2	6	-	-	
3	16	6	2.7	
4	8	6	1.3	
5	10	-	-	
6	10	-	-	
7	6	-	-	
8	12	6	2.0	
9	15	6	2.5	
10	15	6	2.5	
11	12	6	2.0	
12	20	6	3.3	
13	20	6	3.3	
14	10	-	-	
15	13	6	2.2	
16	13	6	2.2	
17	23	6	3.6	
18	21	6	3.5	
19	13	6	2.2	
20	10	6	1.7	
21	11	6	1.8	
22	18	6	3.0	
23	21	6	3.5	
24	21	6	3.5	
25	33	3	11.0	
26	15	-	-	
27	12	6	2.0	
28	14	6	2.3	
29	6	-	-	
30	12	6	2.0	
31	6	-	-	
32	16	6	2.7	
33	6	-	-	
34	-	-	-	
35	-	-	-	
36	-	-	-	
37	10	-	-	
38	19	6	3.2	
39	18	6	3.0	
40	20	6	3.3	
41	16	6	2.7	
42	9	-	-	
43	8	-	-	
44	10	-	-	
45	20	-	-	
46	9	-	-	
47	10	-	-	
48	8	-	-	
49	8	-	-	
50	37	3	12.3	
51	18	6	3.0	
52	6	-	-	
53	15	6	2.5	
54	12	6	2.0	
55	16	6	2.7	
56	8	-	-	
57	10	-	-	
58	6	-	-	
59	15	6	2.5	
60	14	6	2.3	
61	11	-	-	
62	20	6	3.3	
63	6	-	-	
64	8	-	-	
65	6	-	-	
66	6	-	-	
67	6	-	-	
68	10	-	-	
69	9	-	-	
70	6	-	-	
71	10	-	-	
72	7	-	-	
73	27	3	9.0	
TOTAL REPL. REQ.(IN)				121.5
TOTAL MATURE TREES TBR				-
10% LANDSCAPING (3,553 SF)				16.9% LANDSCAPING (6,014 SF)

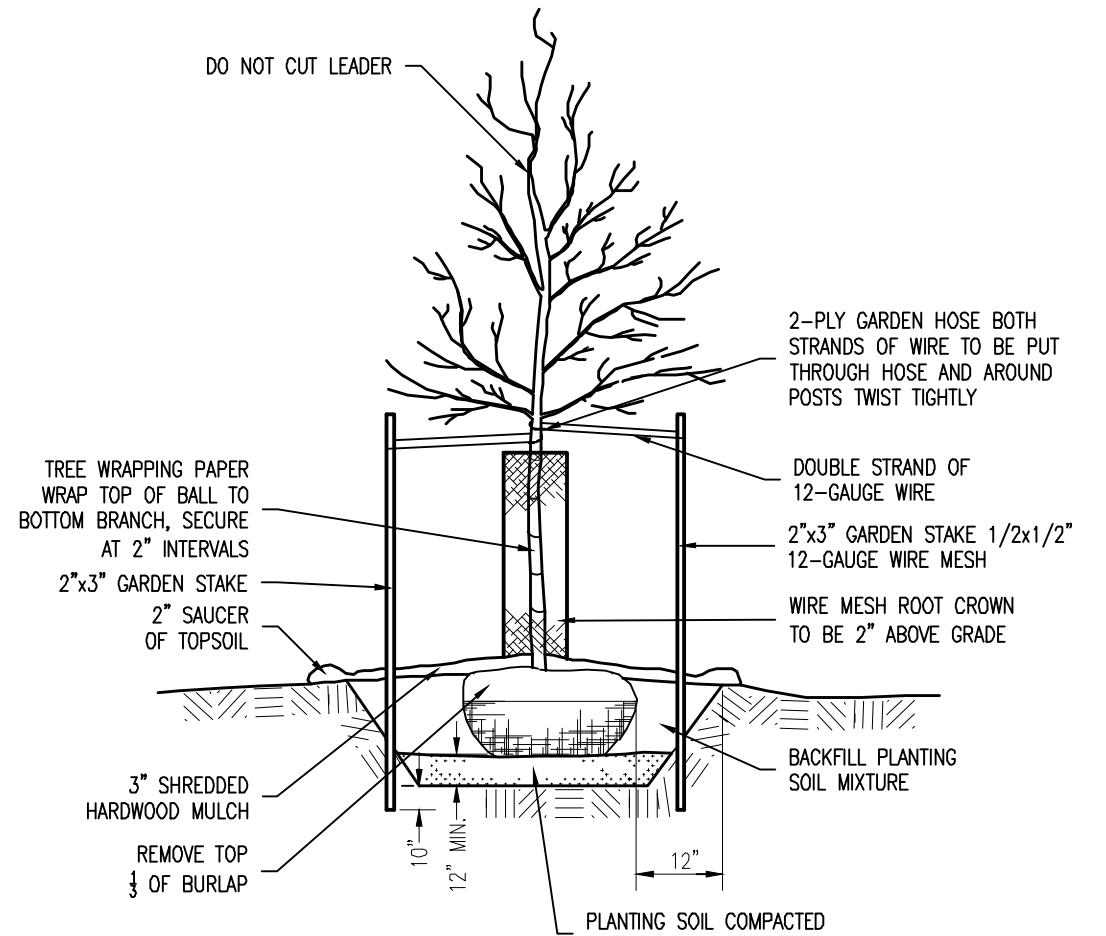


STONE PLANTING BED DETAIL*

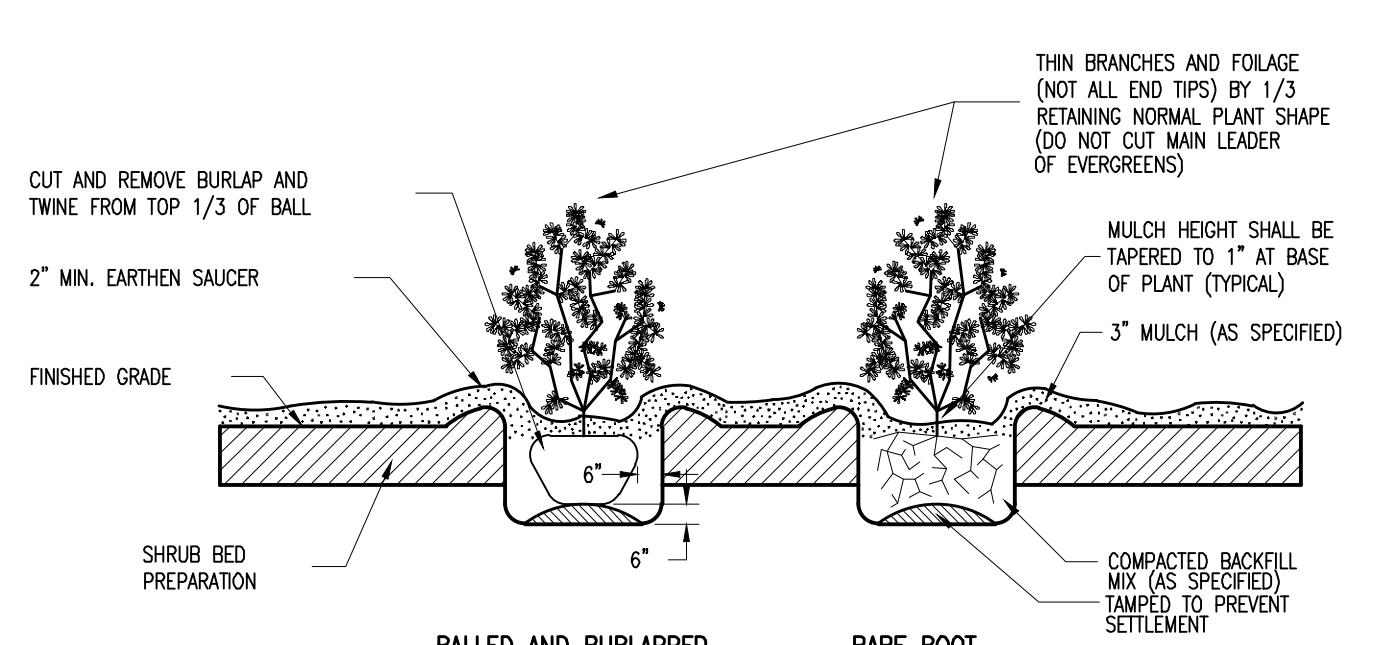
*NOTE: MATCH EXISTING STONE UNLESS DIRECTED BY WENDY'S CM TO DO OTHERWISE.



EVERGREEN TREE PLANTING AND STAKING DETAIL



DECIDUOUS TREE PLANTING & STAKING DETAIL



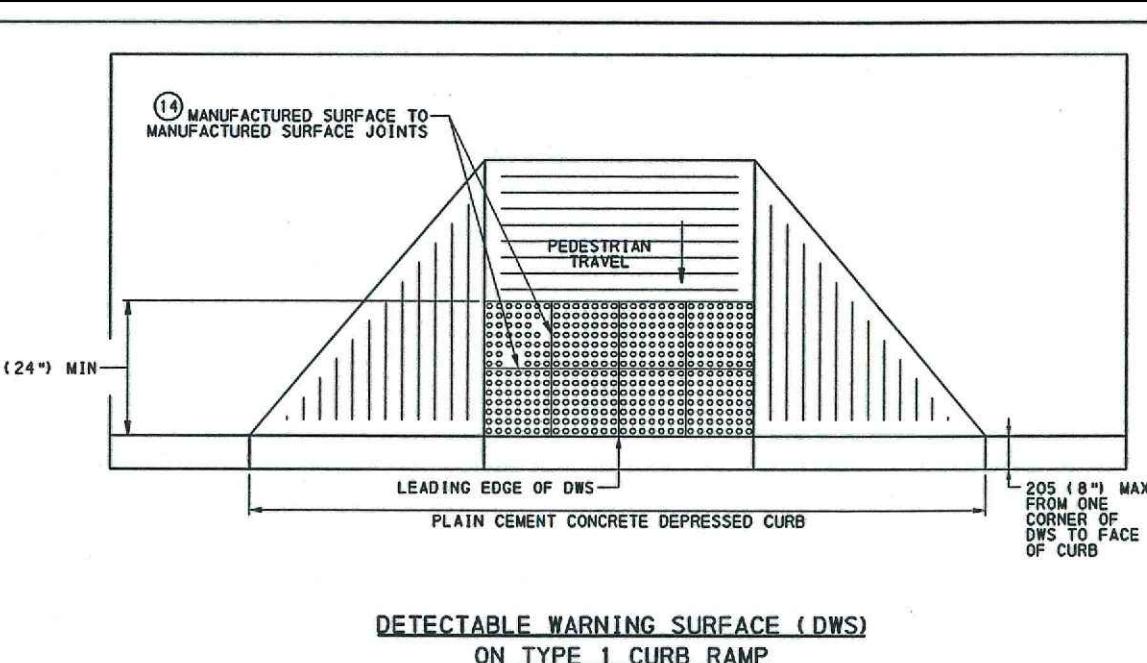
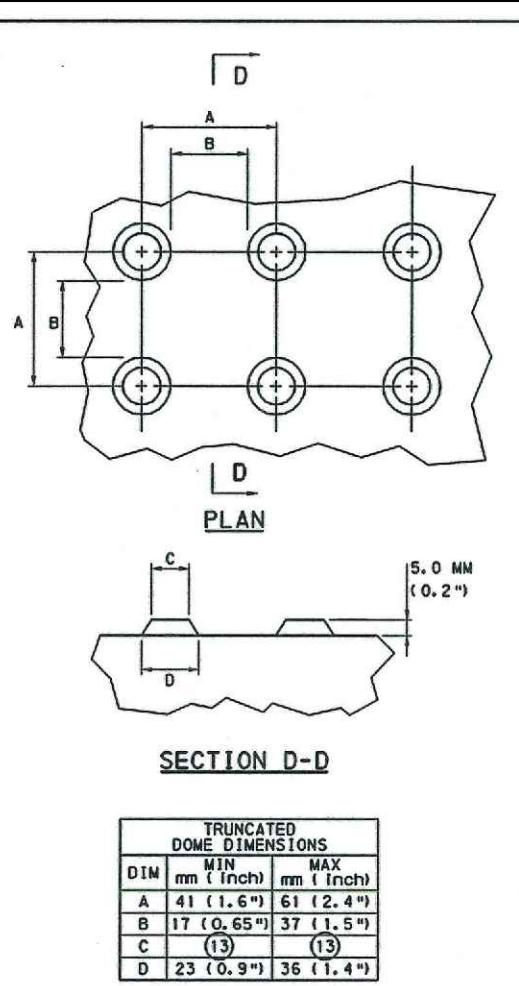
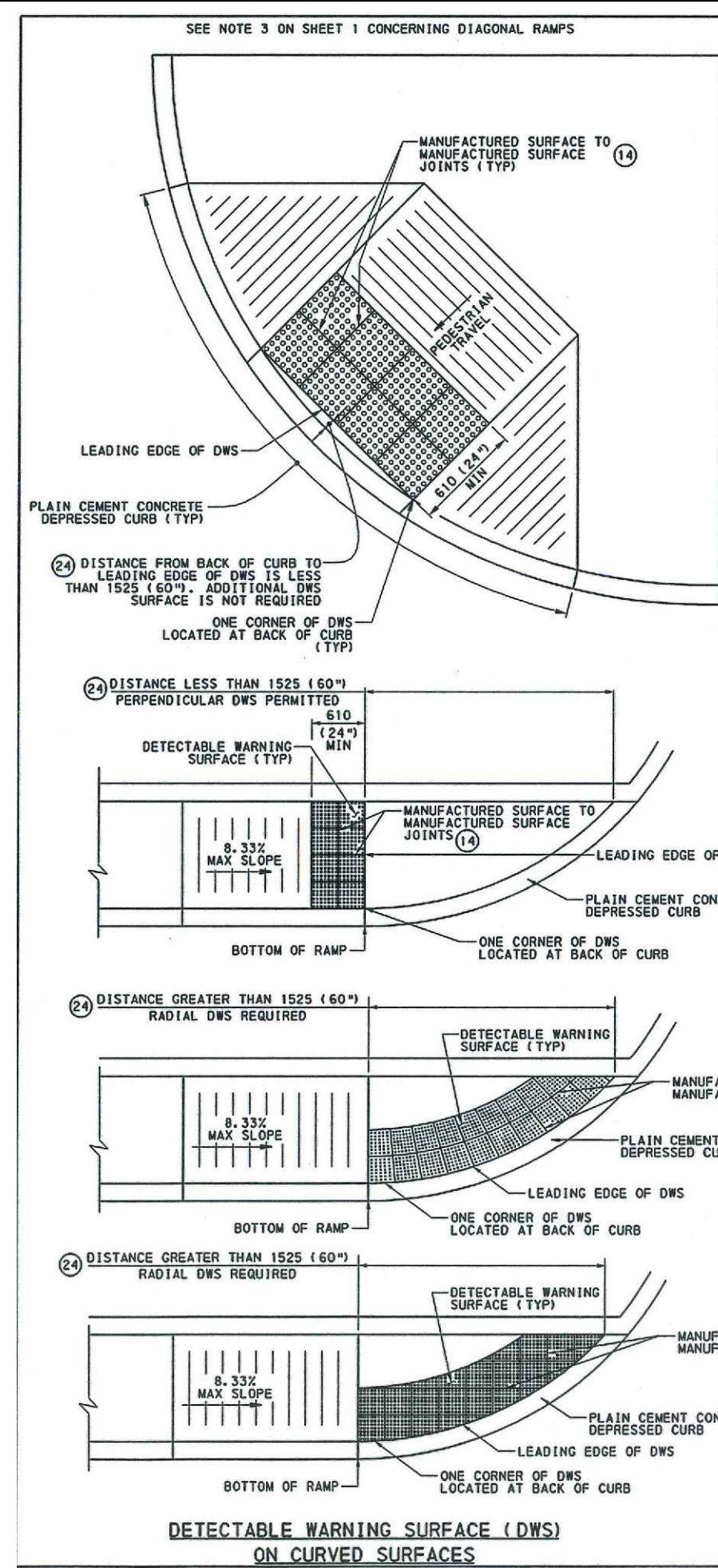
SHRUB PLANTING AND SHRUB BED PREPARATION

J.B. ANDERSON
PROFESSIONAL ENGINEER
DELAWARE LICENSE NO. PE-1438
MARYLAND LICENSE NO. PE-2013
NEW JERSEY LICENSE NO. 2402120400
VIRGINIA LICENSE NO. 0402 045725
LOUISIANA LICENSE NO. 134
NEW YORK LICENSE NO. 099667-1

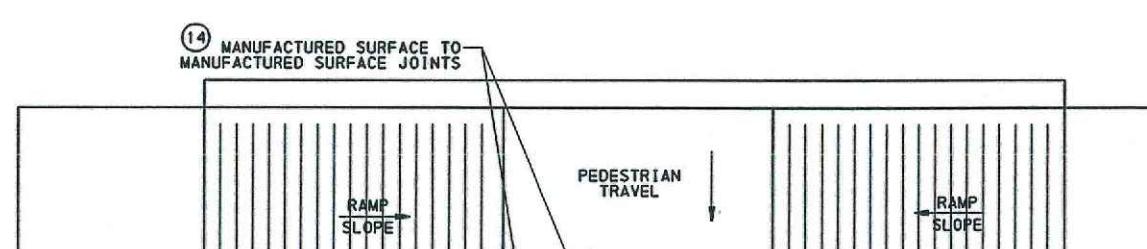
PROJECT LOCATION
LAND DEVELOPMENT DOCUMENTS
"SUNOCO 1451 PROVIDENCE ROAD"
PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY
PREPARED FOR
SIRHANDI ENTERPRISES, INC.

TITLE

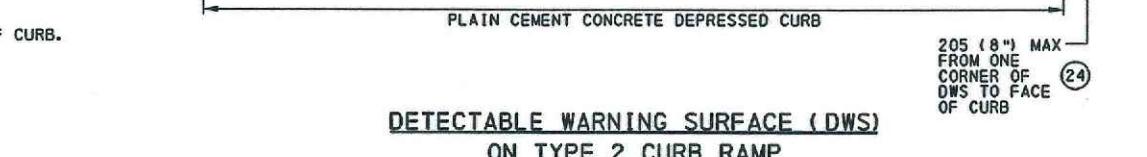
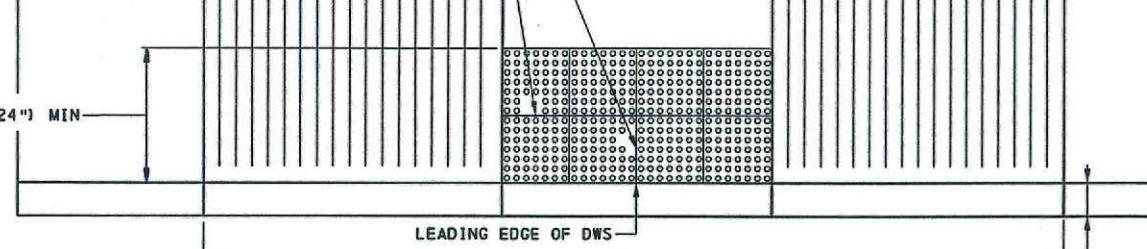
LANDSCAPE NOTES & DETAILS
PROJ. # 19-0425 DATE 05-21-2021
CAD ID: 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA
REVISION I
SHEET 17 OF 29
REVISION I



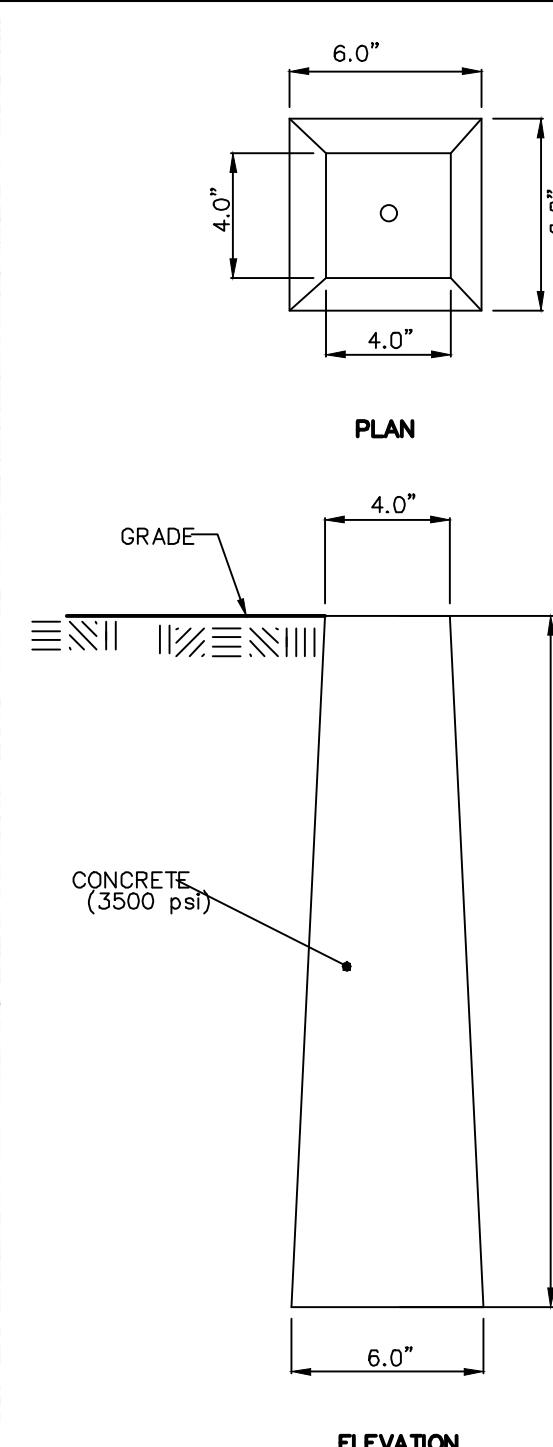
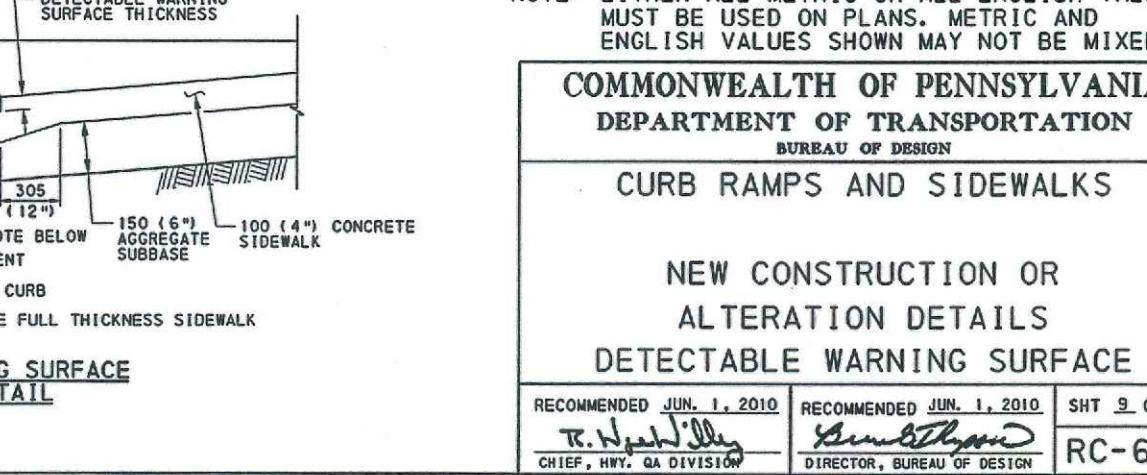
DETECTABLE WARNING SURFACE (DWS) ON TYPE 1 CURB RAMP



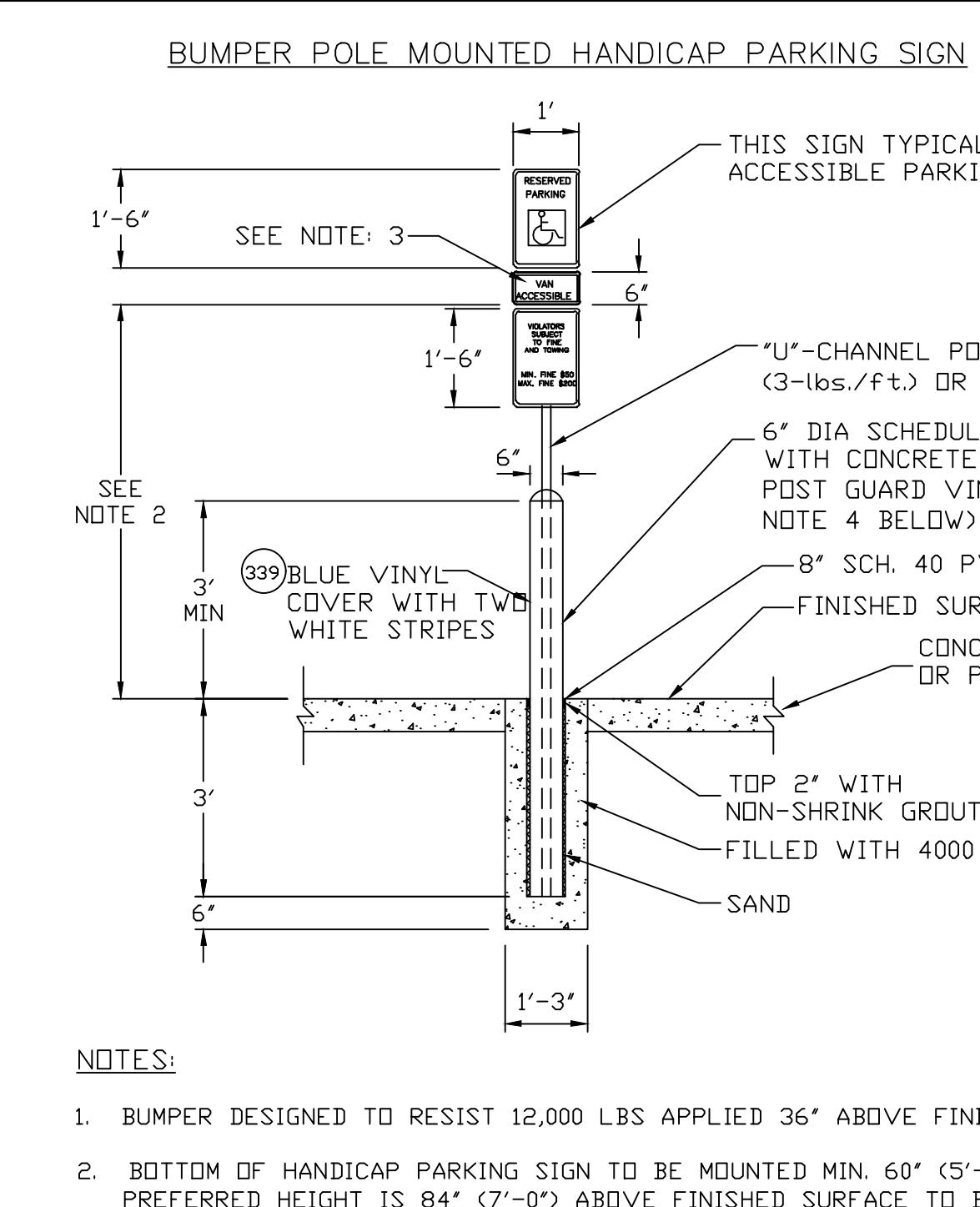
DETECTABLE WARNING SURFACE (DWS) ON TYPE 2 CURB RAMP



DETECTABLE WARNING SURFACE (DWS) ON CURVED SURFACES



CONCRETE MONUMENT (TYP.)



