

NPDES GENERAL PERMIT (PAG-02)

EROSION AND SEDIMENTATION CONTROL PLAN

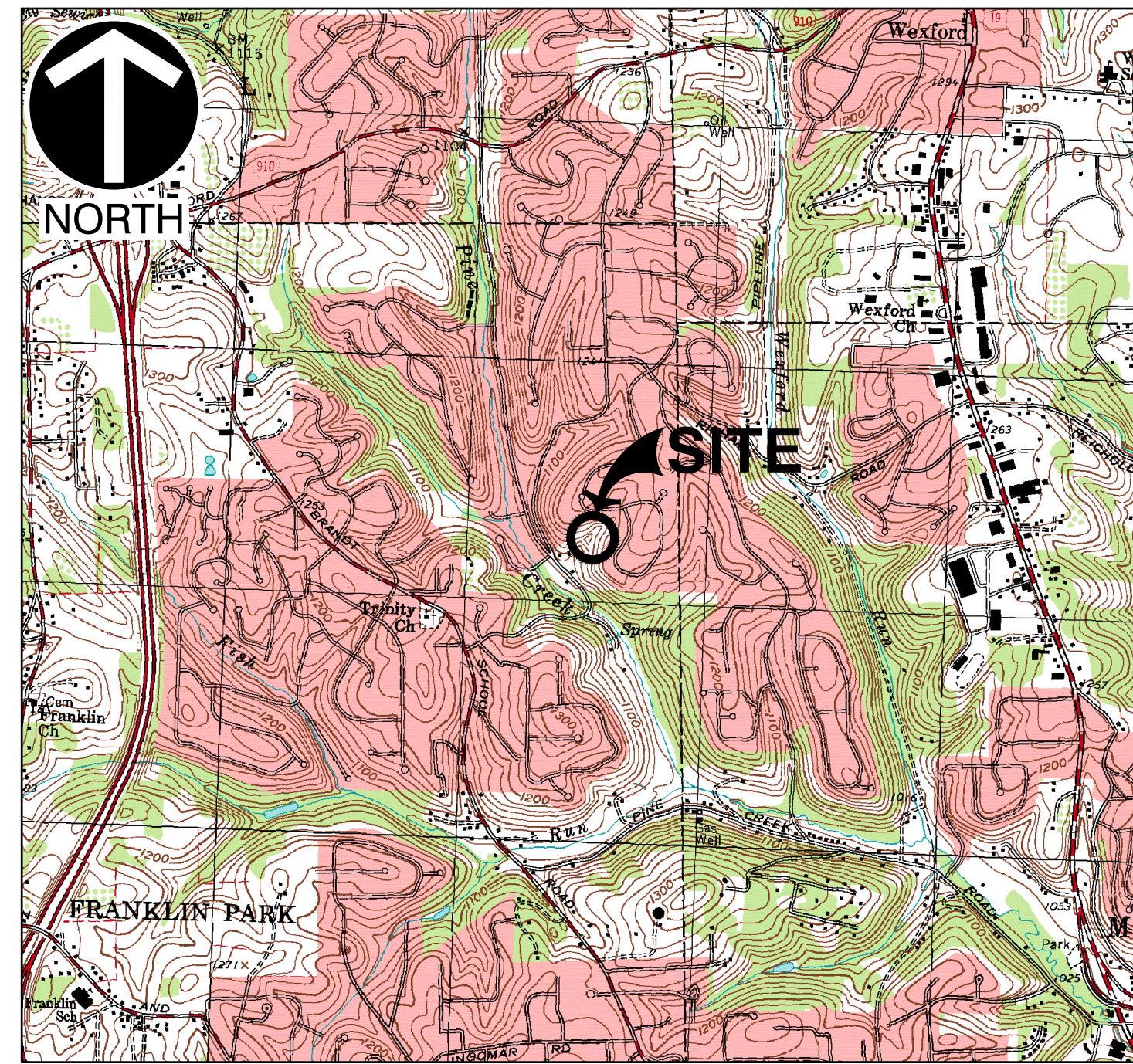
MATTERHORN BASIN RETROFIT

FRANKLIN PARK BOROUGH, ALLEGHENY COUNTY, PENNSYLVANIA