BUMPER POLE MOUNTED HANDICAP PARKING SIGN

HANDICAP PARKING NOTES

- 1) MAX CROSS SLOPE = 2% (1:50)
- 2) MAX RUNNING SLOPE = 2% (1:50)
- 3) FOR CONCRETE PARKING, USE CONCRETE SEAL COAT PER MARKETING ENGINEERING SPECIFICATION (SECTION 03001)
- 4) STATE SPECIFIC REQUIREMENTS FOR HANDICAP PARKING MAY VARY FROM SUNOCO'S GENERAL GUIDELINES

HANDICAP MARKING PAINT SPEC. & NOTES

- 1) LINE STRIPING
 - A) SHERWIN WILLIAMS INDUSTRIAL (SET FAST ACRYLIC WATERBORNE) COLOR = BLUE (TM2133)
 - B) ALL LINE STRIPING TO BE 4" WIDE
 - C) THE DISTANCE FROM CENTERLINE TO CENTERLINE OF EACH ADJACENT HATCH MARK IS TO BE 2'-4".
 - D) ALL LINE STRIPING TO BE TWO COATS ON NEW SEALED OR UNSEALED ASPHALT, ONE COAT, TWO IF NECESSARY, ON SEALED ASPHALT. ONLY ONE COAT REQUIRED FOR CONCRETE.
- 2) HC MARKING
 - A) SHERWIN WILLIAMS INDUSTRIAL (SET FAST ACRYLIC WATERBORNE) COLOR = BLUE (TM2133)
 - B) STROKE WIDTH MIN/STANDARD TO BE 3"
 - C) ALL LINE STRIPING TO BE TWO COATS ON NEW SEALED OR UNSEALED ASPHALT, ONE COAT, TWO IF NECESSARY, ON SEALED ASPHALT. ONLY ONE COAT REQUIRED FOR CONCRETE.
- 3) STENCIL ORDERING INFO:
 - A) <http://store.parkinglotplanet.com/>
 - B) PHONE: (903) 566-5499
 - C) FAX: (866) 821-0552
 - CUSTOMER SERVICE & TELEPHONE SALES HOURS: MON. - FRI. 9:00am TO 5:00pm CST
 - D) PARKING LOT PLANET
2817 ROANOKE LN. #100
TYLER, TX 75701

Y Cornerstone
Consulting Engineers & Architectural, Inc.

Pocono Region
57-0839-1770

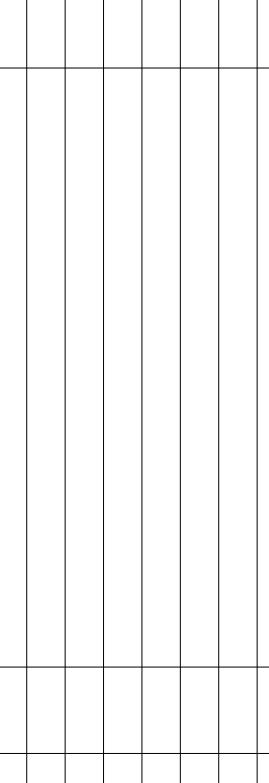
213 West Main Street, Lansdale, PA 19446
Phone: 215-362-2600 Fax: 215-362-8400
www.cornerstone.com

Lehigh Valley Region
610-820-8200

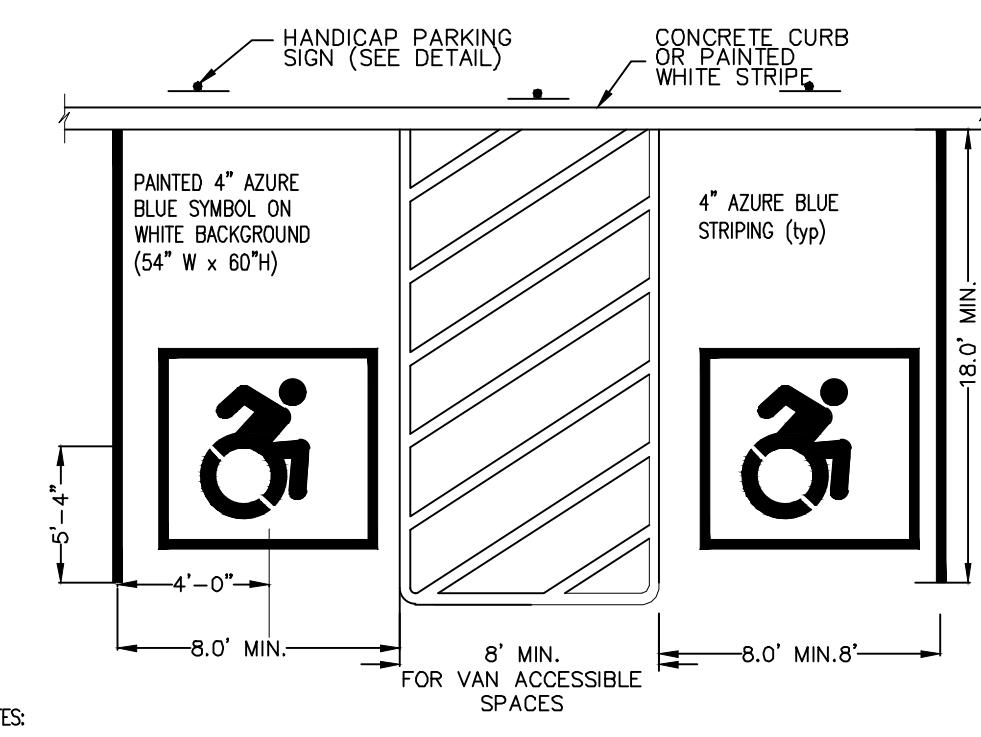
Philadelphia Region
215-362-2600

SUNOCO
Aplus

CLIENT DATA



HANDICAP PARKING SIGNAGE GUIDELINES



NOTES:

1. BUMPER DESIGNED TO RESIST 12,000 LBS APPLIED 36" ABOVE FINISH GRADE.
2. BOTTOM OF HANDICAP PARKING SIGN TO BE MOUNTED MIN. 60" (5'-0") TO MAX 96" (8'-0"). PREFERRED HEIGHT IS 84" (7'-0") ABOVE FINISHED SURFACE TO BOTTOM OF SIGN
3. VAN ACCESSIBLE SIGNS ONLY REQUIRED AT VAN ACCESSIBLE SITES MINIMUM 1 PER FACILITY
4. BOLLARD COVER:
 - a. MANUFACTURED BY POST GUARD (SOUTHFIELD, MI - 1-866-737-8900)
 - b. BLUE WITH TWO WHITE STRIPES
 - c. BOLLARD COVER TO BE ORDERED 2" TALLER THAN STEEL POST.
 - d. FOR MORE DETAILS ON BOLLARD COVERS, REFER TO 6" STEEL BUMPER POST DETAIL (4-500XX)

REVISIONS

NO BY DESCRIPTION REVISED PER TOWNSHIP COMMENTS

1 - I DN

PENNSYLVANIA ONE CALL SYSTEM, INC.

925 Main Run Road West Mifflin, Pennsylvania 15122-1000

1. CURB RAMPS MAY NOT EXTEND INTO ANY PORTION OF THE PARKING SPACE OR ASSOCIATED STRIPED ISLAND.

2. CURB RAMPS PAVEMENT MARKINGS, & APPLICABLE SIGNAGE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST A.D.A. ACCESSIBILITY GUIDELINE.

A.D.A. ACCESSIBLE PARKING STRIPING

BEFORE YOU DID ANYWHERE IN PENNSYLVANIA CALL 1-800-242-1776

NON MEMBERS MUST BE CONTACTED DIRECTLY

PALAWB (PA) 1-800-242-1776
NOVTECH (PA) 1-800-242-1776
DRAFT (PA) 1-800-242-1776

PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE NO. PE15458
PENNSYLVANIA LICENSE NO. PE15536
NEW JERSEY LICENSE NO. PE15536
VIRGINIA LICENSE NO. 0402045725
MICHIGAN LICENSE NO. 10000000
NEW YORK LICENSE NO. 093667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS "SUNOCO 1451 PROVIDENCE ROAD"

PROPOSED COMMERCIAL RE-DEVELOPMENT
1451 PROVIDENCE ROAD

MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR SIRHANDI ENTERPRISES, INC.

TITLE

SITE DETAILS

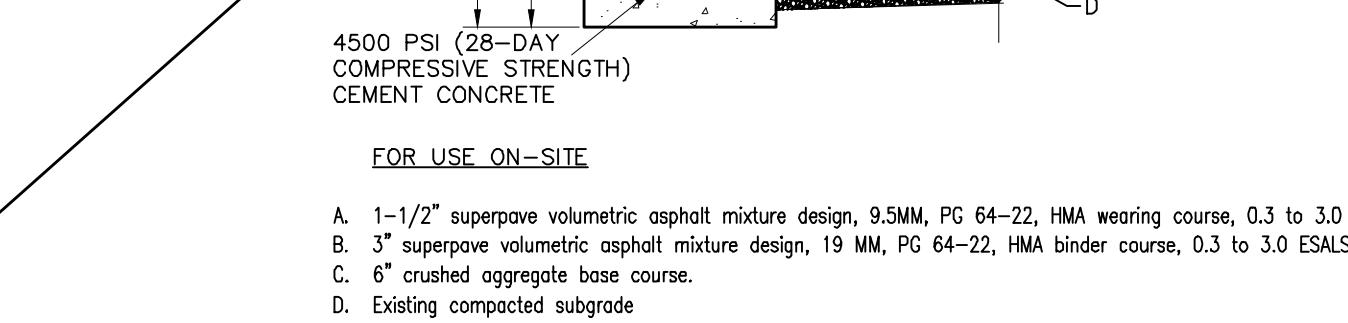
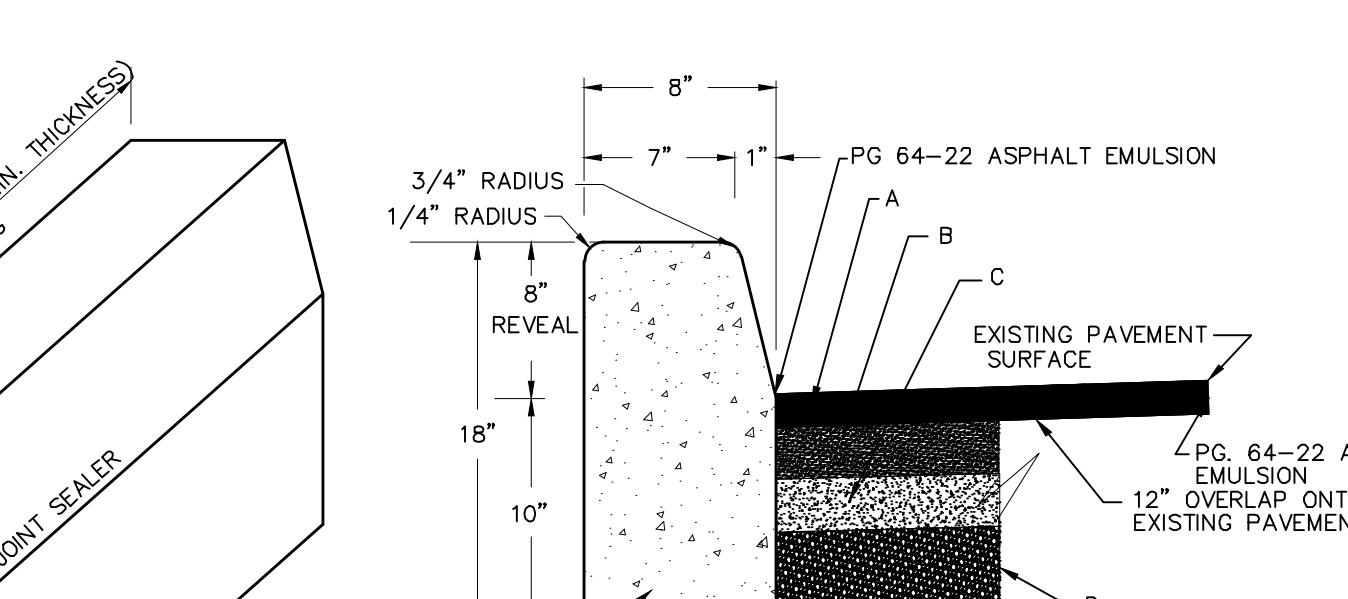
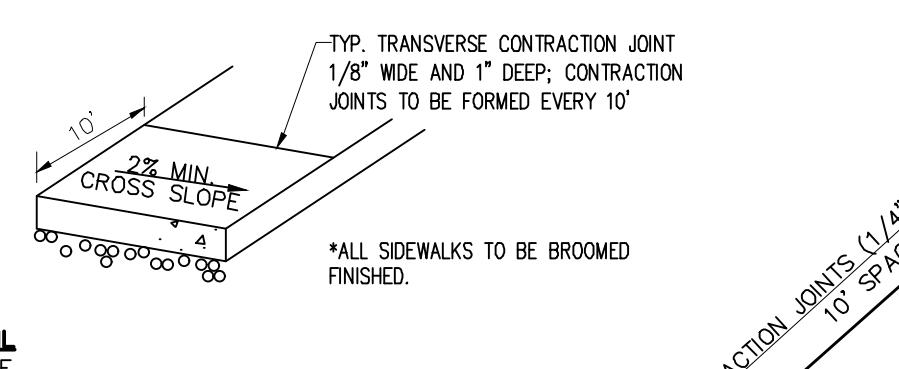
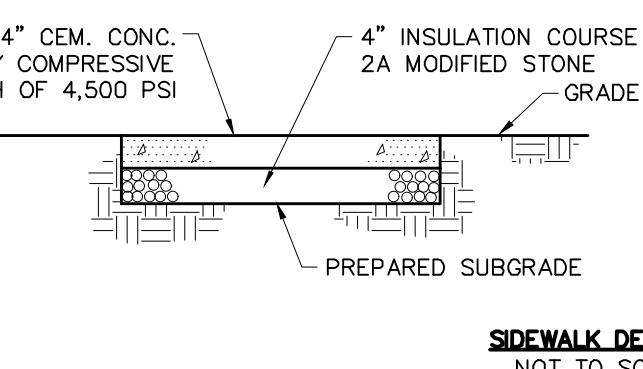
PROJ. # 19-0425 DATE 05-21-2021

CAD ID 19-0425 DRN BY GTM

SCALE AS NOTED CHK BY JBA

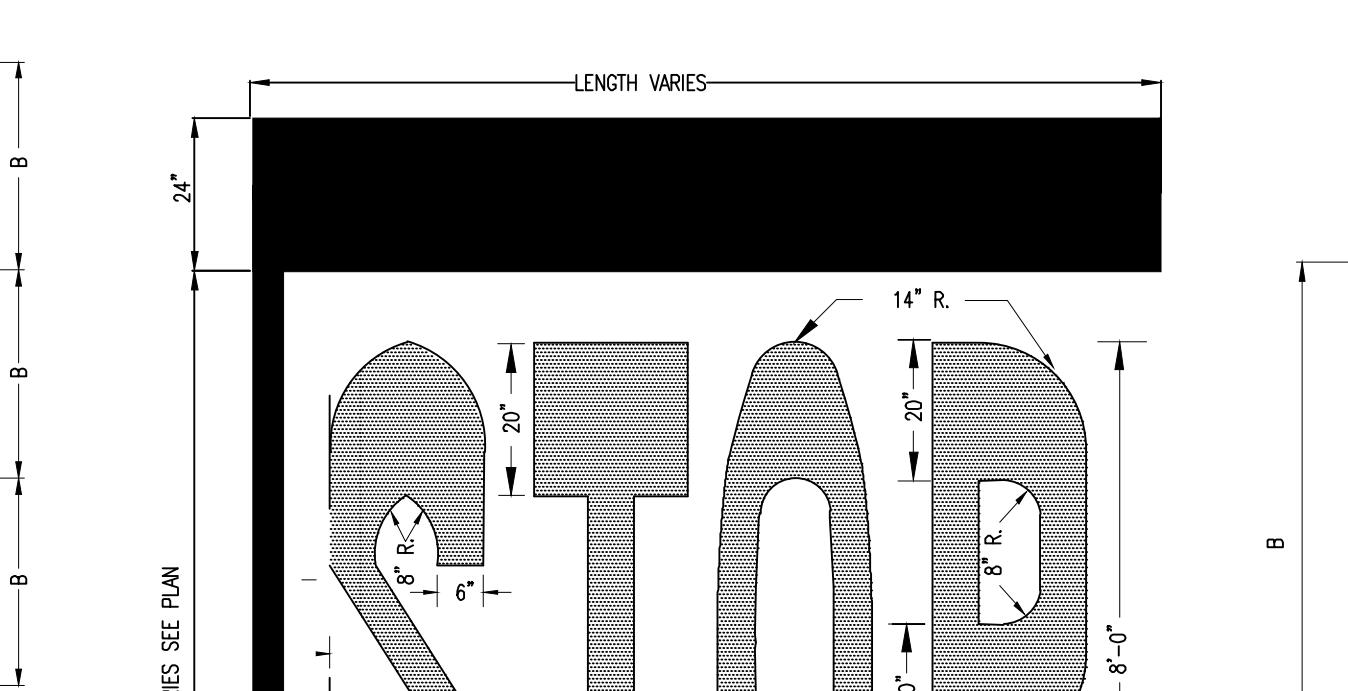
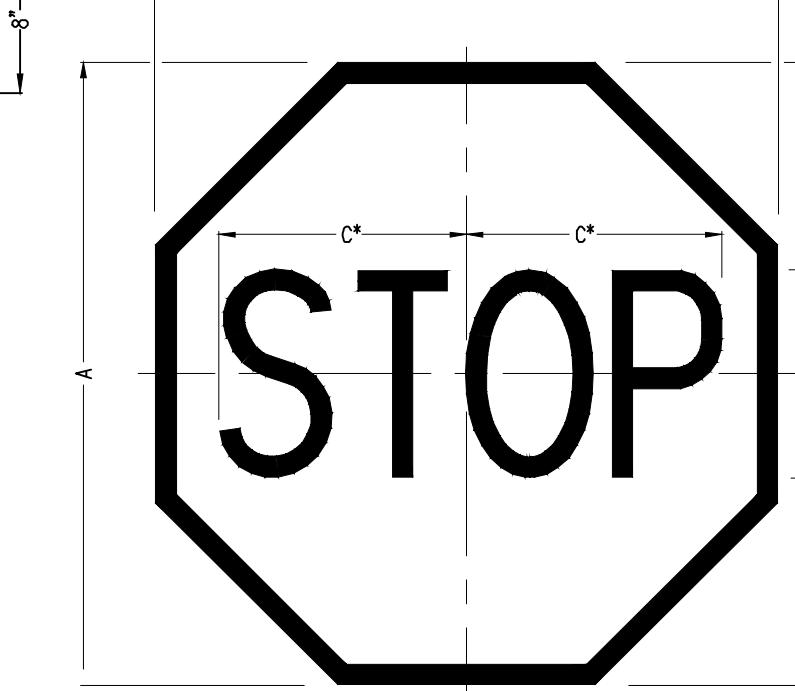
SHEET 18 OF 27

REVISION 1



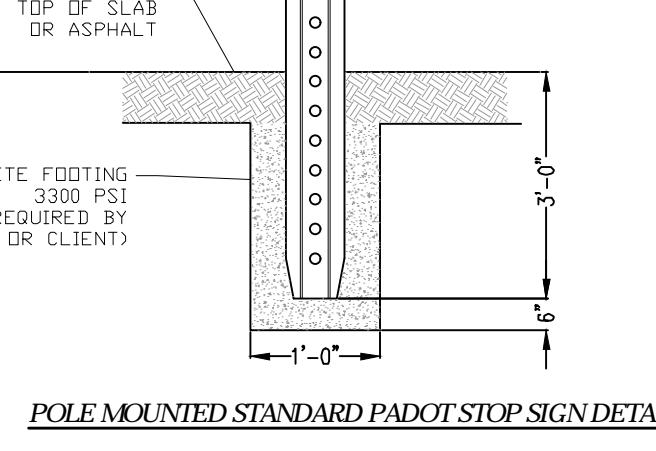
TYPICAL CONCRETE CURB AND PAVEMENT DETAIL

NOT TO SCALE

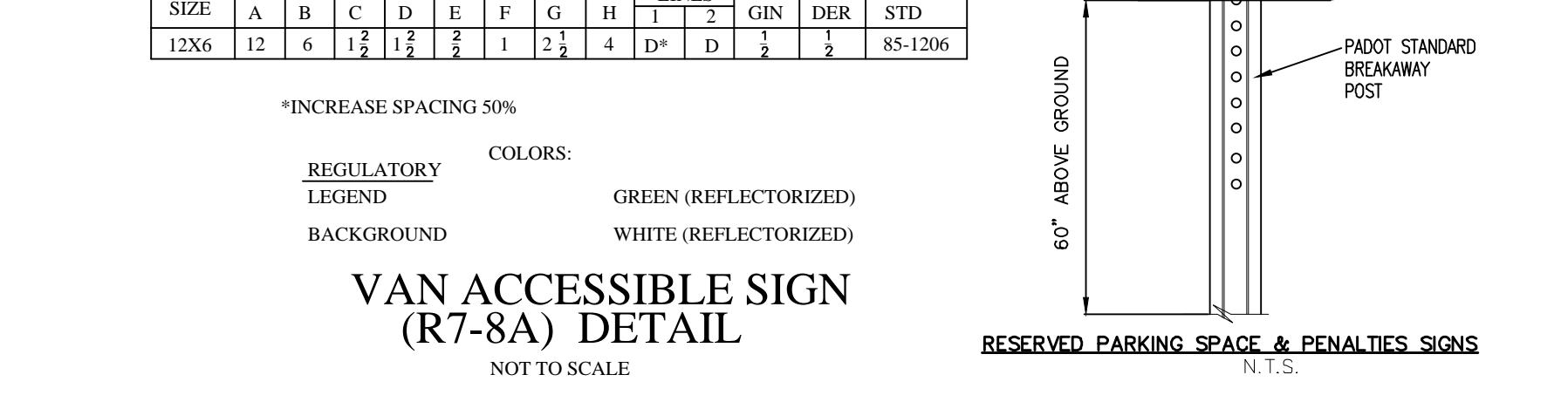
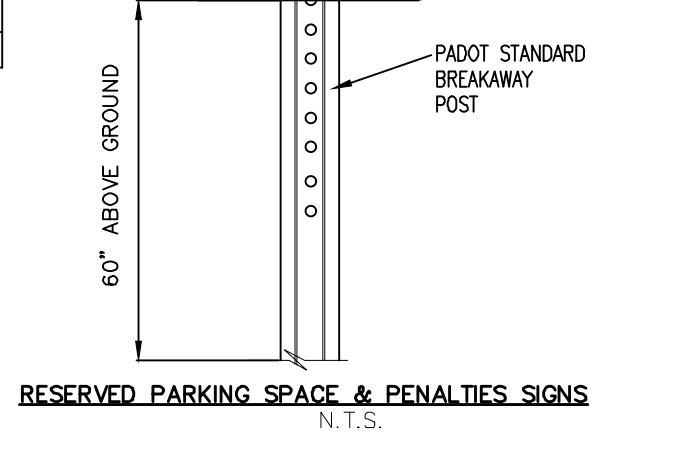
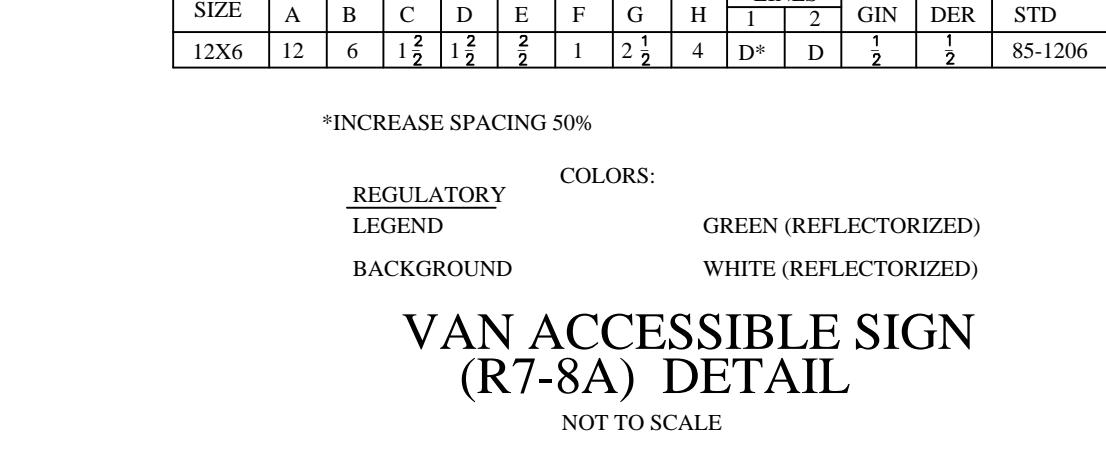
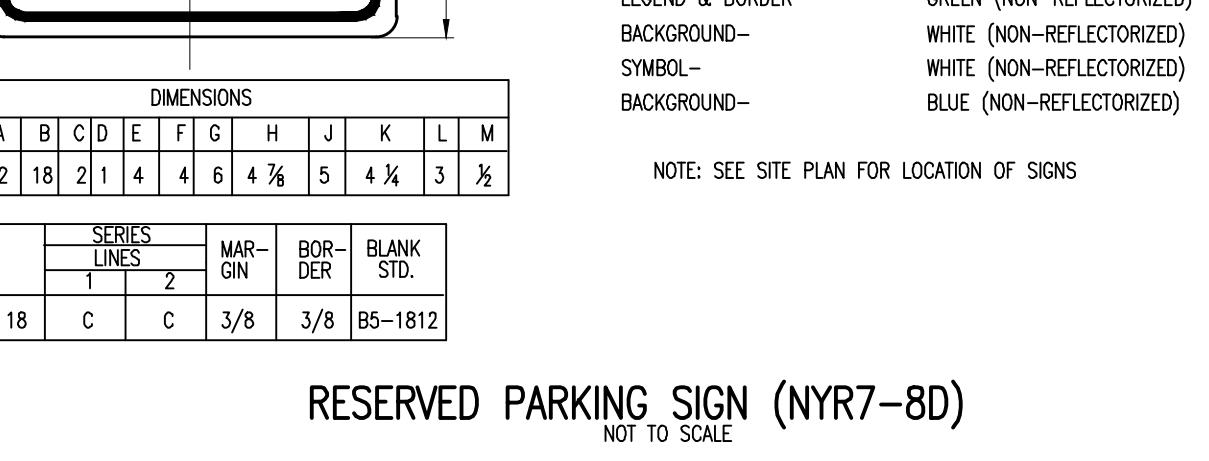
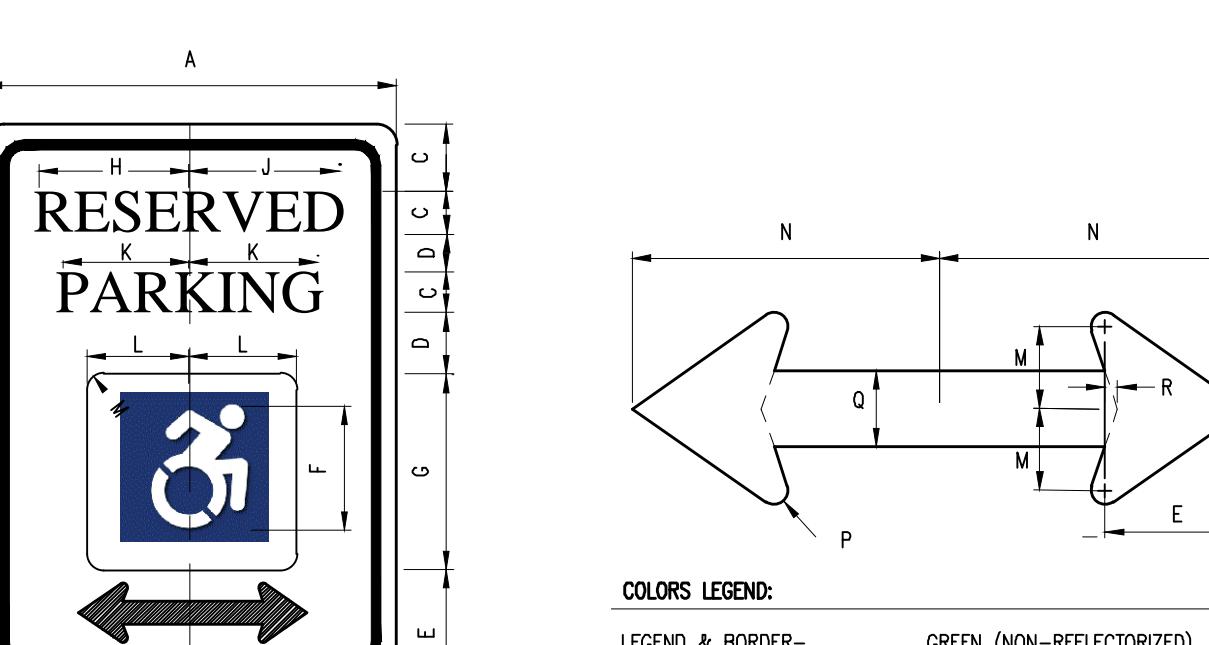
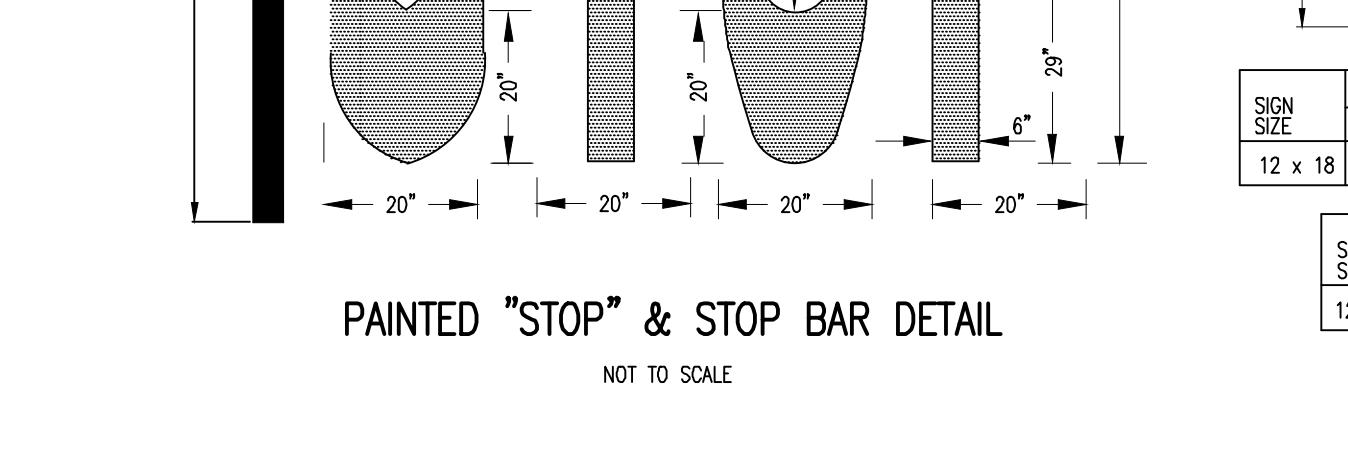


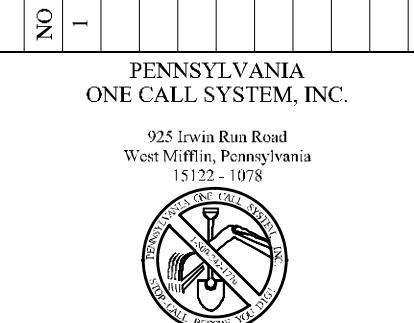
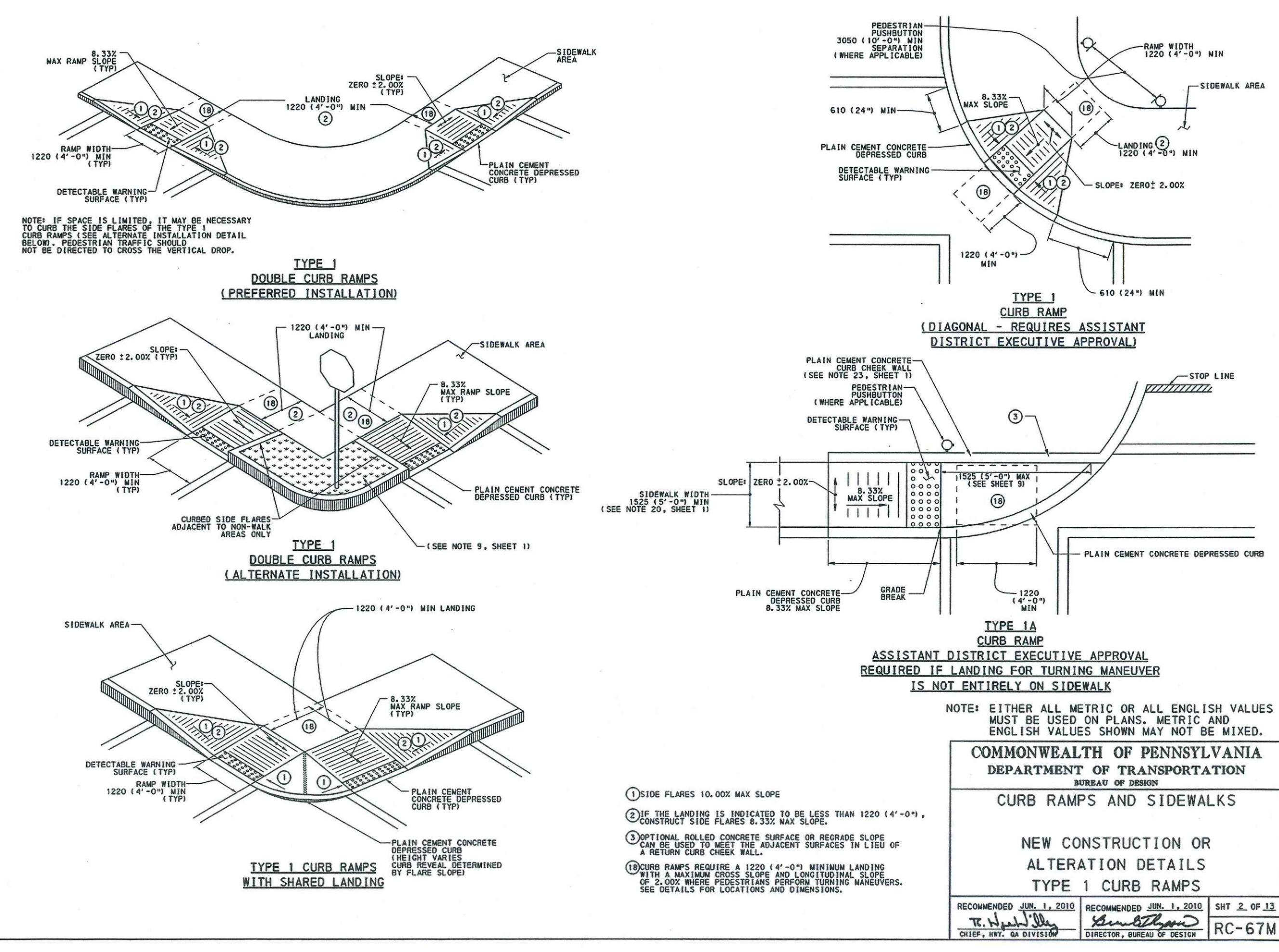
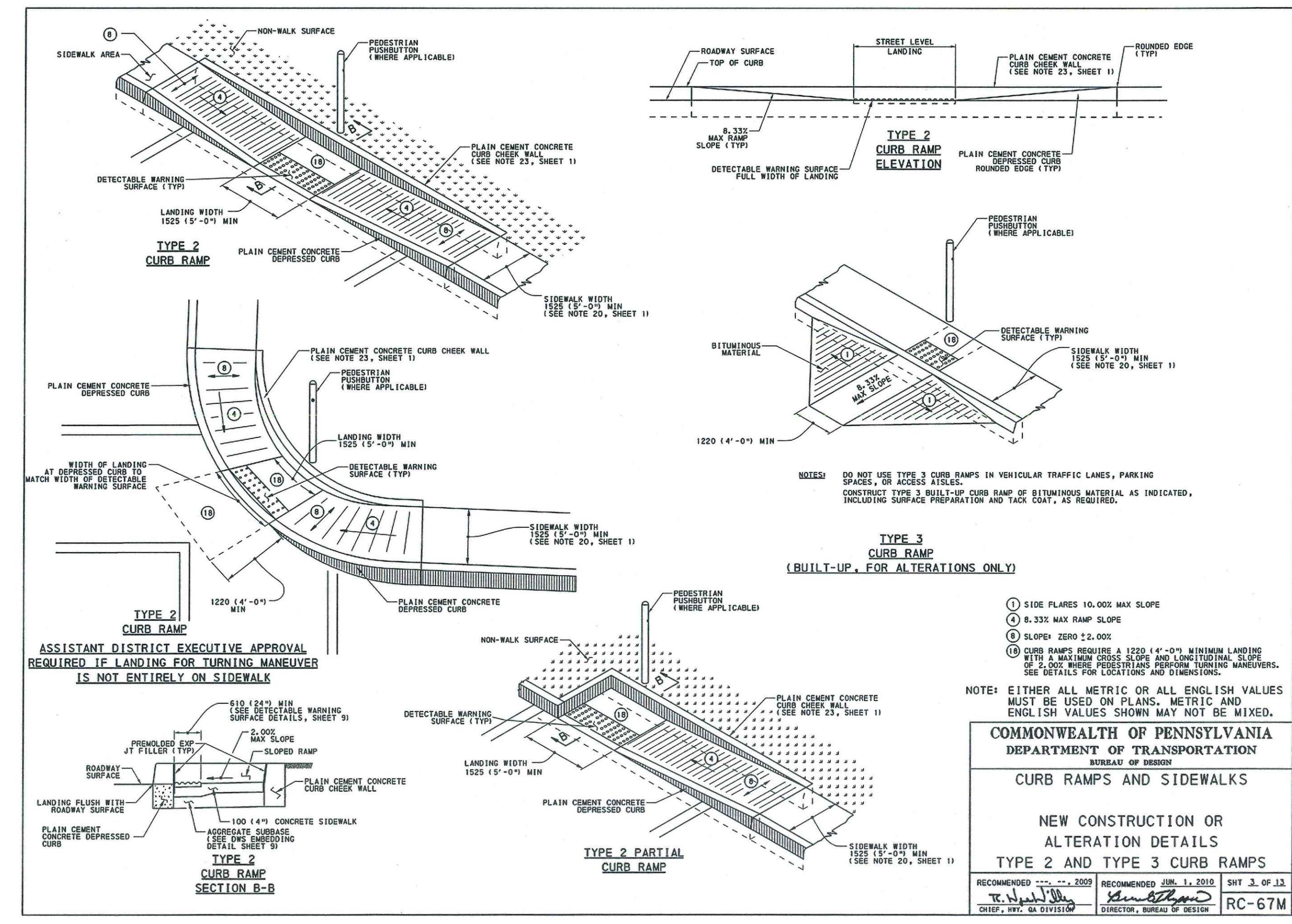
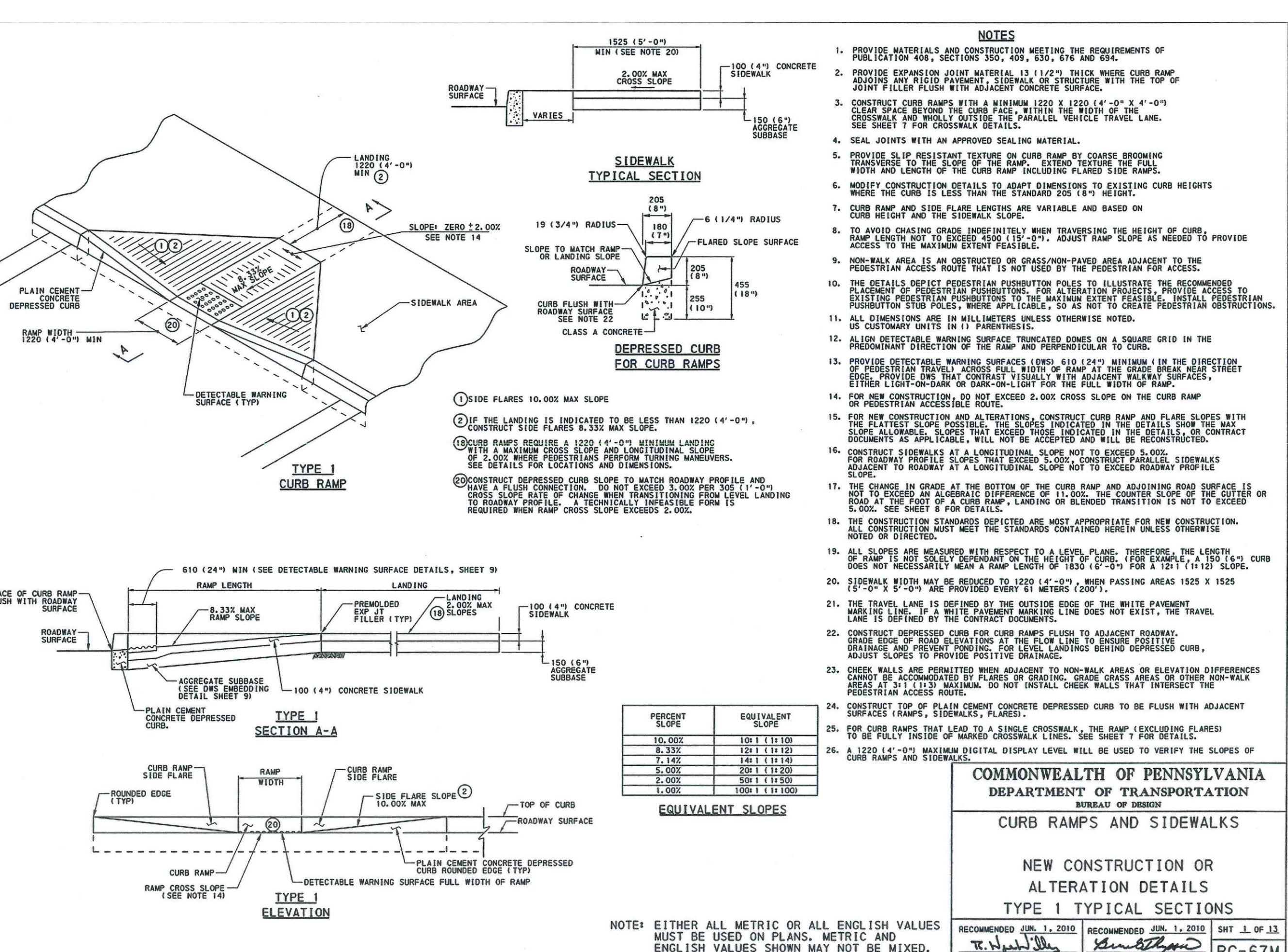
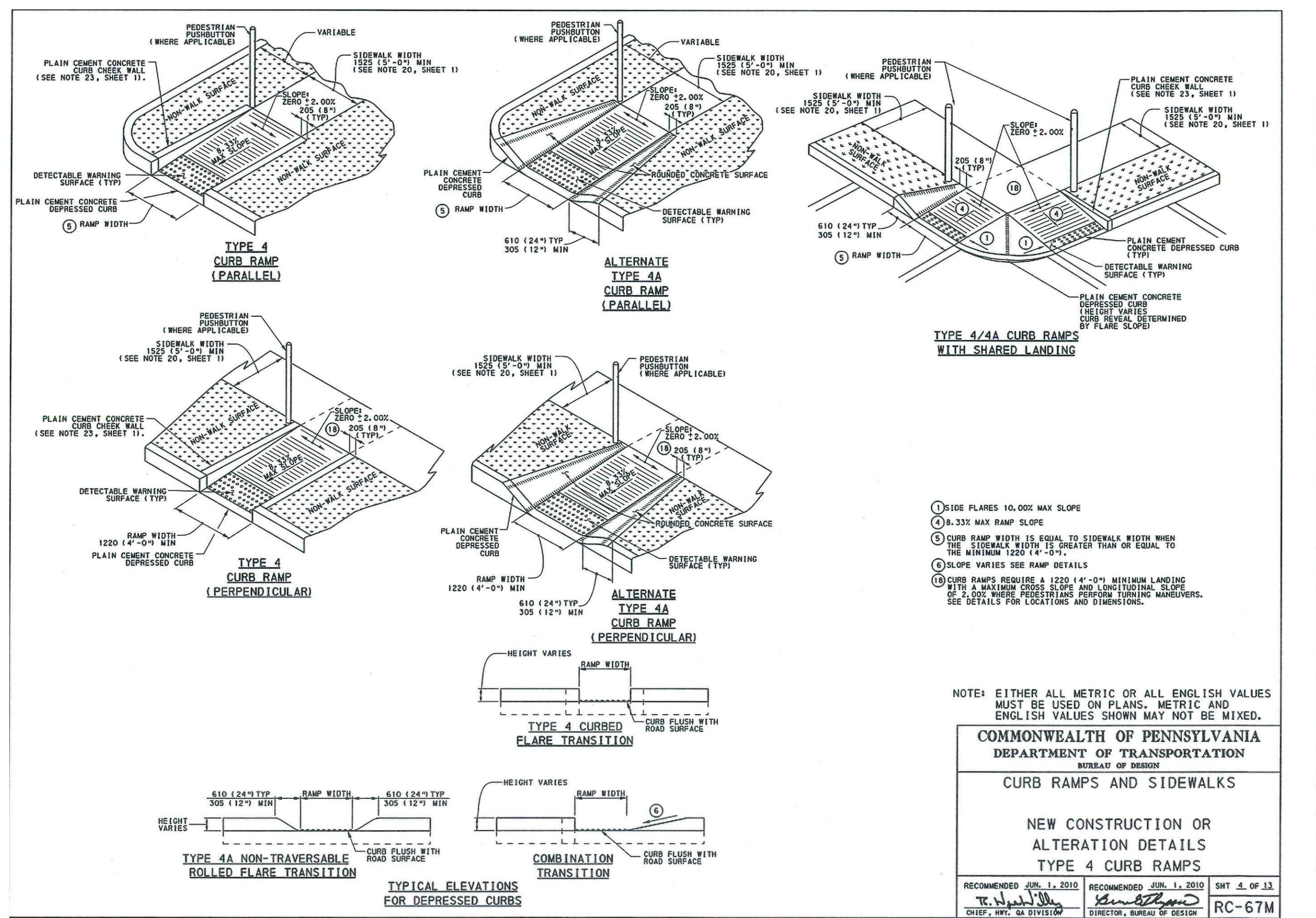
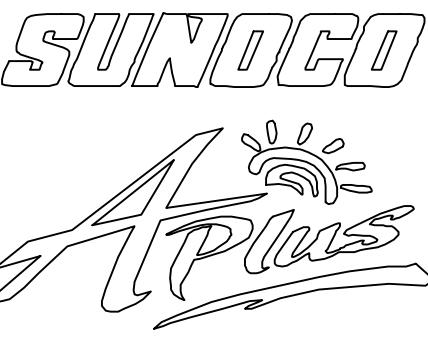
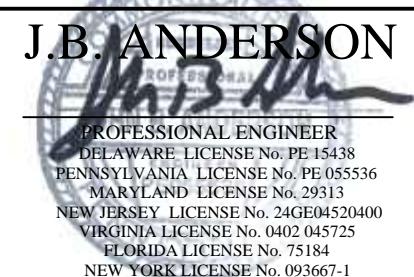
PAINTED "STOP" & STOP BAR DETAIL

NOT TO SCALE



"STOP" (R1-1) SIGN DETAIL
NOT TO SCALE



PENNSYLVANIA
ONE CALL SYSTEM, INC.925 Irvin Run Road
West Mifflin, Pennsylvania
(15222-107)BEFORE YOU DIG ANYWHERE IN
PENNSYLVANIA, CALL 1-800-24-1776
NON-MEMBERS MUST BE
CONTACTED DIRECTLY
PA LAW REQUIRES 100% WORKING DAYS
NOTICE TO CALLER, 24 HOURS IN ADVANCE
DIAL 1-800-24-1776J.B. ANDERSON
PROFESSIONAL ENGINEER
PENNSYLVANIA LICENSE No. 4005458
PENNSYLVANIA LICENSE No. 203136
NEW YORK LICENSE No. 00045725
VIRGINIA LICENSE No. 0402045725
NEW JERSEY LICENSE No. 00045671
NEW YORK LICENSE No. 093667-1

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS
"SUNOCO 1451 PROVIDENCE ROAD"PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTYPREPARED FOR
SIRHAND ENTERPRISES, INC.

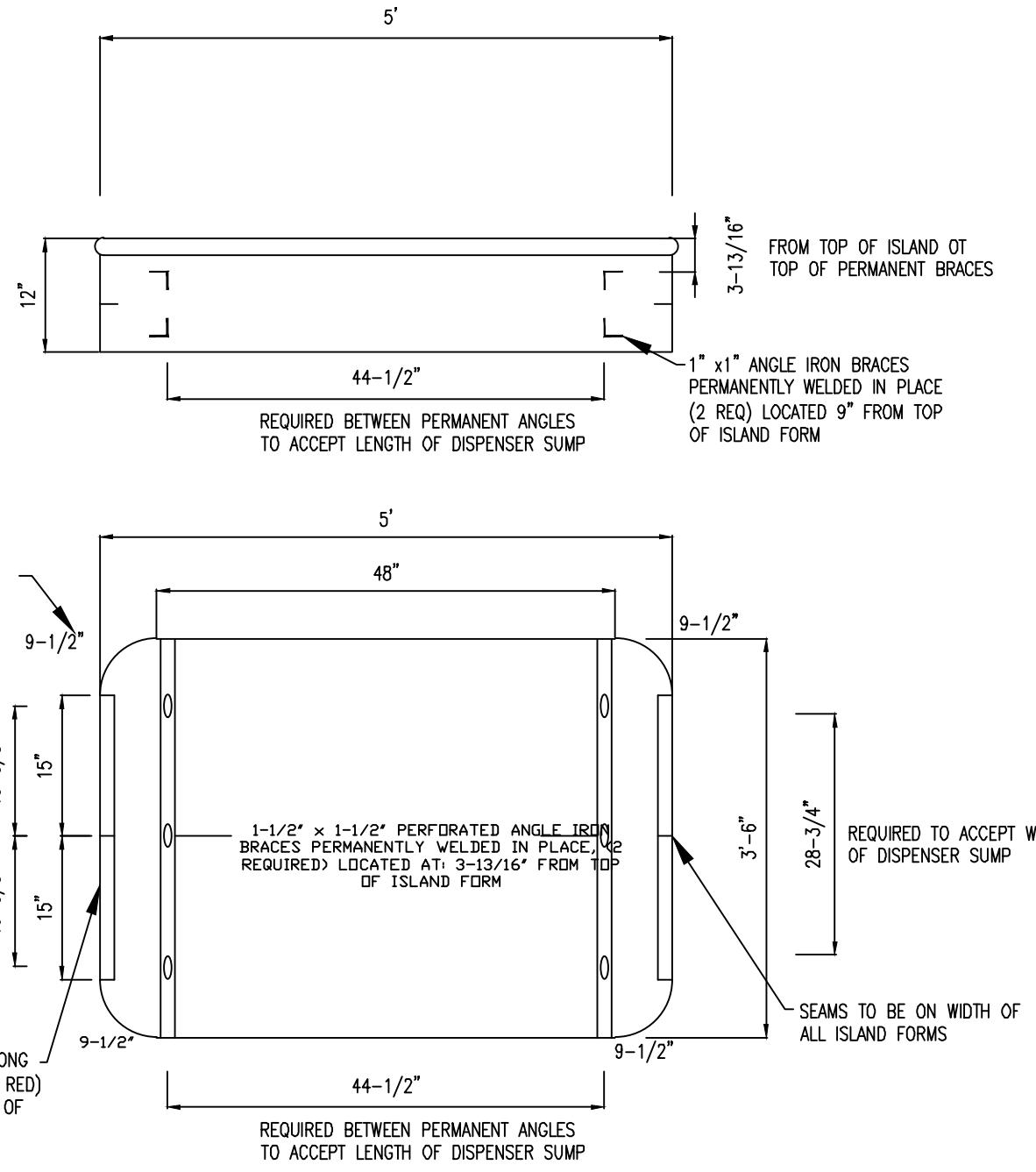
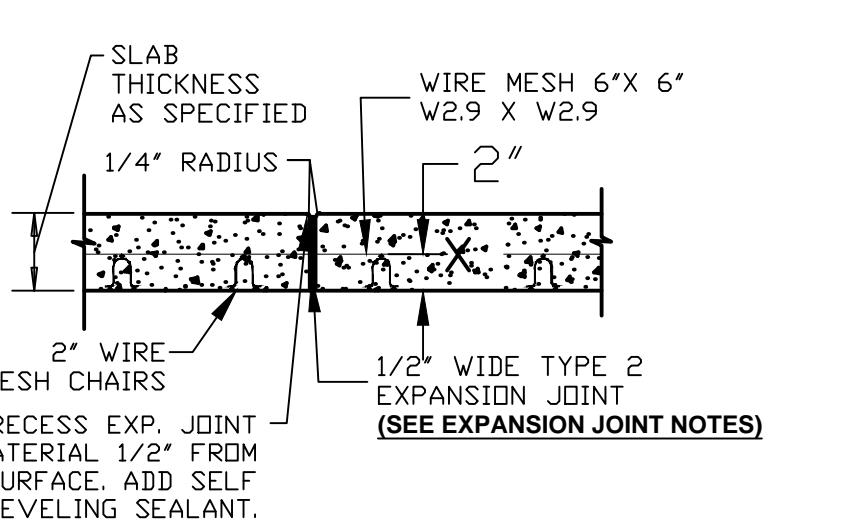
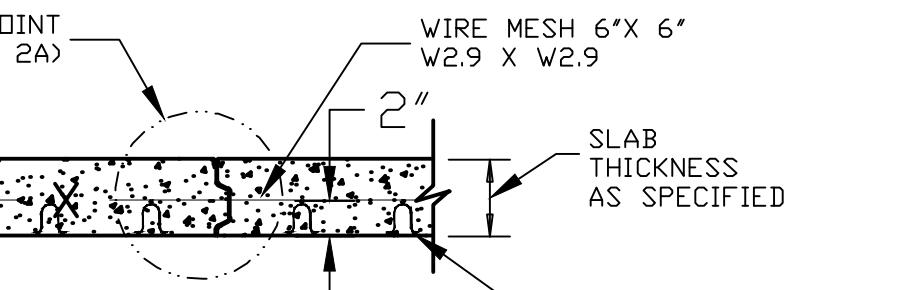
TITLE

SITE DETAILS

PROJ. # 19-0425 DATE 05/21/2021
CAD ID 19-0425 DRN BY GTM
SCALE AS NOTED CHK BY JBA
SHEET 19 OF 27
REVISION 1

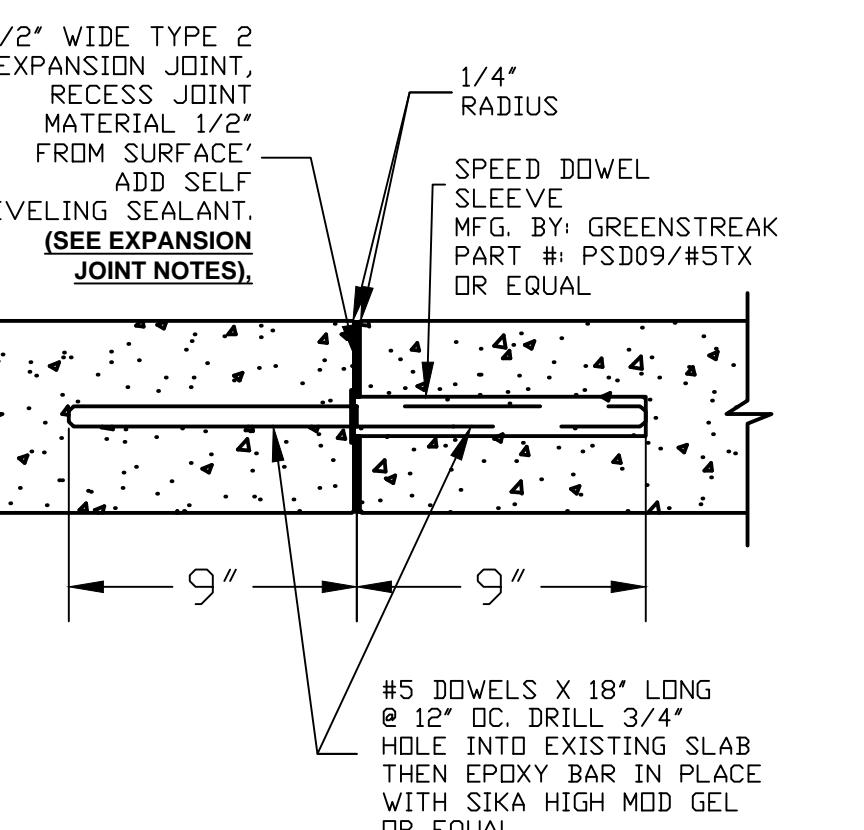
GENERAL NOTES

- 1. ISLAND FORM IS STAINLESS STEEL, MANUFACTURED BY BURTCO.
- 2. SLOPE TOP OF ISLAND AWAY FROM DISPENSER AT 1/8" FEET FOR DRAINAGE.
- 3. FORMS ARE TO BE MADE SECURE & PROPERLY BRACED PRIOR TO CONCRETE POUR.
- 4. DISPENSER SUMPS ARE TO BE SUPPORTED BY ANGLED IRON BRACES (2 SUPPLIED WITH EACH FORM) (SUMP HEIGHT IS PREDETERMINED TO PROVIDE SLOPE FOR DRAINAGE, SEE NOTE 2)


**TYPICAL 3'-6" x 5' RECTANGLE ISLAND
FOR ENCORE DISPENSERS**

DETAIL 1
EXPANSION JOINT
BETWEEN CONC. MAT
N.T.S.

DETAIL 2
KEY JOINT BETWEEN CONC. MAT
SCALE: N.T.S.

NOTES:

1. FOR WIRE MESH, SEE GENERAL NOTE #5
2. FOR WIRE MESH CHAIRS, SEE GENERAL NOTE #6

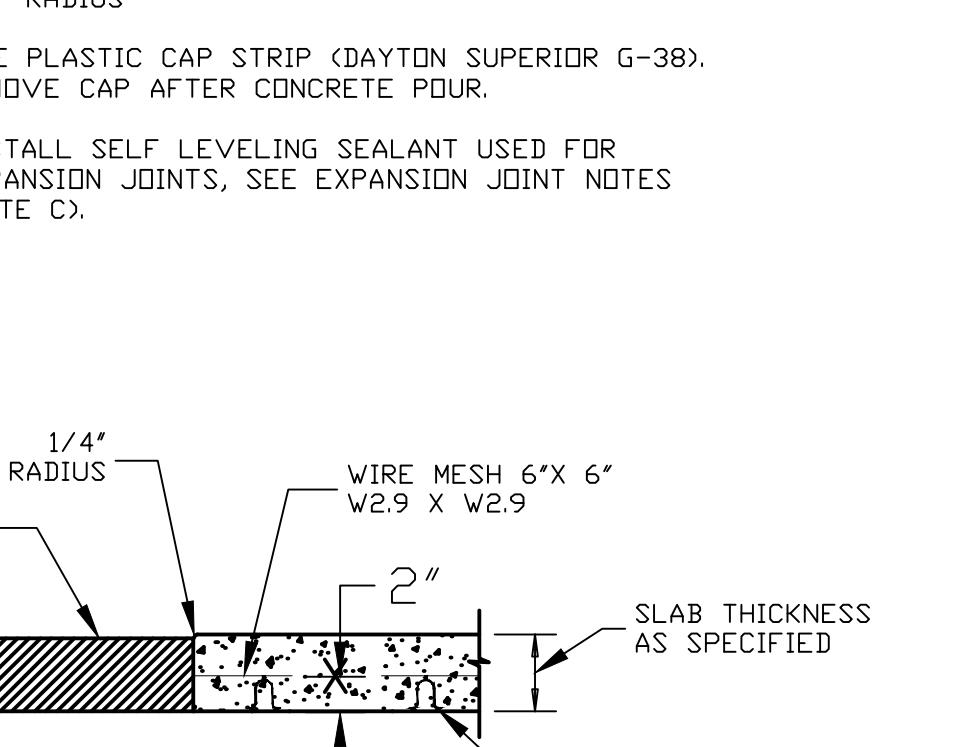
DETAIL 1A
SPEED DOWEL / EXPANSION
JOINT INSTALLATION
N.T.S.
INSTALL ONLY WHEN ENTIRE
DRIVEWAY IS CONCRETE
(NO ASPHALT)

DETAIL 2A
ENLARGED KEY JOINT SECTION
SCALE: N.T.S.

NOTE:

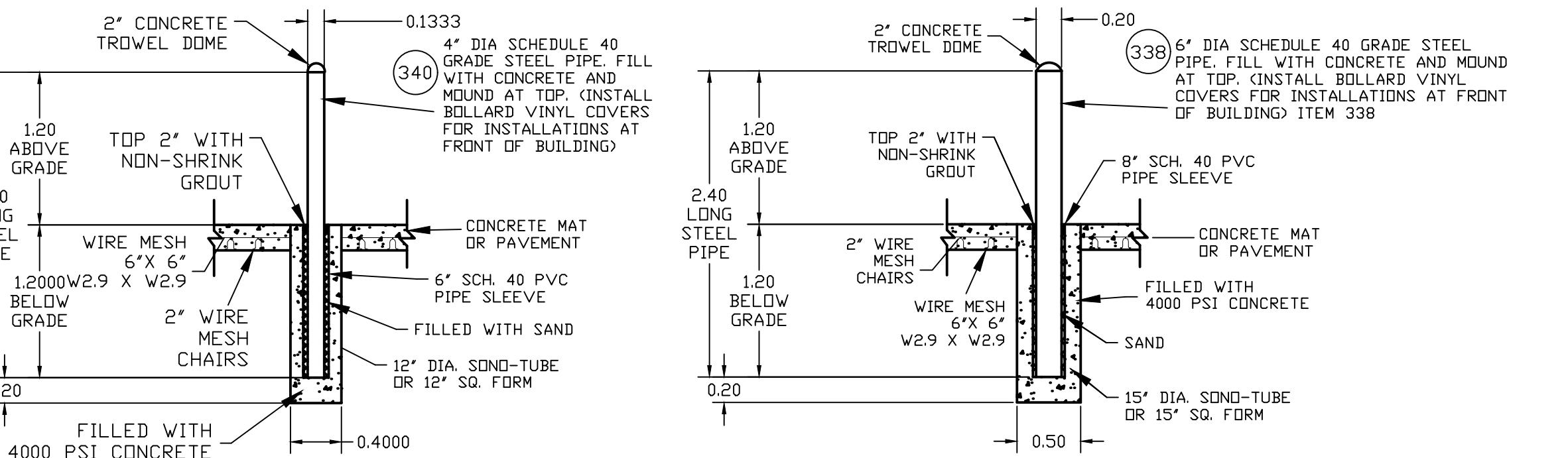
1. KEY JOINTS:
 - A) DAYTON SUPERIOR G-33 SCREED KEY JOINT (FOR 4', 5', & 6' SLABS)
 - B) DAYTON SUPERIOR G-34 LOAD KEY JOINT (8' & 10' SLABS)
 - C) ALABAMA METALS VULCAN SCREED KEY
 - D) "FORM-A-KEY" KEY LOC
 - 7 1/2" KEY FOR 8' SLAB
 - 5 1/2" KEY FOR 6' SLAB
 - 1/2" KEY FOR 4' SLAB
 - E) FOR NYC ONLY USE KEY JOINT SUITABLE FOR 9" THICK MAT
2. RECESS KEY JOINT 1/4" FROM SURFACE TO TOP OF PLASTIC CAP ON KEY JOINT. TOOL CONCRETE EDGES 1/4" RADIUS
3. USE PLASTIC CAP STRIP (DAYTON SUPERIOR G-38). REMOVE CAP AFTER CONCRETE POUR.
4. INSTALL SELF LEVELING SEALANT USED FOR EXPANSION JOINTS, SEE EXPANSION JOINT NOTES (NOTE C).

NOTES ON EXPANSION JOINT TYPES:

- A) TYPE 1 FLEXIBLE FOAM EXPANSION JOINT CERAMAS MFG. BY W.R. MEADOWS OR EQUIVALENT USED TO FOLLOW CURB OF ISLAND FORM AND COLUMNS. RECESS EXP. JOINT 1/4" FROM SURFACE
- B) TYPE 2 FIBER EXPANSION JOINT COMPOSED OF CELLULAR FIBERS BONDED WITH ASPHALT AS MFG. BY W.R. MEADOWS OR EQUIVALENT. (SEALIT FIBERS EXPANSION JOINT FILLER CAPPED WITH W.R. MEADOWS SNAP CAP 1/2" SIZE) RECESS EXP. JOINT 1/4" FROM SURFACE
- C) SEALANT USED FOR EXPANSION JOINTS TYPE 1 AND TYPE 2 ARE SPECIFIED AS: "THCO 900/901 MANUFACTURED BY THCO SEALIT CERAMAS MFG. BY W.R. MEADOWS SIKA SINGLE COMPONENT URETHANE SEALANT "1A" IS RESISTANT TO OIL AND OHS, AND IS SELF LEVELING AND GUNNABLE NON-SAGGING TYPE. (COLOR: GRAY)


DETAIL 3
SECTION OF CONC. SLAB ADJOINING BITUMINOUS
N.T.S.

1. FOR WIRE MESH, SEE GENERAL NOTE #5
2. FOR WIRE MESH CHAIRS, SEE GENERAL NOTE #6


4" DIA. STEEL PIPE BUMPER POST
(CUTAWAY VIEW)

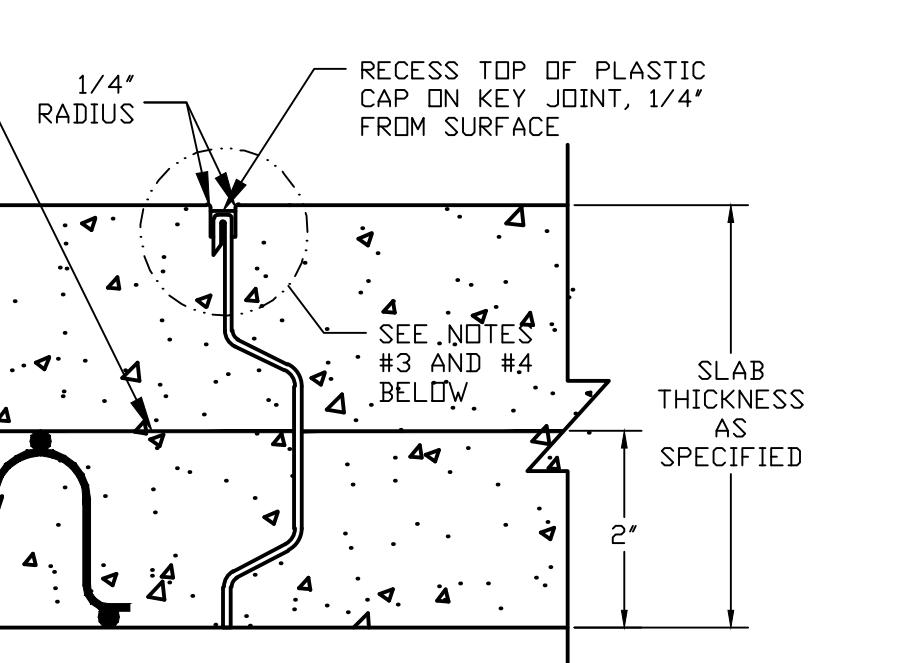
NOTES: BOLLARDS USED ALONG FRONT OF BUILDING, TO PROTECT VENT PIPING, AIR VACUUMS, PROPANE TANK STORAGE, AND FOR OTHER EQUIPMENT PROTECTION.

1. STORE FRONT PROTECTION:

- TO BE LOCATED IN FRONT OF FULL HEIGHT STORE FRONT GLASS AND VESTIBULES.
- SPACING FOR PROPER PROTECTION FROM VEHICLE CONTACT IS 5 FEET CENTER TO CENTER.
- POSTS TO BE INSTALLED 9 INCHES FROM EDGE OF CONCRETE WALK.
- HEIGHT IS TO BE 36 INCHES ABOVE GRADE.
- PIPE TO BE 6 INCH DIAMETER, SCHEDULE 40.
- BOLLARDS ARE TO BE INSTALLED IN AN 8 INCH, SCHEDULE 40 PVC SLEEVE. PACK WITH SAND AND NON-SHRINK GROUT TOP 2 INCHES.
- STEEL TO BE PRIME COATED PRIOR TO INSTALLING VINYL COVER.
- VINYL BOLLARD COVERS TO BE INSTALLED ON ALL, MANUFACTURED BY POST GUARD - SMITHFIELD MI ITEM 338.
- COLORS: GREY WITH WHITE STRIPES-GENERAL BLUE WITH WHITE STRIPES-ADA PARKING.

2. VENT PIPING AND EQUIPMENT PROTECTION:

- SPACING FOR PROPER PROTECTION FROM VEHICLE CONTACT IS 5 FEET CENTER TO CENTER.
- POSTS ARE TO BE INSTALLED NO FURTHER THAN 3 FEET FROM PROTECTED OBJECT.
- HEIGHT IS TO BE 36 INCHES ABOVE GRADE.
- PIPE TO BE 4 INCH DIAMETER, SCHEDULE 40.
- BOLLARDS ARE TO BE INSTALLED IN A 6 INCH, SCHEDULE 40 PVC SLEEVE, PACK WITH SAND AND NON-SHRINK GROUT TOP 2 INCHES.
- STEEL TO BE PRIME COATED PRIOR TO INSTALLING VINYL COVER.

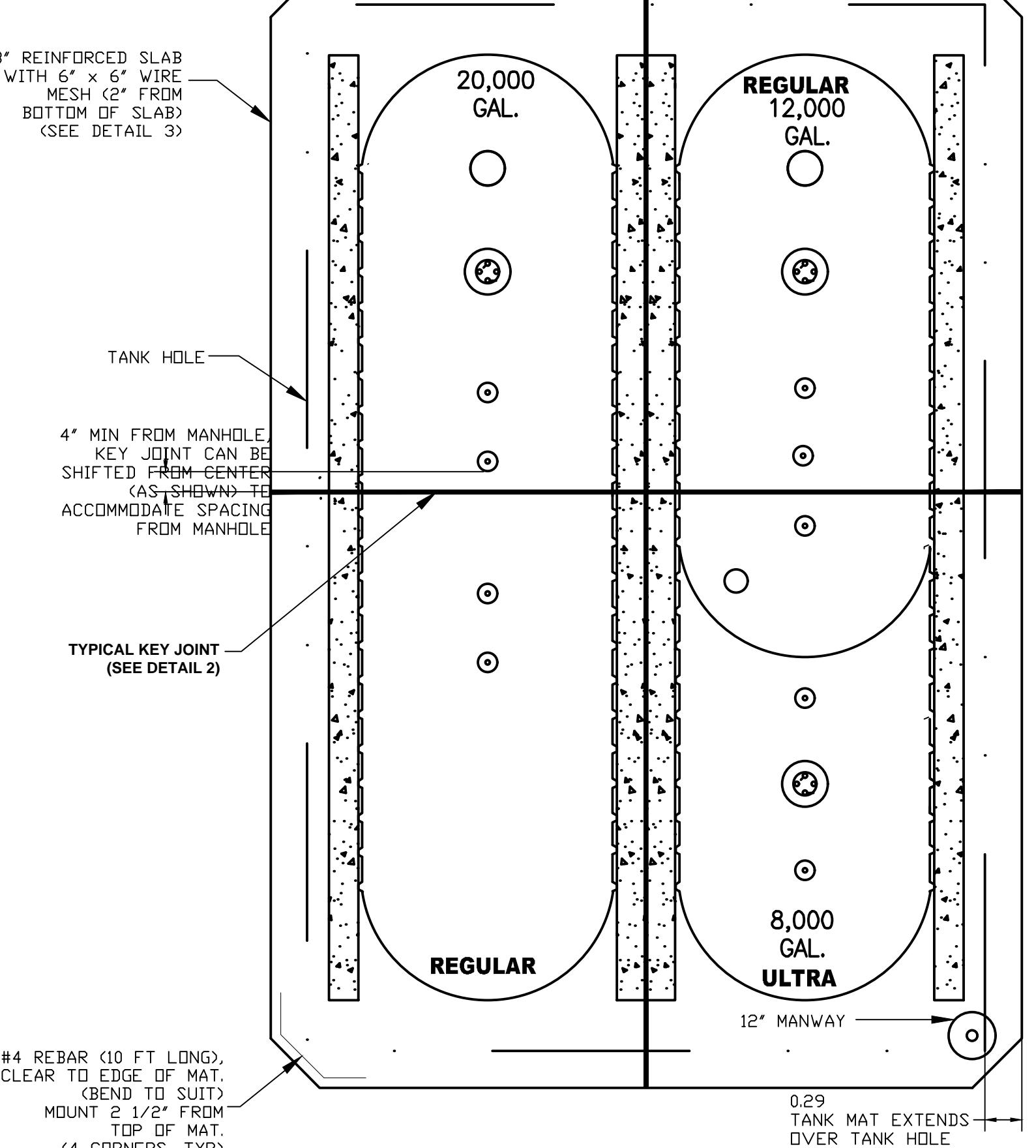

DETAIL 2
KEY JOINT BETWEEN CONC. MAT
SCALE: N.T.S.

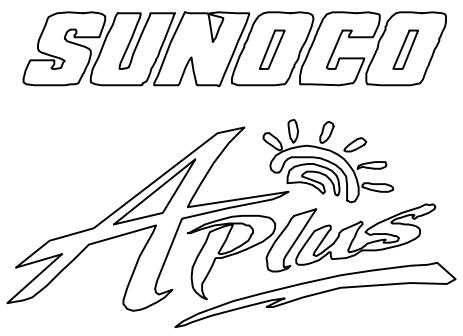
GENERAL NOTES:

1. CONCRETE WORK AND MATERIALS TO CONFORM TO ALL REQUIREMENTS OF THE LATEST REVISIONS OF CODES ACI 301 & ACI 318.
2. USE 4000 PSI CONCRETE (READY-MIXED ASTM C-94 OR MIXED-ON-JOB ACI 304), (SLUMP 2"-4", MIN WATER / CEMENT RATIO 0.4 TO 1, AIR CONTENT SHALL BE 4.5% MIN AND 7.5% MAX).
3. ANCHOR BOLTS TO BE ASTM A-307 STEEL.
4. REINFORCING STEEL TO BE ASTM A-615 GRADE 60 KSI, DEFORMED BILLET STEEL BARS.
5. WIRE MESH TO BE ASTM A-185 ELECTRIC WELDED WIRE FABRIC (6" x 6" W2.9 x W2.9). MESH IS TO BE OVERLAPPED 6" AND TO BE EXTENDED TO WITHIN 3" OF JOINTS AND EDGE OF MAT (WIRE MESH TO BE IN FLAT SHEETS, NOT ROLLS).
6. FOR SUPPORTS OF ALL WIRE MESH IN SLABS USE 2" WIRE MESH CHAIRS (MAS-CON OR EQUAL), SPACED AT 4 FT INTERVALS.
7. UNSATISFACTORY SUB-GRADE MATERIAL MUST BE REMOVED.
8. FILL MATERIAL MUST MEET SPECIFICATION ASTM M-33 FOR CRUSHED STONE. FILL UNDER CURBS, WALKS, DRIVEWAYS TRASH ENCLOSURE AND ISLAND MATS SHALL BE 6" (MINIMUM) OF CRUSHED STONE.
10. CONCRETE PLACEMENT NOT PERMITTED WHEN TEMPERATURE IS BELOW 40°F AND FALLING OR BELOW 30°F AND RISING. DO NOT POUR CONCRETE IF BACKFILL IS FROZEN.
11. TEMPORARY FORMS TO REMAIN IN PLACE FROM 24 TO 72 HOURS.
12. CONSTRUCTION LOADS NOT PERMITTED BEFORE 7 DAYS WITHOUT OWNER APPROVAL.
13. THE ONLY OWNER APPROVED USE OF CONCRETE PRIOR TO 7 DAYS CURING IS THE USE OF HIGH EARLY STRENGTH CONCRETE (4000 PSI WITH ASTM C-150 TYPE II PORTLAND CEMENT) FOR SLABS SPECIFICALLY DESIGNATED AT OPERATING LOCATIONS FOR VEHICULAR TRAFFIC AFTER 72 HOURS.
15. TOP OF ISLANDS, WALKS, & SLABS TO RECEIVE A FINE BROOM FINISH AND BE SEALED PER SPECIFICATIONS.
16. USE HYDRAULIC CEMENT "5-STAR GROUT" OR APPROVED EQUAL FOR BASE PLATE GROUT (NON-SHRINK) AND BUMPER POST.
18. REINFORCING WIRE MESH MINIMUM COVER IS 2".
19. SLOPE TANK MATS AND ISLAND MATS IN ACCORDANCE WITH PLOT PLAN, TANK MATS AND ISLAND MATS SHALL BE SURFACED SUCH THAT LIQUID WILL FLOW AWAY FROM MANWAYS, SPILL CONTAINERS AND ISLANDS AND WILL NOT ALLOW PONDING. OVERALL FLATNESS SHALL BE A MIN. 1/8" FT SLOPE ON CONE.
20. EXPOSED CORNERS ON CONCRETE FOOTINGS SHALL BE CHAMFERED 3/4".
21. VOIDS ON ANY FORMED CONCRETE SURFACES ARE TO BE PUNCTED-UP WITH 1/2 CEMENT MORTAR MIX AND ALL SURFACES WETTED AND RUBBED WITH CARBORUNDUM BRICK OR OTHER ABRASIVE UNTIL UNIFORM COLOR AND TEXTURE IS PRODUCED.
22. CONCRETE SEALER:
 - ALL HORIZONTAL CONCRETE SHOULD BE SEALED WITH V-SEAL 102 EXCEPT STAMPED CONCRETE
 - ALL HORIZONTAL STAMPED CONCRETE SHOULD BE SEALED WITH V-SEAL 101
 - W.R. MEADOWS VOCOMP-30 WILL BE REPLACED BY V-SEAL 102 FOR ALL CONCRETE SEALING APPLICATIONS
 - V-SEAL SHOULD BE APPLIED ACCORDING TO THE ATTACHED APPLICATION SPECIFICATIONS.
- NEW CONCRETE:
 - APPLY V-SEAL 102 AS A CURING AGENT AFTER ALL BLEED WATER IS GONE, FINISHING IS COMPLETE, AND CONCRETE CAN WITHSTAND THE WEIGHT OF A PERSON WITHOUT MARRING BROOMED SURFACE. (DEPENDING ON ATMOSPHERIC CONDITIONS CURING CAN VARY FROM 3-12 HOURS FROM FINAL FINISHING.)
 - NEWLY Poured CONCRETE SHOULD NOT BE SUBJECT TO RAIN OR OTHER SOURCES OF WATER PRIOR TO OBTAINING SURFACE HARDNESS. APPLY UNIFORMLY USING A LOW PRESSURE SPRAYER. COVERAGE RATE DEPENDS OF POROSITY OF CONCRETE. THE PRODUCT SHOULD PRODUCE AN EVEN WET SHEEN WITH NO PUDDLES. PUDDLES SHOULD BE IMMEDIATELY DISPERSED WITH LIGHT ROLLING. BEING CAREFUL NOT TO MAR SURFACE. PRODUCT SHOULD BE COMPLETELY ABSORBED IN APPROXIMATELY 1 MINUTE LEAVING A CLEAR FINISH. SURFACE SHOULD BE DRY TO TOUCH IN 1-3 HOURS, BUT SHOULD NOT BE WALKED ON FOR AT LEAST 6 HOURS.
0. A SECOND COAT OF V-SEAL 102 SHOULD BE APPLIED WITHIN 7 TO 10 DAYS OF THE FIRST COAT USING A LOW PRESSURE SPRAYER AND BACK ROLLING FOR BETTER ABSORPTION. CONCRETE SHOULD BE DRY TO THE TOUCH AFTER 3 HOURS AND CAN BE OPENED TO TRAFFIC IN 6-12 HOURS (DEPENDING ON ABSORPTION AND DRYING RATE).
- EXISTING CONCRETE:
 - 0. ENSURE SURFACE IS CLEAN AND FREE OF DIRT, OIL, MILDEW, PAINT, AND TOPICAL COATINGS. ALSO ENSURE THAT SURFACE IS DRY. APPLY V-SEAL 102 WITH A LOW PRESSURE SPRAYER. SPECIFIC COVERAGE RATE IS BASED UPON SUBSTRATE POROSITY. THE PRODUCT SHOULD PRODUCE AN EVEN WET SHEEN WITH NO PUDDLES. PUDDLES SHOULD BE IMMEDIATELY DISPERSED WITH LIGHT ROLLING. PRODUCT SHOULD BE COMPLETELY ABSORBED IN APPROXIMATELY 1 MINUTE LEAVING A CLEAR FINISH. CONCRETE SHOULD BE DRY TO THE TOUCH AFTER 3 HOURS AND CAN BE OPENED TO TRAFFIC IN 6-12 HOURS (DEPENDING ON ABSORPTION AND DRYING RATE).

GENERAL NOTES:

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4. REINFORCING STEEL TO BE ASTM A-615 GRADE 60 KSI, DEFORMED BILLET STEEL BARS.
5. WIRE MESH TO BE ASTM A-185 ELECTRIC WELDED WIRE FABRIC (6" x 6" W2.9 x W2.9). MESH IS TO BE OVERLAPPED 6" AND TO BE EXTENDED TO WITHIN 3" OF JOINTS AND EDGE OF MAT (WIRE MESH TO BE IN FLAT SHEETS, NOT ROLLS).
6. FOR SUPPORTS OF ALL WIRE MESH IN SLABS USE 2" WIRE MESH CHAIRS (MAS-CON OR EQUAL), SPACED AT 4 FT INTERVALS.
7. UNSATISFACTORY SUB-GRADE MATERIAL MUST BE REMOVED.
8. FILL MATERIAL MUST MEET SPECIFICATION ASTM M-33 FOR CRUSHED STONE. FILL UNDER CURBS, WALKS, DRIVEWAYS TRASH ENCLOSURE AND ISLAND MATS SHALL BE 6" (MINIMUM) OF CRUSHED STONE.
10. CONCRETE PLACEMENT NOT PERMITTED WHEN TEMPERATURE IS BELOW 40°F AND FALLING OR BELOW 30°F AND RISING. DO NOT POUR CONCRETE IF BACKFILL IS FROZEN.
11. TEMPORARY FORMS TO REMAIN IN PLACE FROM 24 TO 72 HOURS.
12. CONSTRUCTION LOADS NOT PERMITTED BEFORE 7 DAYS WITHOUT OWNER APPROVAL.
13. THE ONLY OWNER APPROVED USE OF CONCRETE PRIOR TO 7 DAYS CURING IS THE USE OF HIGH EARLY STRENGTH CONCRETE (4000 PSI WITH ASTM C-150 TYPE II PORTLAND CEMENT) FOR SLABS SPECIFICALLY DESIGNATED AT OPERATING LOCATIONS FOR VEHICULAR TRAFFIC AFTER 72 HOURS.
15. TOP OF ISLANDS, WALKS, & SLABS TO RECEIVE A FINE BROOM FINISH AND BE SEALED PER SPECIFICATIONS.
16. USE HYDRAULIC CEMENT "5-STAR GROUT" OR APPROVED EQUAL FOR BASE PLATE GROUT (NON-SHRINK) AND BUMPER POST.
18. REINFORCING WIRE MESH MINIMUM COVER IS 2".
19. SLOPE TANK MATS AND ISLAND MATS IN ACCORDANCE WITH PLOT PLAN, TANK MATS AND ISLAND MATS SHALL BE SURFACED SUCH THAT LIQUID WILL FLOW AWAY FROM MANWAYS, SPILL CONTAINERS AND ISLANDS AND WILL NOT ALLOW PONDING. OVERALL FLATNESS SHALL BE A MIN. 1/8" FT SLOPE ON CONE.
20. EXPOSED CORNERS ON CONCRETE FOOTINGS SHALL BE CHAMFERED 3/4".
21. VOIDS ON ANY FORMED CONCRETE SURFACES ARE TO BE PUNCTED-UP WITH 1/2 CEMENT MORTAR MIX AND ALL SURFACES WETTED AND RUBBED WITH CARBORUNDUM BRICK OR OTHER ABRASIVE UNTIL UNIFORM COLOR AND TEXTURE IS PRODUCED.
22. CONCRETE SEALER:
 - ALL HORIZONTAL CONCRETE SHOULD BE SEALED WITH V-SEAL 102 EXCEPT STAMPED CONCRETE
 - ALL HORIZONTAL STAMPED CONCRETE SHOULD BE SEALED WITH V-SEAL 101
 - W.R. MEADOWS VOCOMP-30 WILL BE REPLACED BY V-SEAL 102 FOR ALL CONCRETE SEALING APPLICATIONS
 - V-SEAL SHOULD BE APPLIED ACCORDING TO THE ATTACHED APPLICATION SPECIFICATIONS.
- NEW CONCRETE:
 - APPLY V-SEAL 102 AS A CURING AGENT AFTER ALL BLEED WATER IS GONE, FINISHING IS COMPLETE, AND CONCRETE CAN WITHSTAND THE WEIGHT OF A PERSON WITHOUT MARRING BROOMED SURFACE. (DEPENDING ON ATMOSPHERIC CONDITIONS CURING CAN VARY FROM 3-12 HOURS FROM FINAL FINISHING.)
 - NEWLY Poured CONCRETE SHOULD NOT BE SUBJECT TO RAIN OR OTHER SOURCES OF WATER PRIOR TO OBTAINING SURFACE HARDNESS. APPLY UNIFORMLY USING A LOW PRESSURE SPRAYER. SPECIFIC COVERAGE RATE IS BASED UPON SUBSTRATE POROSITY. THE PRODUCT SHOULD PRODUCE AN EVEN WET SHEEN WITH NO PUDDLES. PUDDLES SHOULD BE IMMEDIATELY DISPERSED WITH LIGHT ROLLING. BEING CAREFUL NOT TO MAR SURFACE. PRODUCT SHOULD BE COMPLETELY ABSORBED IN APPROXIMATELY 1 MINUTE LEAVING A CLEAR FINISH. SURFACE SHOULD BE DRY TO TOUCH IN 1-3 HOURS, BUT SHOULD NOT BE WALKED ON FOR AT LEAST 6 HOURS.
0. A SECOND COAT OF V-SEAL 102 SHOULD BE APPLIED WITHIN 7 TO 10 DAYS OF THE FIRST COAT USING A LOW PRESSURE SPRAYER AND BACK ROLLING FOR BETTER ABSORPTION. CONCRETE SHOULD BE DRY TO THE TOUCH AFTER 3 HOURS AND CAN BE OPENED TO TRAFFIC IN 6-12 HOURS (DEPENDING ON ABSORPTION AND DRYING RATE).
- EXISTING CONCRETE:
 - 0. ENSURE SURFACE IS CLEAN AND FREE OF DIRT, OIL, MILDEW, PAINT, AND TOPICAL COATINGS. ALSO ENSURE THAT SURFACE IS DRY. APPLY V-SEAL 102 WITH A LOW PRESSURE SPRAYER. SPECIFIC COVERAGE RATE IS BASED UPON SUBSTRATE POROSITY. THE PRODUCT SHOULD PRODUCE AN EVEN WET SHEEN WITH NO PUDDLES. PUDDLES SHOULD BE IMMEDIATELY DISPERSED WITH LIGHT ROLLING. PRODUCT SHOULD BE COMPLETELY ABSORBED IN APPROXIMATELY 1 MINUTE LEAVING A CLEAR FINISH. CONCRETE SHOULD BE DRY TO THE TOUCH AFTER 3 HOURS AND CAN BE OPENED TO TRAFFIC IN 6-12 HOURS (DEPENDING ON ABSORPTION AND DRYING RATE).

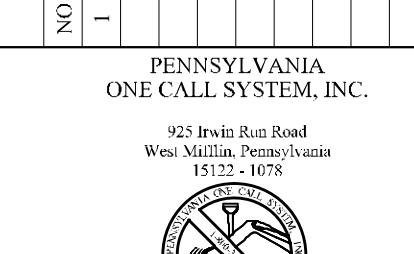

TYPICAL 8" THICK TANK MAT
EXPANSION AND KEY JOINT DETAIL



GENERAL NOTES:

1. CONCRETE WORK AND MATERIALS TO CONFORM TO ALL REQUIREMENTS OF THE LATEST REVISIONS OF CODES ACI 301 & ACI 318.
2. USE 4000 PSI CONCRETE (READY-MIXED ASTM C-94 OR MIXED-ON-JOB ACI 304), (SLUMP 2"-4", MIN WATER / CEMENT RATIO 0.4 TO 1, AIR CONTENT SHALL BE 4.5 % MIN AND 7.5% MAX).
3. ANCHOR BOLTS TO BE ASTM A-307 STEEL.
4. REINFORCING STEEL TO BE ASTM A-615 GRADE 60 KSI, DEFORMED BILLET STEEL BARS.
5. WIRE MESH TO BE ASTM A-185 ELECTRIC WELDED WIRE FABRIC (6" x 6"-W2.9 x W2.9). MESH IS TO BE OVERLAPPED 6" AND TO BE EXTENDED TO WITHIN 3" OF JOINTS AND EDGE OF MAT. (WIRE MESH TO BE IN FLAT SHEETS, NOT ROLLS)
6. FOR SUPPORT OF ALL WIRE MESH IN SLABS USE 2" WIRE MESH CHAIRS (MAS-CON OR EQUAL), SPACED AT 4 FT INTERVALS.
7. UNSATISFACTORY SUB-GRADE MATERIAL MUST BE REMOVED.
8. FILL MATERIAL MUST MEET SPECIFICATION AST M-33 FOR CRUSHED STONE. FILL UNDER CURBS, WALKS, DRIVEWAYS, TRASH ENCLOSURE AND ISLAND MATS. SHALL BE 6" (MINIMUM) OF CRUSHED STONE.
9. CONCRETE PLACEMENT NOT PERMITTED WHEN TEMPERATURE IS BELOW 40°F AND FALLING OR BELOW 30°F AND RISING. DO NOT POUR CONCRETE IF BACKFILL IS FROZEN.
10. TEMPORARY FORMS TO REMAIN IN PLACE FROM 24 TO 72 HOURS.
11. CONSTRUCTION LOADS NOT PERMITTED BEFORE 7 DAYS WITHOUT OWNER APPROVAL.
12. THE ONLY OWNER APPROVED USE OF CONCRETE PRIOR TO 7 DAYS CURING IS THE USE OF HIGH EARLY STRENGTH CONCRETE (4000 PSI WITH ASTM C-150 TYPE III PORTLAND CEMENT) FOR SLABS SPECIFICALLY DESIGNATED AT OPERATING LOADS FOR VEHICULAR TRAFFIC AFTER 72 HOURS.
13. TOP OF ISLANDS, WALKS, & SLABS TO RECEIVE A FINE BROOM FINISH AND BE SEALED PER SPECIFICATIONS.
14. USE HYDRAULIC CEMENT "5-STAR GROUT" OR APPROVED EQUAL FOR BASE PLATE GROUT (NON-SHRINK) AND BUMPER POST.
15. REINFORCING WIRE MESH MINIMUM COVER IS 2".
16. SLOPE TANK MATS AND ISLAND MATS IN ACCORDANCE WITH PLOT PLAN. TANK MATS AND ISLAND MATS SHALL BE SURFACED SUCH THAT LIQUID WILL FLOW AWAY FROM MANWAYS, SPILL CONTAINERS AND ISLANDS AND WILL NOT ALLOW PONDING. OVERALL FLATNESS SHALL BE A MIN. 1/8" / FT SLOPE ON CONE.
17. EXPOSED CORNERS ON CONCRETE FOOTINGS SHALL BE CHAMFERED 3/4".
18. VOIDS ON ANY FORMED CONCRETE SURFACES ARE TO BE POINTED-UP WITH 1/2 CEMENT MORTAR MIX AND ALL SURFACES WETTED AND RUBBED WITH CARBONBRUNDRU BRICK OR OTHER ABRASIVE UNTIL UNIFORM COLOR AND TEXTURE IS PRODUCED.
19. FOR CANOPY, TANK MATS, CONCRETE PARKING, AND CONCRETE SIDEWALKS, SEAL COAT WITH W.R. MEADOWS VDCMP-30 PER MANUFACTURER'S INSTALLATION PROCEDURES.
 - A) FOR NEW CANOPY, TANK MATS AND CONCRETE PARKING, 2 COATS ARE REQUIRED. FOR EXISTING SIDEWALKS, ONE 1 COAT IS REQUIRED.
 - B) FOR EXISTING CONCRETE SEALER INSTALLATION, CONCRETE MUST BE CLEAN AND DRY (REMOVE ALL OIL, GREASE, AND DUST) PRIOR TO INSTALLATION.
 - C) APPLY W.R. MEADOWS VDCMP-30 WHEN THE SURFACE WATER HAS DISAPPEARED AND THE CONCRETE SURFACE WILL NOT BE MARRED BY WALKING WORKMAN, FIRST COAT WITHIN 72 HOURS, SECOND COAT WITHIN 2 WEEKS.
20. ASPHALT PAVEMENT GUIDELINES: ALL INSTALLATIONS, PROCEDURES AND MATERIALS USED ARE TO BE IN ACCORDANCE WITH LOCAL STATE HIGHWAY DEPARTMENT (LSH) SPECIFICATIONS. REVIEW INSTALLATION PROCEDURES WITH SUNOCO FIELD ENGINEER.
 - A) BASE COURSE MATERIALS: SOUND ANGULAR CRUSHED STONE, CRUSHED GRAVEL, RECYCLED CONCRETE, SAND, OR STONE SCREENINGS, PER LSH SPECIFICATIONS.
 - B) BINDER COURSE: 3.5%-8% OF ASPHALT CEMENT BY WEIGHT MIXTURE. MIX GRADIENT (1-1/2 MAX) PER LSH SPECIFICATIONS.
 - C) WEARING COURSE: 4.5%-9.5% OF ASPHALT CEMENT BY WEIGHT MIXTURE. MIX GRADIENT (3/4 MAX) PER LSH SPECIFICATIONS.
 - D) DIMENSIONS SHOWN IN DETAILS 7A & 7B ARE COMPAKTED DIMENSIONS.
 - E) DO NOT PLACE ASPHALT WHEN AMBIENT OR BASE SURFACE TEMPERATURE IS LESS THAN 40°F, OR BASE IS WET OR FROZEN.
 - F) FOR RE-SURFACING INSTALL A TACK COAT TO EXISTING SURFACE IMMEDIATELY PRIOR TO PAVING. WEARING COURSE IS TO BE A COMPAKTED THICKNESS OF 1-1/2". INSTALLATION PROCEDURES IN ACCORDANCE WITH LSH SPECIFICATIONS.
 - G) NOTES ON TYPE 2 EXPANSION JOINTS:
 - 1) TYPE 2 FIBER EXPANSION JOINT COMPOSED OF CELLULAR FIBERS BONDED WITH ASPHALT AS MANUFACTURED BY W.R. MEADOWS OR EQUIVALENT. SEALIGHT FIBERS EXPANSION JOINT FILLER CAPPED WITH W.R. MEADOWS SNAP CAP 1/2" SIZE, RECESS EXP. JOINT 1/4" FROM SURFACE.
 - 2) SEALANT USED FOR EXPANSION JOINT TYPE 2 ARE SPECIFIED AS 'THC' 900/901 MANUFACTURED BY TREMCO SEALIGHT GARDIX MANUFACTURED BY W.R. MEADOWS SIKA SINGLE COMPONENT URETHANE SEALANT "1A" IS RESISTANT TO OIL AND GAS, AND IS SELF-LEVELING AND GUNABLE NON-SAGGING TYPE. COLOR: GRAY.

NO	BY	DESCRIPTION	REVISED PER TOWNSHIP COMMENTS	DATE
1	DN			9/2/2021



BEFORE YOU DIG ANYWHERE IN
PENNSYLVANIA CALL 1-800-242-1776

NON-MEMBERS MUST BE
CONTACTED DIRECTLY.

PLACES TO STAY OVERNIGHT
NOTICE TO UTILITIES BEFORE YOU EXCAVATE,
DREDGE OR DEMOLISH!



PROFESSIONAL ENGINEER
DELAWARE LICENSE No. PE15438
PENNSYLVANIA LICENSE No. P605536
NEW JERSEY LICENSE No. 3400450400
VIRGINIA LICENSE No. 0402045725
NEW YORK LICENSE No. 0936671

PROJECT LOCATION

LAND DEVELOPMENT DOCUMENTS
"SUNOCO 1451 PROVIDENCE ROAD"
PROPOSED COMMERCIAL
RE-DEVELOPMENT
1451 PROVIDENCE ROAD
MEDIA, PENNSYLVANIA, 19063
DELAWARE COUNTY

PREPARED FOR
SIRHANDI ENTERPRISES, INC.

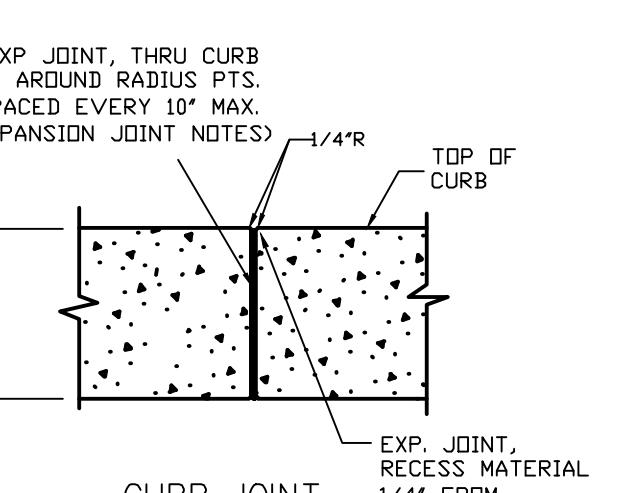
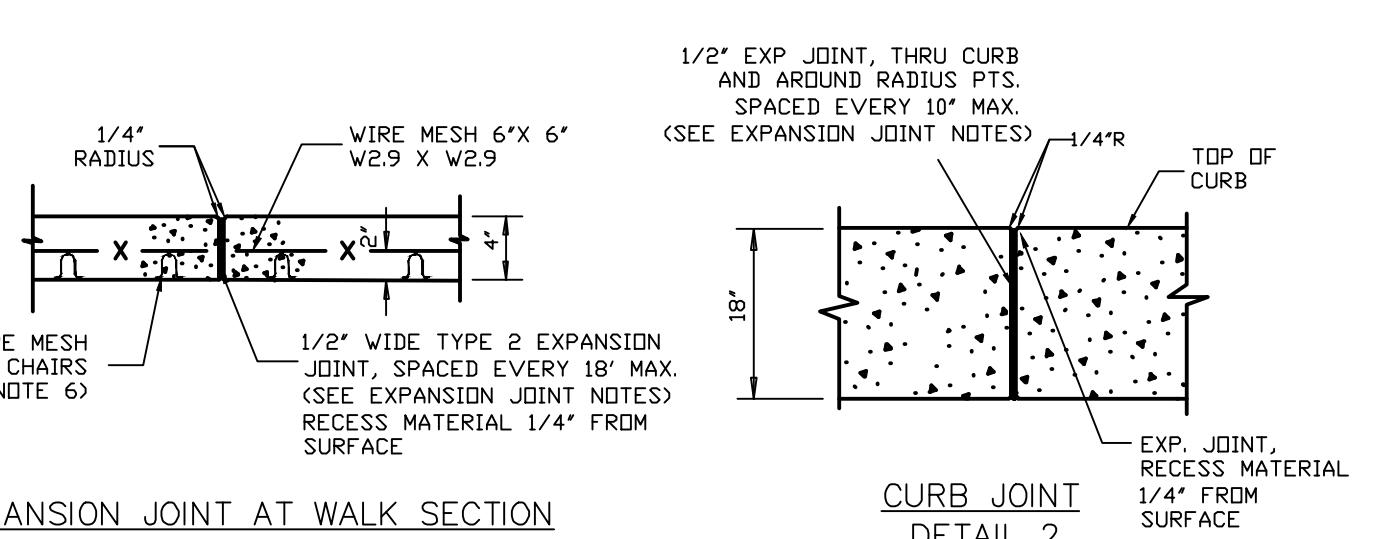
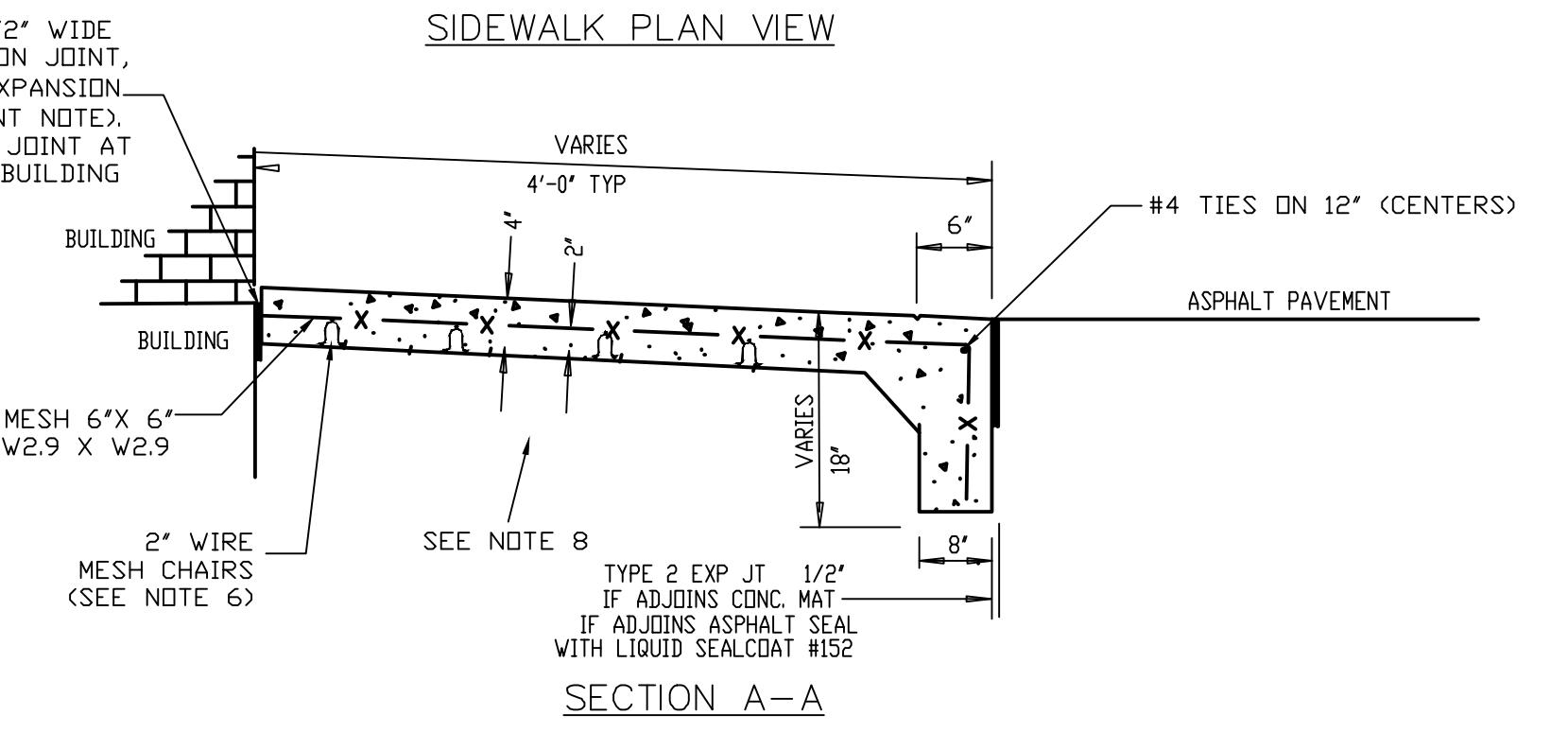
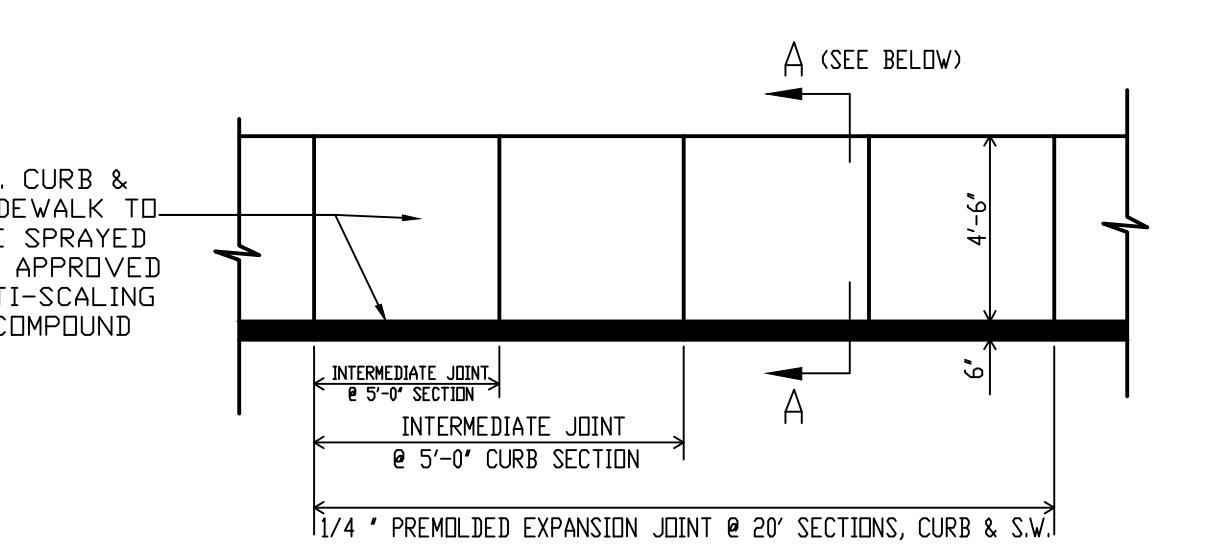
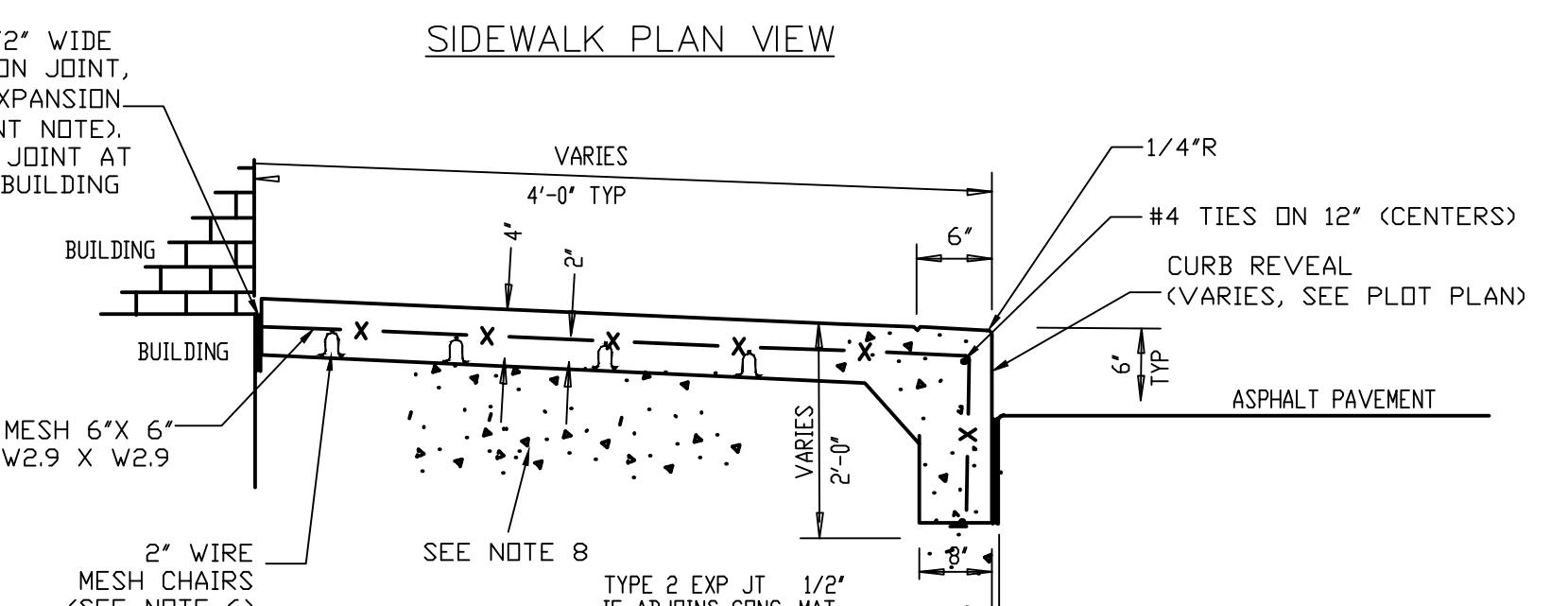
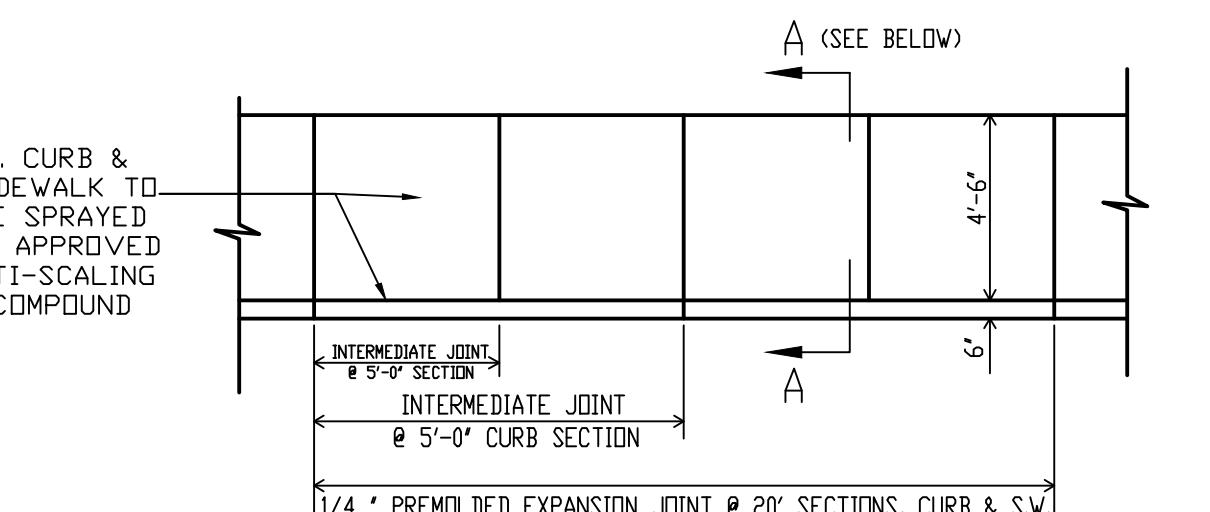
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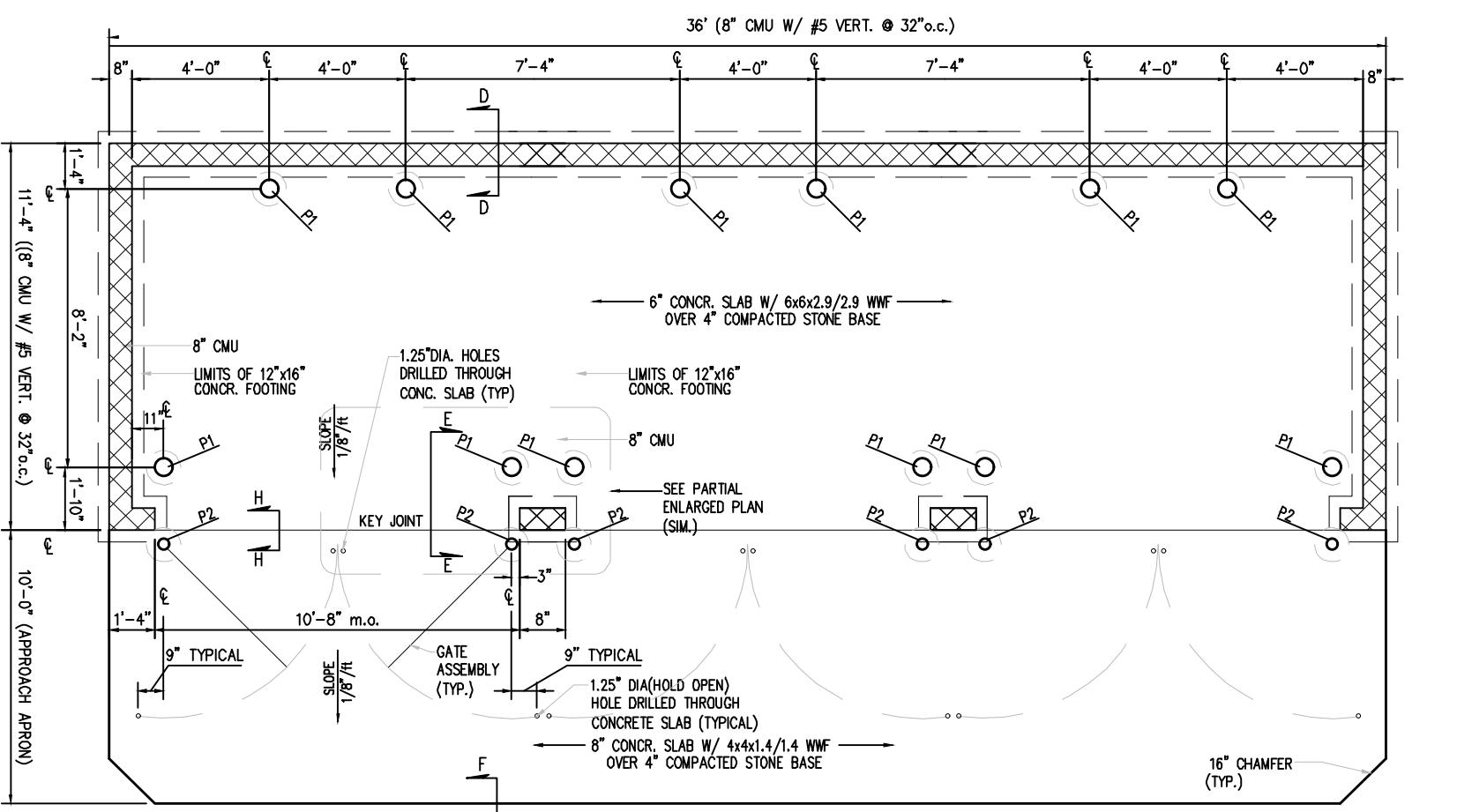
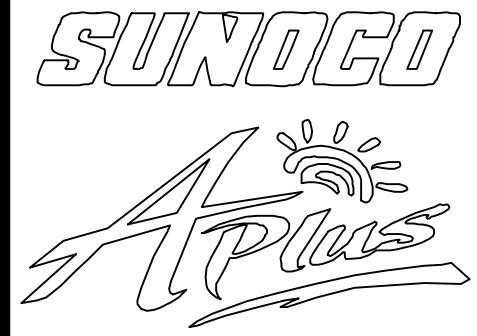
SITE DETAILS

PROJ. #	19-0425	DATE	05-21-2021
CAD ID	19-0425	DRN BY	GTM
SCALE	AS NOTED	CHK BY	JBA

SHEET 21 OF 27

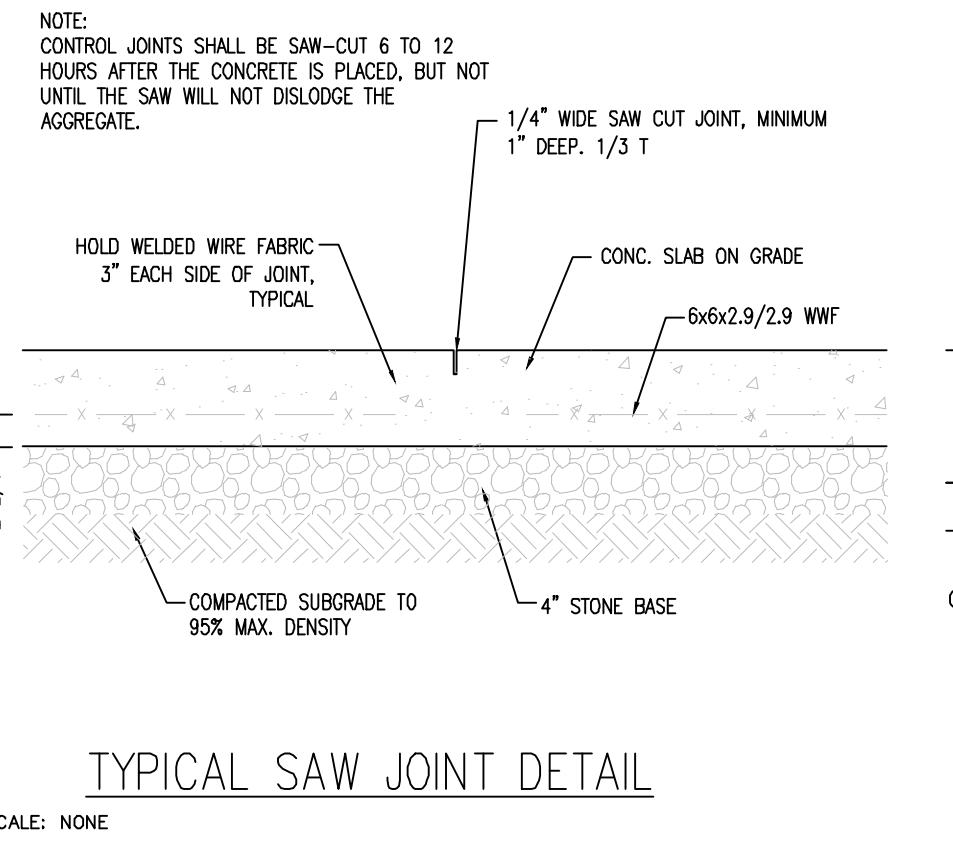
REVISION 1



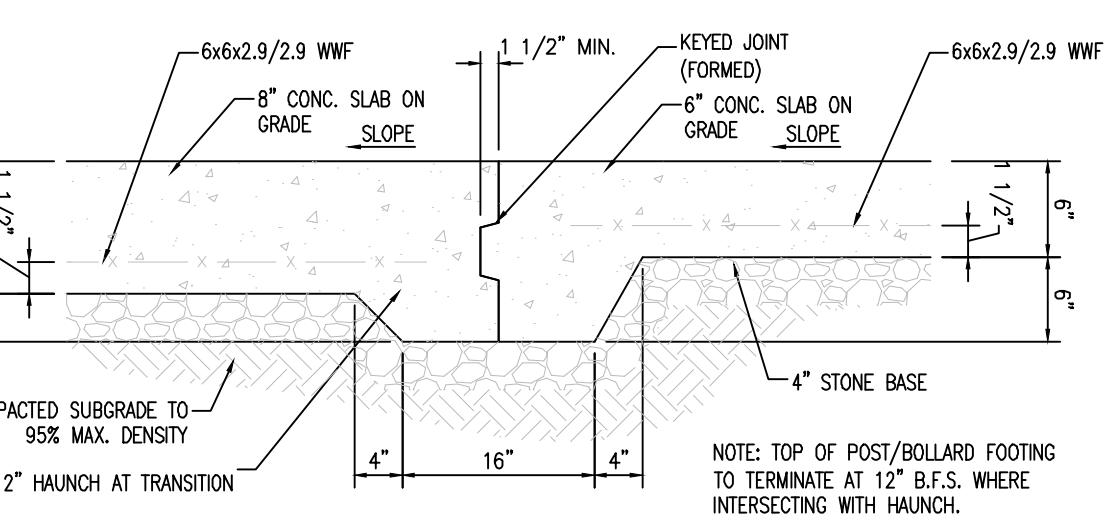


GENERAL NOTES:

- TREX PLANKS:
 A. TREX TRANSCEND (COLOR GRAVEL PATH, EDGE: SQUARE) IS THE STANDARD
 B. TREX PLANKS ARE TO BE SCREWED IN FROM THE REAR AS FOLLOWS:
 - SCREWS THROUGH THE TOP RECESSED WELDED PLATE
 - SCREWS THROUGH THE CENTER STEEL SUPPORT BRACE
 - SCREWS THROUGH THE BOTTOM RECESSED WELDED PLATE
 C. TREX SELECT (COLOR PEBBLE GREY, EDGE: SQUARE) IS THE APPROVED ALTERNATIVE. GROOVED EDGES ALSO APPROVED ALTERNATIVES.
- TREX MOUNTING SCREWS ARE TO BE GRK FASTENERS – CABINET SCREWS 10x1" (NOTE: DO NOT OVER-TORQUE).
- NEW CONCRETE CMU TO MATCH THE BUILDING BLOCK COLOR: 500 (WHITE) E.P. HENRY COLOR FIORI LINE OR AS INSTRUCTED BY THE FIELD ENGINEER.
- EXISTING BLOCK ENCLOSURES ARE TO BE PAINTED TO MATCH THE BUILDING IF THE BUILDING IS BEING PAINTED SUNOCO STANDARD SHERWIN WILLIAMS "PEDIMENT" #SW7634 SEMI-GLOSS OR AS INSTRUCTED BY THE FIELD ENGINEER.
- STEEL FRAME TO BE PAINTED AS LISTED BELOW OR AS INSTRUCTED BY THE FIELD ENGINEER.
 - PRIMER COAT: PRO-CRYL UNIVERSAL METAL PRIMER #B66-310
 - INTERMEDIATE COAT: SHERWIN WILLIAMS "ONYX GRAY" #B66-350
 - FINISH COAT: SHERWIN WILLIAMS "ONYX GRAY" #B66-350
- FILL 4" O.D. SCH 80 (3 1/2" NOM SIZE) GATE POST SOLID WITH GROUT AND LEVEL TOP
- CONSULT ENGINEERING REGARDING GRADE DIFFERENTIALS.
- ALL GATE MATERIAL AND HARDWARE TO BE SHOP PRIMED PER SUNOCO STANDARDS.



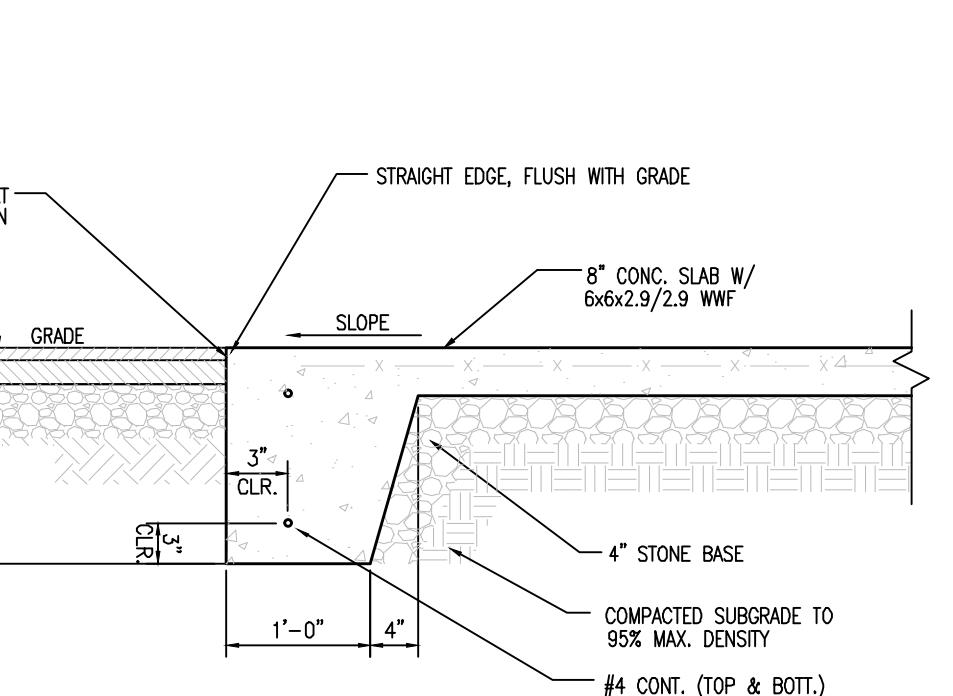
TYPICAL SAW JOINT DETAIL



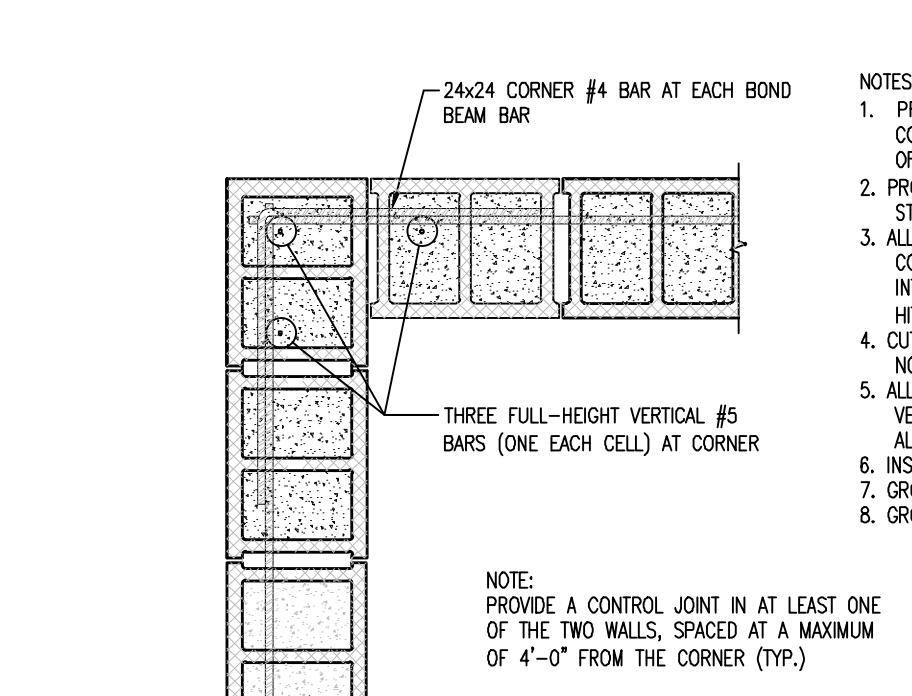
TRASH ENCLOSURE CONCRETE SLAB SECTION 'H' THROUGH KEY JOINT

NOTES:

- PROVIDE CONTROL JOINTS AT A MAXIMUM L/H RATIO OF 1.5:1 IN CONCRETE MASONRY WALLS, NOT TO EXCEED A MAXIMUM SPACING OF 25 FEET.
- PROVIDE CONTROL JOINT AT MINIMUM 4'-0" AWAY FROM ALL STRUCTURE CORNERS.
- ALL VERTICAL REINFORCING BARS AT WALL ENDS, EACH SIDE OF CONTROL JOINTS, AND EACH SIDE OF OPENINGS SHALL BE DOWELLED INTO THE WALL SUPPORT. THIS MAY BE EPOXY-SET WITH HILTI HIT RH150.
- CUT ALL HORIZONTAL JOINT REINFORCING AT CONTROL JOINTS. DO NOT CUT BOND BEAM REINFORCING AT CONTROL JOINTS.
- ALL BOND BEAM REINFORCING SHALL BE ANCHORED AROUND THE VERTICAL BARS WITH A STANDARD LENGTH AT THE WALL ENDS AND AT ALL VERTICAL BARS INSTEAD OF CONTROL JOINTS.
- INSTALL DURAWALL TRUSS TYPE HORIZ. REINFORCING EVERY OTHER BLOCK COURSE.
- GROUT ENTIRE WALL SOLID TO 3 COURSES ABOVE FINISH SLAB.
- GROUT ALL CELLS CONTAINING VERTICAL REINFORCING SOLID.

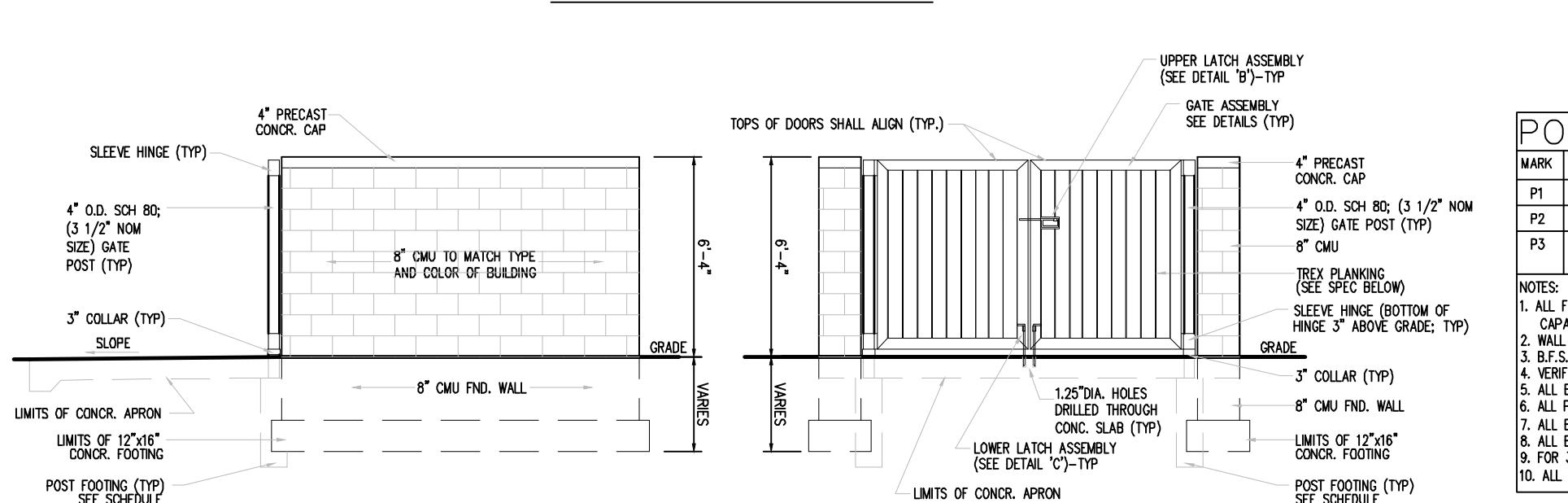


APRON HAUNCH DETAIL 'F'



TYPICAL REINFORCING DETAIL 'G'

ENCLOSURE PLAN - TRIPLE



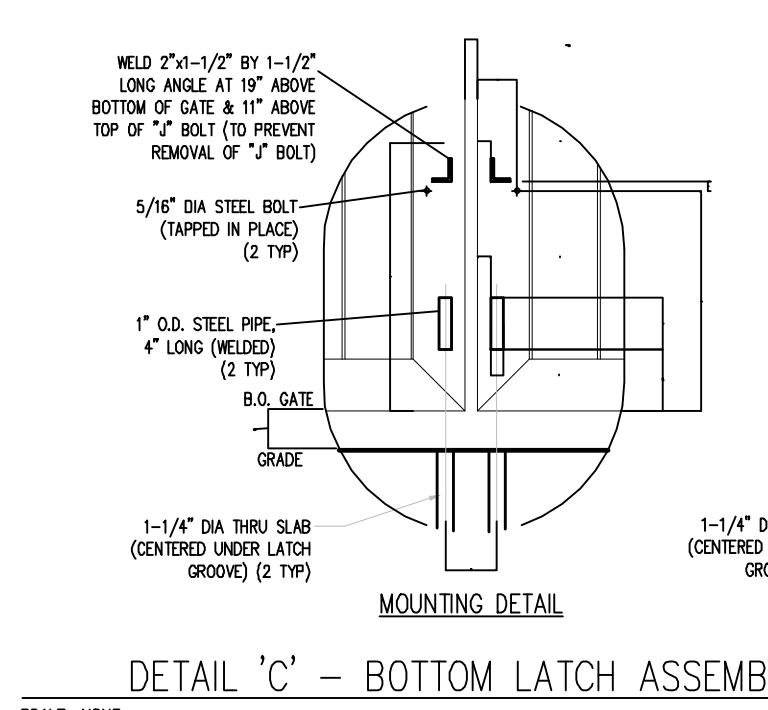
POST/ BOLLARD SCHEDULE					
MARK	PIPE SIZE	FOOTING SIZE	FOOTING DEPTH	REMARKS	PIPE HEIGHT
P1	6" DIA.	12" DIA.	36" B.F.S.	SEPARATE POUR; PAINTED SAFETY YELLOW-0" MIN. A.F.S.	
P2	4" DIA.	12" DIA.	48" B.F.S.	SEPARATE POUR; PAINTED GRAY	6'-3" A.F.S.
P3	(2) 4" DIA.	18" DIA. OR 18" DIA.	48" B.F.S.	SEPARATE POUR; PAINTED GRAY	6'-3" A.F.S.

NOTES:
 1. ALL FOOTINGS OR 18" SONOTUBE SHALL REST ON VIGOROUS OR ENGINEERED FILL WITH A BEARING CAPACITY NO LESS THAN 1500PSI PER SQ. FT.
 2. WIDTH OF 18" SONOTUBE IS ADJUSTED TO ACCOMMODATE GRADE DIFFERENTIALS.
 3. 18" DIA. = BELOW FINISH SLAB.
 4. VERIFY APRON CONFIGURATION WITH FINAL LAND DEVELOPMENT PLANS.
 5. ALL APRON POSTS TO BE 4" O.D. SCH 80 (3 1/2" NOM SIZE).
 6. ALL POSTS SHALL BE GROUTED SOLID WITH FLAT TOPS.
 7. ALL BOLLARD PIPE TO BE STANDARD GRADE STEEL PIPE (NOT GALVANIZED).
 8. ALL BOLLARD POSTS TO BE 4" O.D. SCH 80 (3 1/2" NOM SIZE).
 9. FOR 3 OR MORE GATES, ADD P3 POSTS AND FOUNDATIONS AS NECESSARY.
 10. ALL GATE POSTS TO BE SCHEDULE 80 STEEL (NOT GALVANIZED).

JULY 2015 REVISION NOTE:
 1. THE TWO BOLLARDS (P1) ON EITHER SIDE OF THE GATE HAVE BEEN RELOCATED 1' FARTHER FROM THE ADJACENT MASONRY WALL. THE BOLLARDS (P1) AT THE REAR WALL OF THE ENCLOSURE HAVE NOT CHANGED POSITION.

ENCLOSURE ELEVATION - SIDE (TYP.)

ENCLOSURE ELEVATION



SCALE: NONE

DETAIL 'C' - BOTTOM LATCH ASSEMBLY

MOUNTING DETAIL

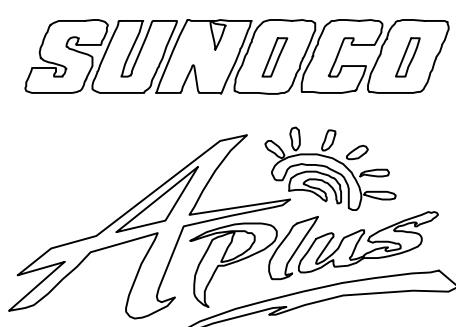
LOCKING POSITION

OPEN POSITION

"J" BOLT DETAIL

LOCKING POSITION

OPEN POSITION



GENERAL NOTES:

- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED. U.S. CUSTOMARY UNITS IN () PARENTHESES.
- METRIC UNITS INDICATED ARE SOFT CONVERTED FROM U.S. CUSTOMARY UNITS.
- DESIGN SPECIFICATIONS AND REQUIREMENTS:
 - ASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND AS SUPPLEMENTED BY DESIGN MANUAL PART 4, STRUCTURES.
 - DESIGN IN ACCORDANCE WITH THE LOAD AND RESISTANCE FACTOR DESIGN METHOD (LRFD).
 - INLET BOXES ARE DESIGNED FOR AN ALLOWABLE FOUNDATION PRESSURE EQUAL TO 0.150 MPa (2.0 TONS/SQ. FT. AT THE SERVICE LIMIT STATE).
- CONSTRUCTION MATERIALS AND PERFORMANCE IN ACCORDANCE WITH THE CURRENT VERSION OF THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION AND THE CONTRACT SPECIAL PROVISIONS.

5. SHOP DRAWINGS FOR INLET BOXES, TOP SLABS, AND TRANSITION SLABS ARE NOT REQUIRED IF THE ITEM IS CONSTRUCTED/FABRICATED IN ACCORDANCE WITH THIS STANDARD.

6. THIS STANDARD DEPICTS THE DIMENSIONS REQUIRED FOR UNIFORMITY AND INTERCHANGEABILITY. IT DOES NOT INCLUDE DETAILS REQUIRED FOR FABRICATION OR MANUFACTURING. FOR FABRICATION MATERIALS AND DETAILS, SUBMIT SHOP DRAWINGS TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF FOR REVIEW AND ACCEPTANCE.

7. THE DESIGNER IS RESPONSIBLE FOR DETERMINING THE TYPE OF INLET BOX REQUIRED BASED ON THE REQUIRED PIPE SIZE AND PIPE OPENINGS. REFER TO TABLES A AND B ON THE FOLLOWING PAGES FOR ADDITIONAL INFORMATION. THE DESIGNER IS RESPONSIBLE TO DETERMINE THE REQUIRED PAY ITEM FOR AN INSTALLATION BASED ON THE OVERALL INSTALLATION HEIGHT.

8. THE SELECTION OF COMPONENTS TO ACHIEVE A SPECIFIED INLET ASSEMBLY IS THE DESIGNER'S RESPONSIBILITY, UNLESS OTHERWISE INDICATED ON THE CONTRACT DOCUMENTS.

9. THE SIZE OF THE INLET TOP UNITS, RC-45M, ARE BASED ON THE MINIMUM DIMENSIONS INDICATED FOR THE STANDARD INLET BOX.

10. MINIMUM PIPE DIAMETERS (INSIDE):

- FILL HEIGHT LESS THAN OR EQUAL TO 7600 mm (25'1" 450 mm (18") FOR FILL HEIGHTS GREATER THAN 7600 mm (25'1" 450 mm (18") FOR FILL HEIGHTS GREATER THAN 7600 mm (25'1" 450 mm (18")

11. INSIDE INLET BOX DIMENSIONS ARE BASED ON PROVIDING A PIPE OPENING TO ACCOMMODATE A MINIMUM 450 mm (18") PIPE TO A MAXIMUM 4340 mm (15') PIPE. IF A LARGER PIPE SIZE IS REQUIRED, THE DESIGNER IS RESPONSIBLE FOR PROVIDING DESIGN AND DETAILS IN ACCORDANCE WITH PENNDOT REQUIREMENTS.

12. INLETS THAT EXCEED THE MAXIMUM HEIGHT INDICATED REQUIRE SPECIAL DESIGN AND DETAILS IN ACCORDANCE WITH PENNDOT REQUIREMENTS IN PROVIDING DESIGN AND DETAILS IN ACCORDANCE WITH PENNDOT REQUIREMENTS.

13. SHOW ORIENTATION OF INLET BOXES THE CONTRACT DRAWINGS.

14. THE TOP SLAB IS NOT PERMITTED TO BE Poured MONOLITHICALLY WITH THE ADJACENT BOX SECTION.

15. PROVIDE 50 mm (2") DIAMETER WEEPHOLES IN THE WALLS WHEN THE DEPTH BETWEEN THE FINISHED GRADE ELEVATION AND THE TOP OF BOTTOM SLAB ELEVATION IS GREATER THAN 3048 mm (10'-0").

• HORIZONTAL PLACEMENT: PLACE WEEPHOLES IN THE SIDE WALLS THAT ARE PERPENDICULAR TO TRAFFIC.

• LOCATE WEEPHOLES A MINIMUM OF 305 mm (1'-0") ABOVE OUTLET PIPE JOINTS.

16. PROVIDE MANHOLE STEPS WHEN THE DEPTH BETWEEN THE FINISHED GRADE ELEVATION AND THE TOP OF BOTTOM SLAB ELEVATION IS GREATER THAN 1500 mm (5'-0"), SHALLOW REINFORCEMENT BARS ARE GREATER THAN 10 mm (3/8") IN DEPTH, FORMED BY MAGNETIC STEP FORMERS ARE ACCEPTABLE AND DO NOT REQUIRE PATCHING. FOR DETAILS, REFER TO RC-33M.

17. IF A REQUIRED DETAIL IS NOT FOUND IN THIS STANDARD OR ON THE CONTRACT DRAWINGS, A SPECIAL SUBMISSION REQUESTING ACCEPTANCE FOR SPECIFIC DETAILS MUST BE MADE TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF.

18. FOR INLET TOPS, GRATES, GRADE ADJUSTMENT RINGS AND FRAMES, REFER TO RC-45M.

MATERIAL NOTES:

- PROVIDE THE FOLLOWING CONCRETE CLASS:
 - CAST-IN-PLACE CLASS A CEMENT CONCRETE
 - CAST-IN-PLACE CLASS B CEMENT CONCRETE 40 MPa (3,000 PSI)
 - PRECAST CLASS C CEMENT CONCRETE MODIFIED DESIGN COMPRESSIVE STRENGTH, $f'_c = 28$ MPa (4,000 PSI)
- A HIGHER STRENGTH OF CONCRETE MAY BE SUBSTITUTED FOR A LOWER STRENGTH OF CONCRETE AT NO ADDITIONAL COST TO THE DEPARTMENT. SUBMIT MIX DESIGN TO THE DEPARTMENT FOR REVIEW AND ACCEPTANCE.
- REINFORCEMENT STEEL:
 - PROVIDE GRADE 420 (GRADE 60) DEFORMED REINFORCEMENT BARS THAT MEET THE REQUIREMENTS OF ASTM A615 (A615) OR ASTM A709 (A709).
 - ALL REINFORCEMENT BARS SHOULD BE SOFT CONVERTED METRIC SIZES.
 - PROVIDE MINIMUM LAP AND ENDMENT LENGTH FOR REINFORCING BARS OF 30 mm (1 1/8") IN ACCORDANCE WITH THE CURRENT ASHTO SPECIFICATIONS AS MODIFIED BY THE DESIGN MANUAL PART 4, WHICHEVER IS GREATER. REFER TO TABLE ON SHEET 3.
 - BAR SPACING:
 - MINIMUM SPACING = 102 mm (4")
 - MAXIMUM SPACING = 305 mm (12") OR 1.5 MEMBER THICKNESS
- PERMITS:
 - PROVIDE GRADE 450 (GRADE 60) PLAIN WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A475 OR GRADE 490 GRADE TO DEFORMED WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A497.
 - ALL WELDED WIRE FABRIC SHOULD BE SOFT CONVERTED METRIC SIZES.
 - PROVIDE MINIMUM LAP SPACES FOR WELDED WIRE FABRIC EQUAL TO THE LARGER OF TWO GRID SPACINGS OR 305 mm (12").
 - WIRE FABRIC:
 - MINIMUM SPACING = 51 mm (2")
 - MAXIMUM SPACING = 305 mm (12") OR 1.5 MEMBER THICKNESS
- PERMITS:
 - PROVIDE GRADE 450 (GRADE 60) PLAIN WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A475 OR GRADE 490 GRADE TO DEFORMED WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A497.
 - ALL WELDED WIRE FABRIC SHOULD BE SOFT CONVERTED METRIC SIZES.
 - PROVIDE MINIMUM LAP SPACES FOR WELDED WIRE FABRIC EQUAL TO THE LARGER OF TWO GRID SPACINGS OR 305 mm (12").
 - WIRE FABRIC:
 - MINIMUM SPACING = 51 mm (2")
 - MAXIMUM SPACING = 305 mm (12") OR 1.5 MEMBER THICKNESS
- WELDED WIRE FABRIC (WIFI):
 - PROVIDE GRADE 450 (GRADE 60) PLAIN WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A475 OR GRADE 490 GRADE TO DEFORMED WELDED WIRE FABRIC THAT MEET THE REQUIREMENTS OF ASTM A497.
 - ALL WELDED WIRE FABRIC SHOULD BE SOFT CONVERTED METRIC SIZES.
 - PROVIDE MINIMUM LAP SPACES FOR WELDED WIRE FABRIC EQUAL TO THE LARGER OF TWO GRID SPACINGS OR 305 mm (12").
 - WIRE FABRIC:
 - MINIMUM SPACING = 51 mm (2")
 - MAXIMUM SPACING = 305 mm (12") OR 1.5 MEMBER THICKNESS
- MINIMUM SLAB AND WALL THICKNESS:
 - INLET BOXES #10 (3") #12 (4") #16 (5") #19 (6")
 - MINIMUM WALL THICKNESS = 100 mm (4")
 - MINIMUM BOTTOM SLAB THICKNESS = 178 mm (7")
- THICKNESS OF WALL MUST BE PERMITTED TO VARY FROM SECTION TO SECTION. INSIDE FACE OF WALLS MUST ALIGN BETWEEN SECTIONS.
- FABRICATOR IS RESPONSIBLE FOR LIFTING, HANDLING AND TRANSPORTATION STRESSES.
- LIFTING DEVICES:
 - PROVIDE GALVANIZED STEEL OR PLASTIC LIFTING DEVICES FOR HANDLING AND TRANSPORTATION.
 - FILL LIFTING DEVICES WITH NON-SHRINK GROUT AFTER INSTALLATION.
 - PROVIDE LIFTING DEVICES WITH A MINIMUM CAPACITY OF AT LEAST FOUR TIMES THE CALCULATED LOAD ON THE DEVICE.
10. TAPERS MAY BE PROVIDED ON THE INSIDE AND/OR OUTSIDE VERTICAL FACES OF THE PRECAST CONCRETE INLET BOXES TO ACCOMMODATE STRIPPING OF EXCESS INTERNAL BOTTOM DIMENSIONS THAT VARY 20 mm (1/4")/FOOT PER SIDE TO A MAXIMUM OF 20 mm (1") PER SIDE.
11. KEYED JOINTS MAY BE CONSTRUCTED UPWARDS OR DOWNWARDS. CLEAN JOINTS AND KEYS THOROUGHLY BEFORE PLACING NEXT SEGMENT. PLACE MORTAR OR CAULKING COMPOUND THOROUGHLY IN JOINTS AND KEYED JOINTS IN ACCORDANCE WITH THIS STANDARD.
12. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOX.
13. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE TRANSITION SLAB AND THE ADJACENT TOP AND BOTTOM SECTIONS.
14. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE TRANSITION SLAB AND THE CONCRETE PIER.
15. SEGMENT HEIGHTS:
 - MINIMUM HEIGHT:
 - RISER SECTIONS = 305 mm (1'-0")
 - BASE SECTIONS = 610 mm (2'-0")
 - MAXIMUM HEIGHT = 2438 mm (8'-0")
- MORTAR:
 - PROVIDE MORTAR IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.7(b).
- CAULKING COMPOUND:
 - PROVIDE CAULKING COMPOUND IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.8(a).
- GASKETS:
 - PROVIDE GASKETS IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.5(b).
- MANHOLE STEPS:
 - PROVIDE MANHOLE STEPS IN ACCORDANCE WITH PUBLICATION 408, SECTION 605.2(c).
- SUBBASE MATERIAL AND PREPARATION:
 - PROVIDE 2A COARSE AGGREGATE IN ACCORDANCE WITH PUBLICATION 408, SECTION 703.1 AND COMPACT IN ACCORDANCE WITH PUBLICATION 408, SECTION 703.1(c).
 - PLACE AND COMPACT IN 100 mm (4") MAXIMUM LAYERS.
 - PROVIDE A 300 mm (1'-0") MINIMUM DEPTH.
- IF A REQUIRED DETAIL IS NOT FOUND IN THIS STANDARD OR ON THE CONTRACT DRAWINGS, A SPECIAL SUBMISSION REQUESTING ACCEPTANCE FOR SPECIFIC DETAILS MUST BE MADE TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF.
- FOR INLET TOPS, GRATES, GRADE ADJUSTMENT RINGS AND FRAMES, REFER TO RC-45M.

PRECAST CONCRETE INLET BOX NOTES:

- CONSTRUCT INLET BOXES IN ACCORDANCE WITH THE REQUIREMENTS OF PUBLICATION 408, SECTION 714.1.
- PROVIDE PRECAST CONCRETE INLET BOXES SUPPLIED BY A MANUFACTURER LISTED IN BULLETIN 15.
- PROVIDE A TOP SLAB TO SUPPORT THE INLET TOP UNITS M, S, C AND F AND A ALTERNATE WHEN A STANDARD INLET BOX IS NOT SPECIFIED. PROVIDE AN OPENING TO ACCOMMODATE THE STANDARD TOP COMPONENTS. PROVIDE A TOP SLAB WITH A ROUND OPENING FOR MANHOLE COVER WHEN SPECIFIED ON THE CONTRACT DRAWINGS.
- PROVIDE A TRANSITION SLAB BETWEEN TWO SEPARATE INLET BOXES, WHEN TWO SEPARATE INLET BOX SIZES ARE USED. (SEE TRANSITION SLAB NOTES.)
- CLEAR COVER FOR STEEL:
 - MINIMUM TOP COVER = 24 mm (1/2")
 - FOOTINGS (BOTTOM SLAB):
 - TOP COVER = 50 mm (2")
 - BOTTOM COVER = 38 mm (1 1/2")
 - SIDE COVER = 38 mm (1 1/2")
 - TOP COVER = 38 mm (1 1/2")
- MINIMUM SLAB AND WALL THICKNESS:
 - INLET BOXES #10 (3") #12 (4") #16 (5") #19 (6")
 - MINIMUM WALL THICKNESS = 152 mm (6")
 - MINIMUM BOTTOM SLAB THICKNESS = 178 mm (7")
- THICKNESS OF WALL MUST BE PERMITTED TO VARY FROM SECTION TO SECTION. INSIDE FACE OF WALLS MUST ALIGN BETWEEN SECTIONS.
- FABRICATOR IS RESPONSIBLE FOR LIFTING, HANDLING AND TRANSPORTATION STRESSES.
- LIFTING DEVICES:
 - PROVIDE GALVANIZED STEEL OR PLASTIC LIFTING DEVICES FOR HANDLING AND TRANSPORTATION.
 - FILL LIFTING DEVICES WITH NON-SHRINK GROUT AFTER INSTALLATION.
 - PROVIDE LIFTING DEVICES WITH A MINIMUM CAPACITY OF AT LEAST FOUR TIMES THE CALCULATED LOAD ON THE DEVICE.
10. TAPERS MAY BE PROVIDED ON THE INSIDE AND/OR OUTSIDE VERTICAL FACES OF THE PRECAST CONCRETE INLET BOXES TO ACCOMMODATE STRIPPING OF EXCESS INTERNAL BOTTOM DIMENSIONS THAT VARY 20 mm (1/4")/FOOT PER SIDE TO A MAXIMUM OF 20 mm (1") PER SIDE.
11. KEYED JOINTS MAY BE CONSTRUCTED UPWARDS OR DOWNWARDS. CLEAN JOINTS AND KEYS THOROUGHLY BEFORE PLACING NEXT SEGMENT. PLACE MORTAR OR CAULKING COMPOUND THOROUGHLY IN JOINTS AND KEYED JOINTS IN ACCORDANCE WITH THIS STANDARD.
12. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE BOTTOM OF THE TOP SLAB AND THE TOP OF THE BOX.
13. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE TRANSITION SLAB AND THE ADJACENT TOP AND BOTTOM SECTIONS.
14. PROVIDE EITHER A SHIPLAP OR KEYED JOINT BETWEEN THE TRANSITION SLAB AND THE CONCRETE PIER.
15. SEGMENT HEIGHTS:
 - MINIMUM HEIGHT:
 - RISER SECTIONS = 305 mm (1'-0")
 - BASE SECTIONS = 610 mm (2'-0")
 - MAXIMUM HEIGHT = 2438 mm (8'-0")
- MORTAR:
 - PROVIDE MORTAR IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.7(b).
- CAULKING COMPOUND:
 - PROVIDE CAULKING COMPOUND IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.8(a).
- GASKETS:
 - PROVIDE GASKETS IN ACCORDANCE WITH PUBLICATION 408, SECTION 705.5(b).
- MANHOLE STEPS:
 - PROVIDE MANHOLE STEPS IN ACCORDANCE WITH PUBLICATION 408, SECTION 605.2(c).
- SUBBASE MATERIAL AND PREPARATION:
 - PROVIDE 2A COARSE AGGREGATE IN ACCORDANCE WITH PUBLICATION 408, SECTION 703.1 AND COMPACT IN ACCORDANCE WITH PUBLICATION 408, SECTION 703.1(c).
 - PLACE AND COMPACT IN 100 mm (4") MAXIMUM LAYERS.
 - PROVIDE A 300 mm (1'-0") MINIMUM DEPTH.
- IF A REQUIRED DETAIL IS NOT FOUND IN THIS STANDARD OR ON THE CONTRACT DRAWINGS, A SPECIAL SUBMISSION REQUESTING ACCEPTANCE FOR SPECIFIC DETAILS MUST BE MADE TO THE BUREAU OF DESIGN HIGHWAY QUALITY ASSURANCE DIVISION CHIEF.
- FOR INLET TOPS, GRATES, GRADE ADJUSTMENT RINGS AND FRAMES, REFER TO RC-45M.

FIELD CONSTRUCTION NOTES:

- CONSTRUCT OR PLACE INLET BOXES LEVEL, UNLESS OTHERWISE INDICATED OR DIRECTED.
- CONSTRUCT OR PLACE INLET BOXES ON A SUBBASE CONSTRUCTED OF COMPACTED NO. 2A COARSE AGGREGATE. PLACE AND COMPACT IN 100 mm (4") LAYERS TO PROVIDE A 300 mm (1'-0") MINIMUM DEPTH.
- LOCATE PIPE OR PIPES AS INDICATED OR DIRECTED.
- CONNECT PIPES TO INLET BOXES WITH MORTAR OR WATERTIGHT RUBBER FLEXIBLE CONNECTORS.
- FORM BOTTOM OF INLET, USING CEMENT CONCRETE, TO CHANNEL THE FLOW TOWARD THE OUTLET PIPE. PROVIDE #13 (4") REINFORCEMENT BARS SPACED AT 300 mm (12") CENTER TO CENTER MAXIMUM WHEN THE THICKNESS EXCEEDS 75 mm (3").
- BACKFILL EXCAVATED SPACES AROUND THE STRUCTURE WITH ACCEPTABLE EMBANKMENT MATERIAL.
- THE FOLLOWING ITEMS ARE INCIDENTAL TO THE COST OF THE INLET BOX PAY ITEM EXCAVATION, CONCRETE TOP UNIT, SUBBASE, COARSE AGGREGATE, INLET BOX, CLASS A CEMENT CONCRETE TO CHANNEL FLOW, TRANSITION SLAB, TOP SLAB, BACKFILL AND ANY OTHER MISCELLANEOUS ITEMS REQUIRED FOR THE CONSTRUCTION OF THE INLET BOX.

NOTES:

- FOR ADDITIONAL NOTES, SEE SHEETS 1 - 3.
- STANDARD INLET BOXES SHOWN. PROVIDE TOP SLABS FOR OTHER INLET BOX TYPES.
- SEE RC-45M FOR DETAILS FOR THE CONCRETE TOP UNITS, FRAMES, AND GRATES.
- PROVIDE GRADE ADJUSTMENT RINGS WHEN REQUIRED. SEE RC-45M FOR DETAILS.

INLET BOX SUBBASE PREPARATION DETAIL

(SEE FIELD CONSTRUCTION NOTES ON SHEET 1)

WEEPHOLE DETAIL

(SEE GENERAL NOTE 15 ON SHEET 1)

INLET BOX SCHEMATIC

(SEE SHEET 1)

LEGEND

(TYPICAL ALL TYPES EXCEPT SECTION A-A)

SECTION A-A

(STANDARD INLET BOX ONLY)

SECTION B-B

(TYPICAL ALL TYPES EXCEPT SECTION B-B)

LEGEND

(OUTSIDE DIAMETER OF PIPE TO PIPE OPENING)

(REDUCTION IN WALL THICKNESS DIMENSION)

(INSIDE FACE OF BOX WALL TO OUTSIDE DIAMETER OF PIPE OPENING)

SITE DETAILS

(SEE SHEET 1)

PLAN - INLET BOXES

(SEE SHEET 1)

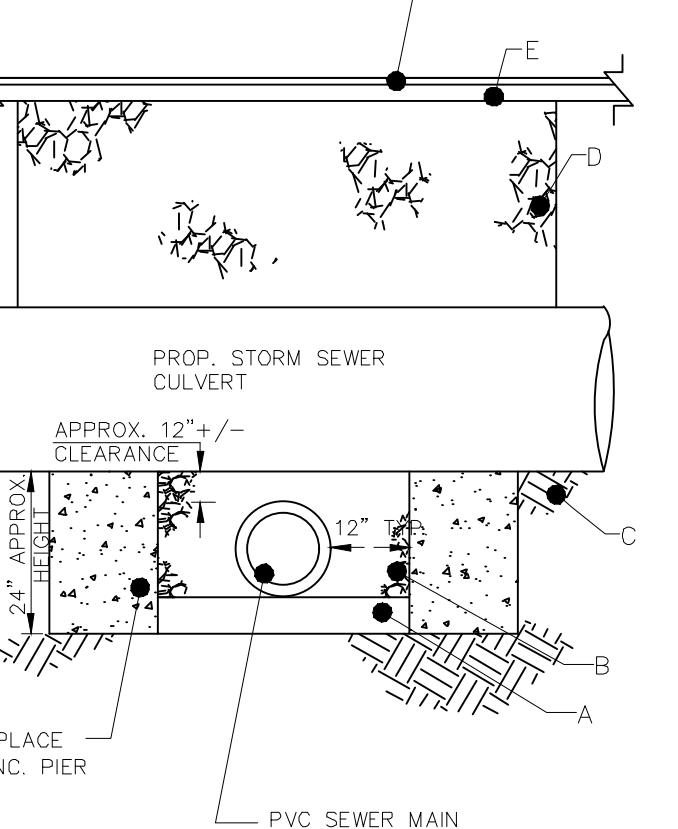
LEGEND

(OUTSIDE FACE - OUTSIDE FACE OF INLET BOX WALL)

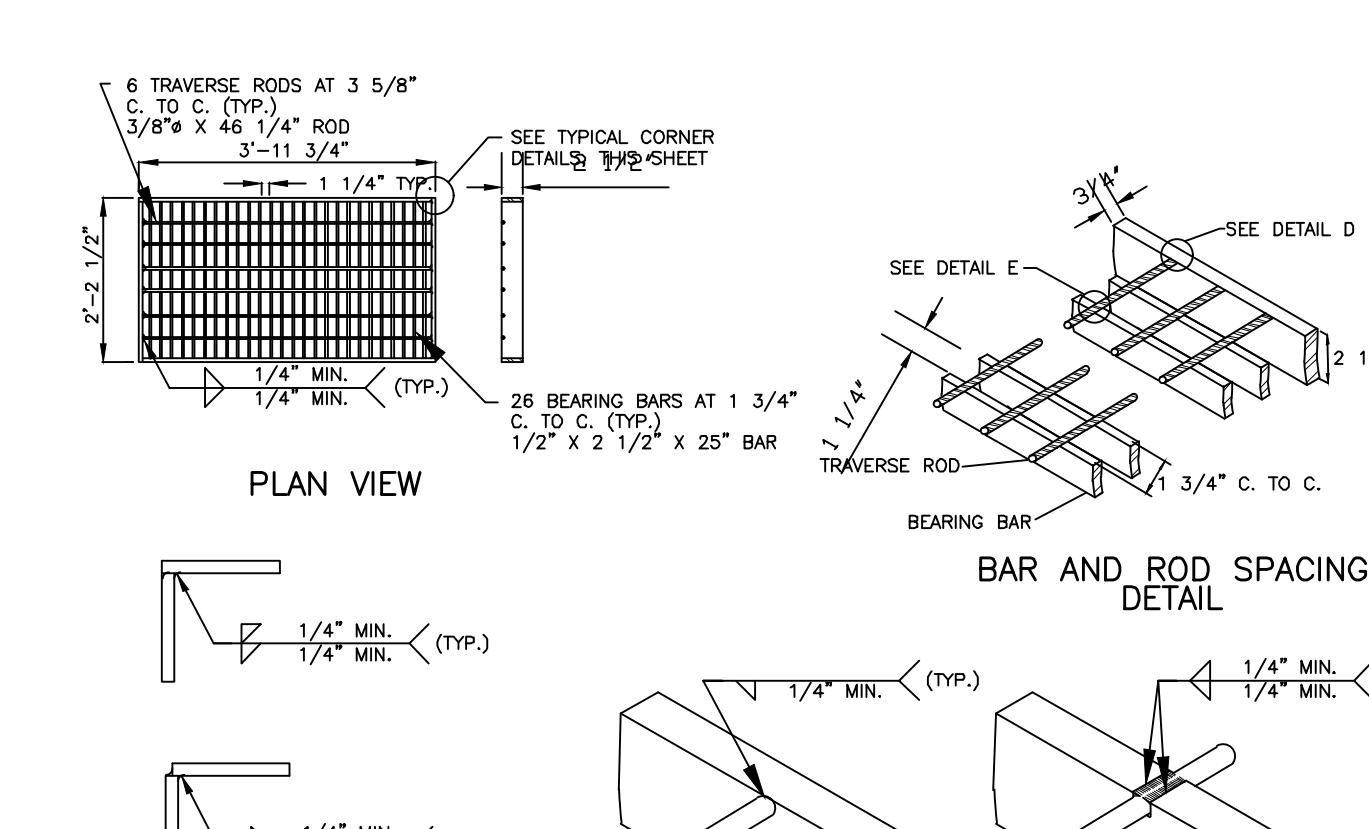
(INSIDE FACE - INSIDE FACE OF INLET BOX WALL)

SHEET 23 OF 27

REVISION 1



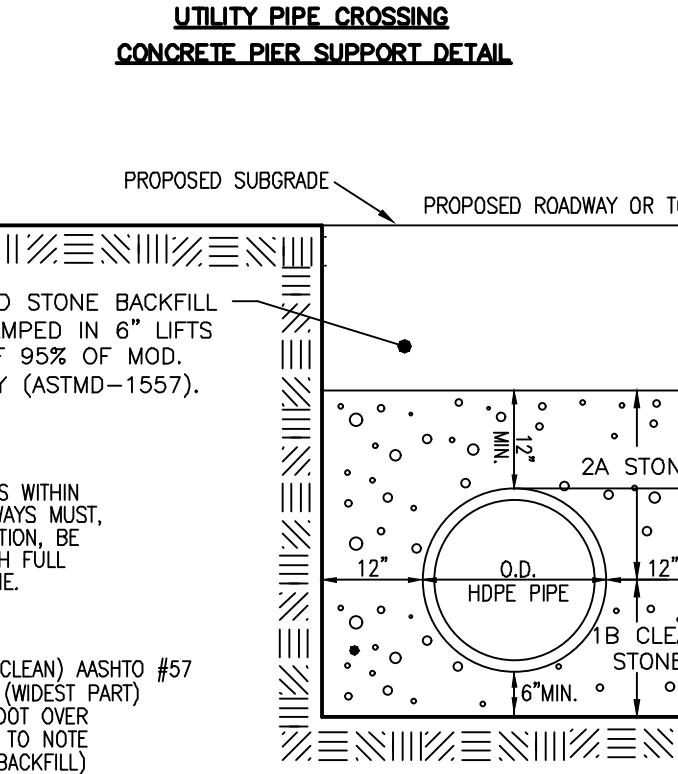
PLAN VIEW



BAR AND ROD SPACING DETAIL

DETAIL D

DETAIL E



UTILITY PIPE CROSSING

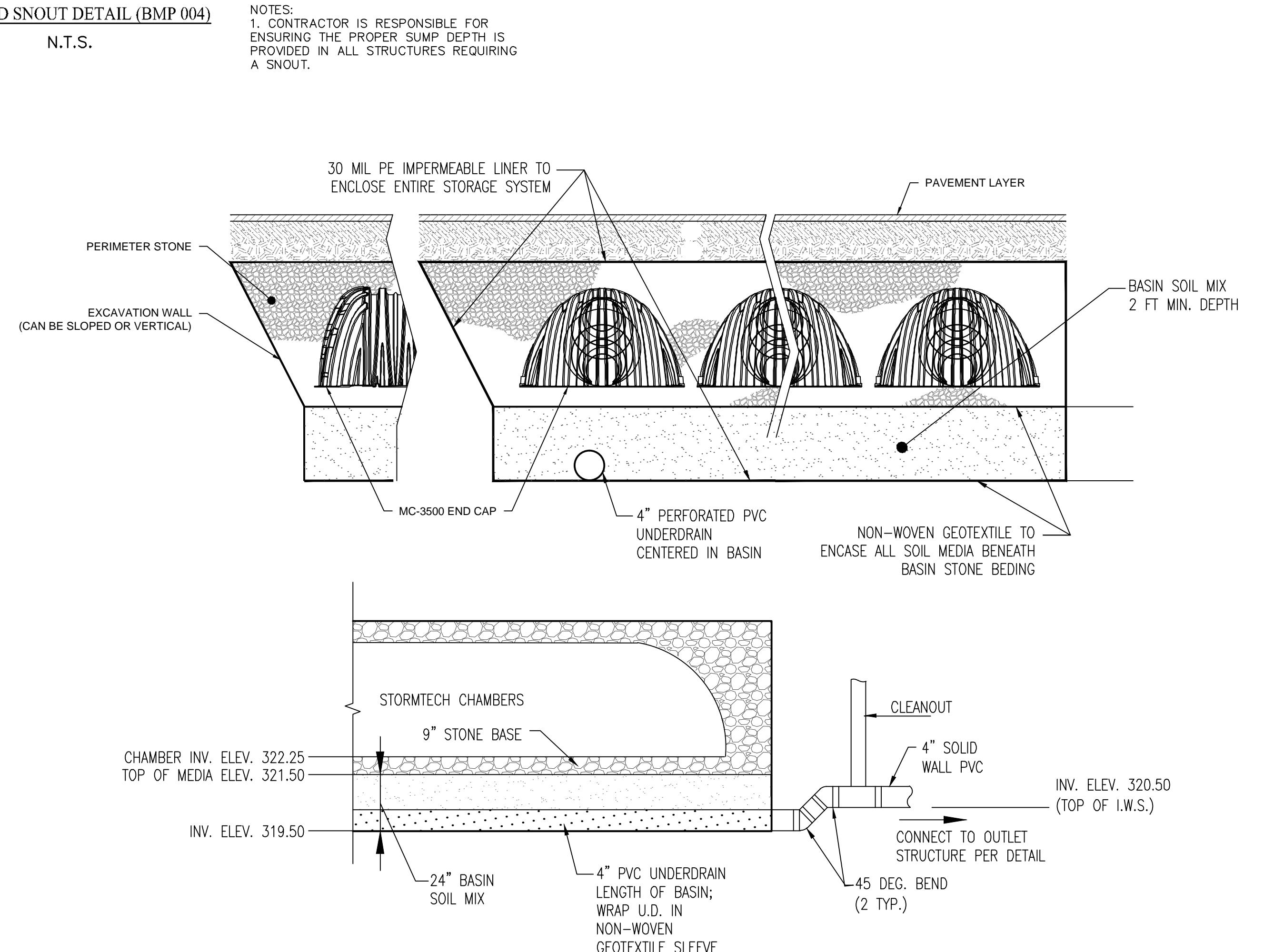
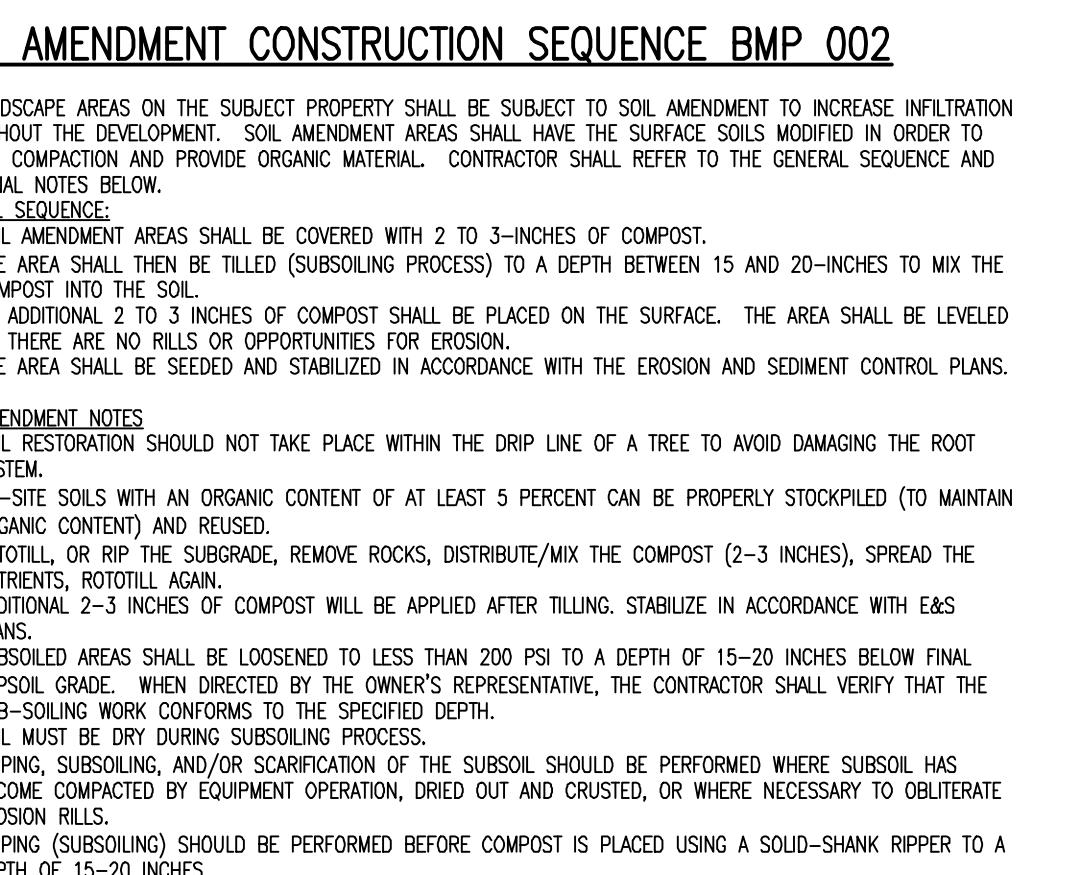
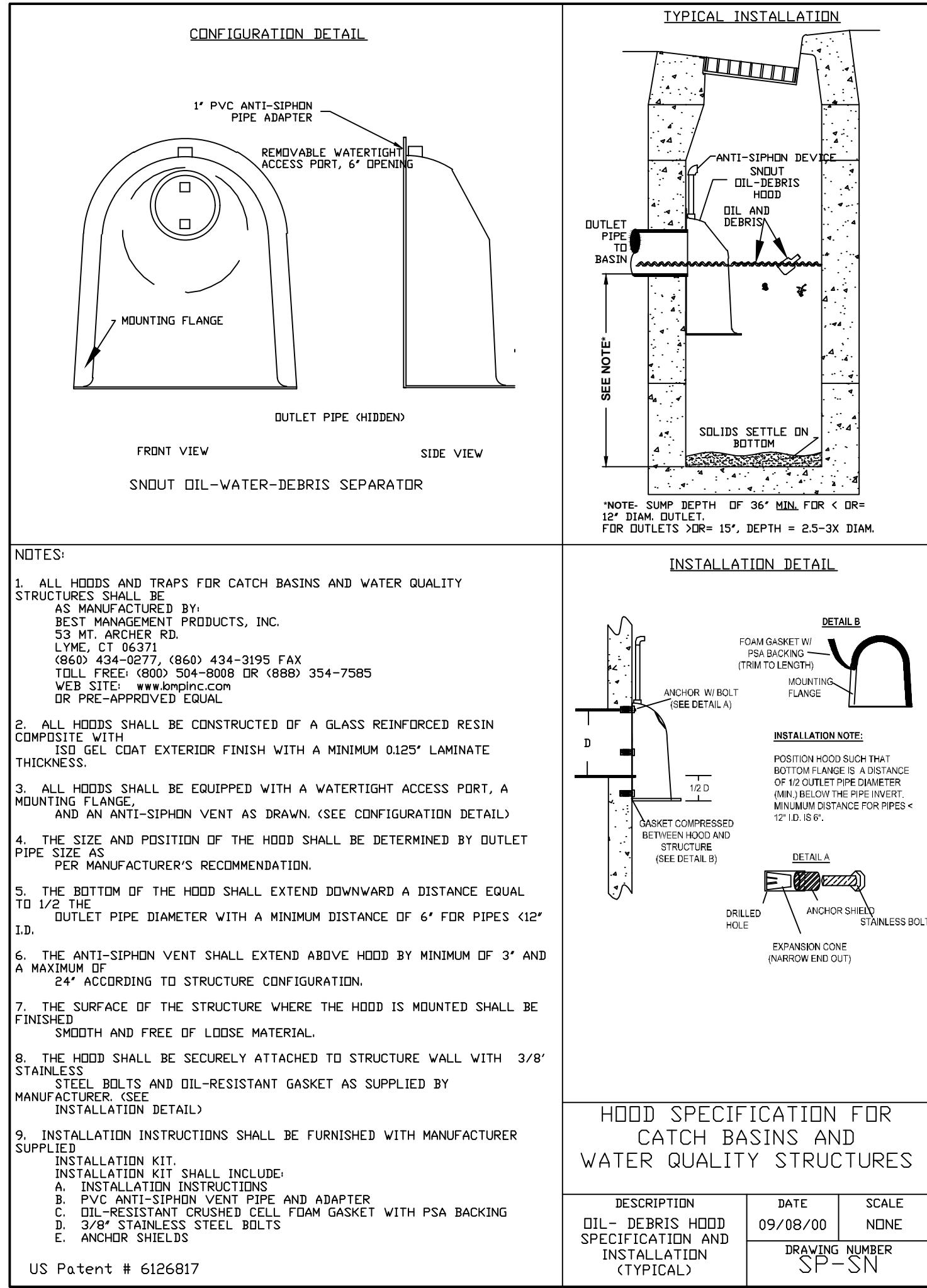
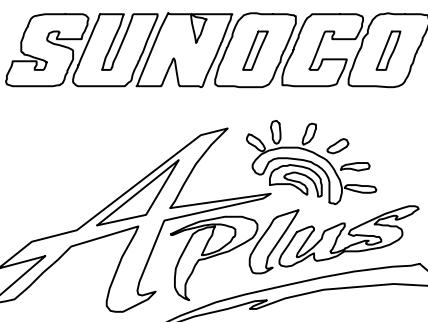
CONCRETE PIER SUPPORT DETAIL

PROPOSED SUBGRADE

PROPOSED ROADWAY OR TOPSOIL

FULL 2A MODIFIED STONE BACKFILL MECHANICALLY TAMPED IN 6" LIFTS TO A DENSITY OF 95% OF MOD. PROCTOR DENSITY (ASTMD-1557).

NOTE: TRENCHES WITHIN EXISTING ROADWAYS MUST, WITHOUT EXCEPTION



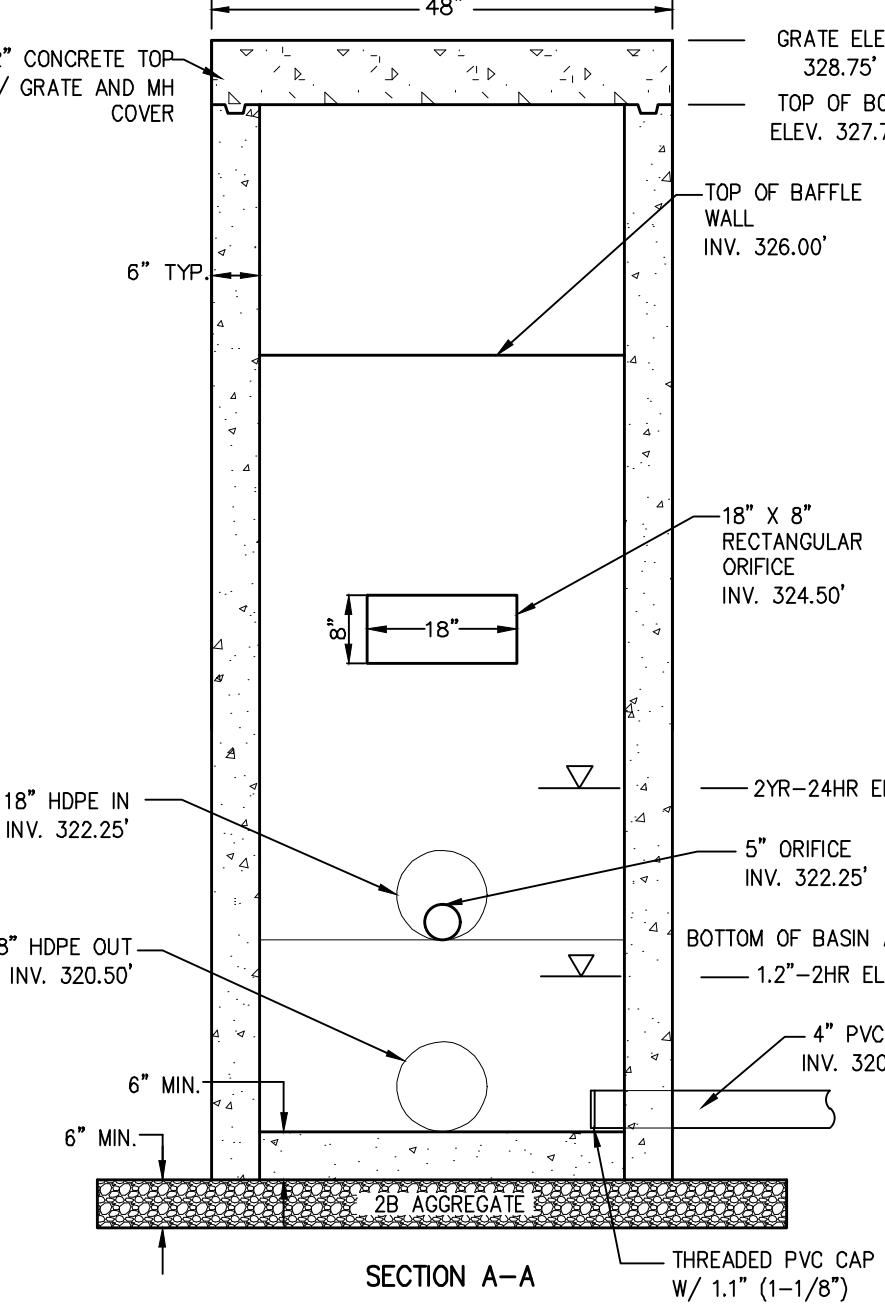
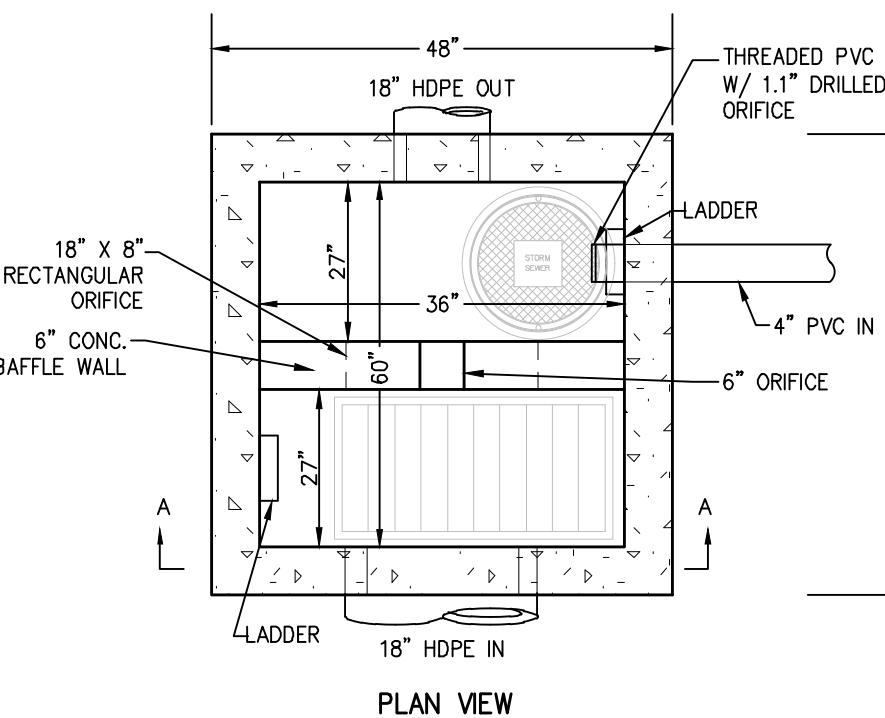
DETENTION BASIN 1 SECTION DETAIL
NO SCALE

REVEGETATE/REFOREST DISTURBED AREAS CONSTRUCTION SEQUENCE:

1. THE REQUIRED PLANT MATERIAL AS SHOWN ON THE LANDSCAPE PLAN SHALL BE MAINTAINED FOR THE LIFE OF THE PROJECT TO AVOID THE REQUIRED VISUAL EFFECT OF THE BUFFER OR SCREEN. IT SHALL BE THE ULTIMATE RESPONSIBILITY OF THE SUCCESSIVE PROPERTY OWNERS TO ENSURE THAT ALL REVEGETATION PLANTINGS ARE PROPERLY MAINTAINED AND PROTECTED. PLANT MATERIAL SHALL BE PROVIDED FOR THE PROPERTY OWNER AND REPLACED IMMEDIATELY OR AT A TIME AS DIRECTED BY THE TOWNSHIP ZONING OFFICER.
2. THE LOCATION, DIMENSIONS AND SPACING OF REQUIRED PLANTINGS SHALL BE ADEQUATE FOR THEIR PROPER GROWTH AND MAINTENANCE, TAKING INTO THE ACCOUNT THE SIZES OF SUCH PLANTINGS AT Maturity AND THEIR PRESENT AND FUTURE ENVIRONMENTAL REQUIREMENTS, SUCH AS WIND, SOIL, MOISTURE, AND SUNLIGHT.
3. ALL PLANT MATERIAL SHALL BE HARDY WITHIN THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) HARDINESS ZONE 5b, APPLICABLE TO THE TOWNSHIP.
4. CANOPY TREES SHALL REACH A MINIMUM HEIGHT AND SPREAD OF 30 FEET AT Maturity AS DETERMINED BY THE ANLA STANDARDS AND SHALL BE DECIDUOUS. NEW TREES SHALL HAVE A MINIMUM CALIPER OF 2 1/2 INCHES AT PLANTING.
5. ORNAMENTAL TREES OR LARGE SHRUBS SHALL REACH A TYPICAL MINIMUM HEIGHT OF 10 FEET AT Maturity BASED ON ANLA STANDARDS. TREES AND SHRUBS MAY BE DECIDUOUS OR EVERGREEN AND SHALL HAVE A DISTINCTIVE ORNAMENTAL CHARACTER SUCH AS SHOW FLOWERS, FRUIT, HABIT, FOLIAGE, OR BARK. NEW ORNAMENTAL TREES SHALL HAVE A MINIMUM HEIGHT OF 6 FEET OR A 2 1/2 CALIPER. NEW LARGE SHRUBS SHALL HAVE A MINIMUM SIZE OF 2 1/2 TO 3 FEET AT THE TIME OF PLANTING.
6. SMALL SHRUBS OR EVERGREENS OR DECIDUOUS SHALL HAVE A MINIMUM HEIGHT AT Maturity OF 4 FEET BASED ON ANLA STANDARDS FOR THAT SPECIES.
7. EVERGREEN TREES SHALL REACH A TYPICAL MINIMUM HEIGHT OF 20 FEET AT Maturity BASED ON ANLA STANDARDS FOR THAT SPECIES AND SHALL REMAIN EVERGREEN THROUGHOUT THE YEAR. NEW EVERGREENS SHALL HAVE A MINIMUM HEIGHT OF 6 FEET AT PLANTING.
8. MAINTENANCE GUIDELINES FOR THE PLANTINGS ARE ENCOURAGED TO BE PUBLISHED BY THE PLANTING PLAN DESIGNER, TO BE USED BY THE CONTRACTOR AND RESPONSIBLE FOR PLANTINGS AT CORRECT GROWTH AND HABITS.
9. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES, DENSELY FOLIATED; VIGOROUS ROOT SYSTEMS, AND BE FREE FROM DEFECTS AND INJURIES.
10. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETERIMENTAL TO THE GROWTH OF THE PLANT MATERIAL.
11. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISIONS SHALL BE MADE FOR GUARANTEE OF AT LEAST EIGHTEEN (18) MONTHS FOR TREES AND A MINIMUM OF TWO (2) SEASONS FOR SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
12. IN SO FAR AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
13. QUALITY AND TYPE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALES SHALL BE IN ACCORDANCE WITH ANSI Z80 (REVISED 1980) STANDARDS FOR NURSERY STOCK AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMAN, INC.
14. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETERIMENTAL TO THE GROWTH OF THE PLANT MATERIAL.
15. ALL PLANTS SHALL BE PLANTED IN TOPSOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACKFILLING PROCESSES. NOTHING BUT SUITABLE TOPSOIL, FREE OF SOIL, STIFF CLAY, LITTER, ETC, SHALL BE USED FOR PLANTING.
16. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH THE ACCEPTED LOCAL PRACTICES.
17. SHOULD ALL PLANTINGS NOT SURVIVE DUE TO DEFECTS, INJURIES, OR OTHER CAUSES, THE PLANT MATERIAL SHALL, AFTER SETTLEMENT, EAT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.

PCSM NOTES – REVEGETATE/REFOREST

1. PLANTINGS SHOWN ON THE LANDSCAPE PLAN AND IN THE LANDSCAPE SCHEDULE HAVE BEEN CREDITED FOR STORMWATER MANAGEMENT TO MEET THE CONDITIONS OF THE NPDPS PERMIT UNDER BMP 5.6.3. RE-VEGETATE/RE-FOREST.
2. TREES SHALL BE A MINIMUM OF 2" CALIPER AND 6 FEET HIGH AT PLANTING.
3. TREES SHALL BE MAINTAINED AND PROTECTED FOR THE LIFE OF THE PROJECT (50 YR) OR UNTIL REDEVELOPMENT OCCURS. DEAD TREES SHALL BE REPLACED WITHIN 6 MONTHS.
4. ANY DEVIATION FROM THE LANDSCAPE PLAN MUST BE APPROVED BY THE MUNICIPALITY AND PA DEP.
5. ALL PLANTINGS MUST COMPLY WITH THE SPECIFICATIONS DESCRIBED IN THE PLANS.



SUBSURFACE DETENTION BASIN CONSTRUCTION SEQUENCE

1. INSTALL AND MAINTAIN ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES (AS PER THE PA E&S PC PROGRAM MANUAL) DURING CONSTRUCTION. RUNOFF SHALL NOT BE PERMITTED TO ENTER THE BASIN UNTIL SUCH TIME AS THE ENTIRE CONTRIBUTORY DRAINAGE AREA HAS ACHIEVED FINAL STABILIZATION PER DEP STANDARDS.
4. INSTALL UPSTREAM AND DOWNSTREAM CONTROL STRUCTURES, PIPING, AND ALL OTHER NECESSARY STORMWATER STRUCTURES INCIDENTAL TO THE BASIN.
5. EXCAVATE BASIN AND INSTALL IMPERMEABLE PVC LINER SYSTEM IN ACCORDANCE WITH SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION STANDARDS.
6. INSTALL PERMEABLE UNDERDRAIN IN ACCORDANCE WITH PLAN DETAILS.
7. UPON APPROVAL OF SOIL MIX, UNDERDRAIN, AND LINING INSTALLATION, ARCH CHAMBER DETENTION SYSTEM CAN BE INSTALLED AND BACKFILLED.
8. CLEAN-WASHED UNIFORMLY GRADED AGGREGATE BACKFILL SHOULD BE PLACED TO THE WIDTH AND DEPTH INDICATED, IN MAXIMUM 8-INCH LIFTS. EACH LAYER SHOULD BE LIGHTLY COMPAKTED.
9. APPROVED BACKFILL SHOULD BE PLACED OVER BASIN IN MAXIMUM 6-INCH LIFTS.
10. DO NOT REMOVE INLET PROTECTION OR OTHER EROSION AND SEDIMENT CONTROL MEASURES UNTIL SITE IS FULLY STABILIZED.

BASIN SOIL MIX SPECIFICATION

1. SOIL MIX SHALL CONSIST OF THE FOLLOWING AND MEET THE FOLLOWING REQUIREMENTS:
 - 1.1. 30% TOPSOIL, 70% COARSE SAND
 - 1.2. LESS THAN 5% FINES PASSING THE #200 SIEVE
 - 1.3. 24" MINIMUM SOIL MIX DEPTH

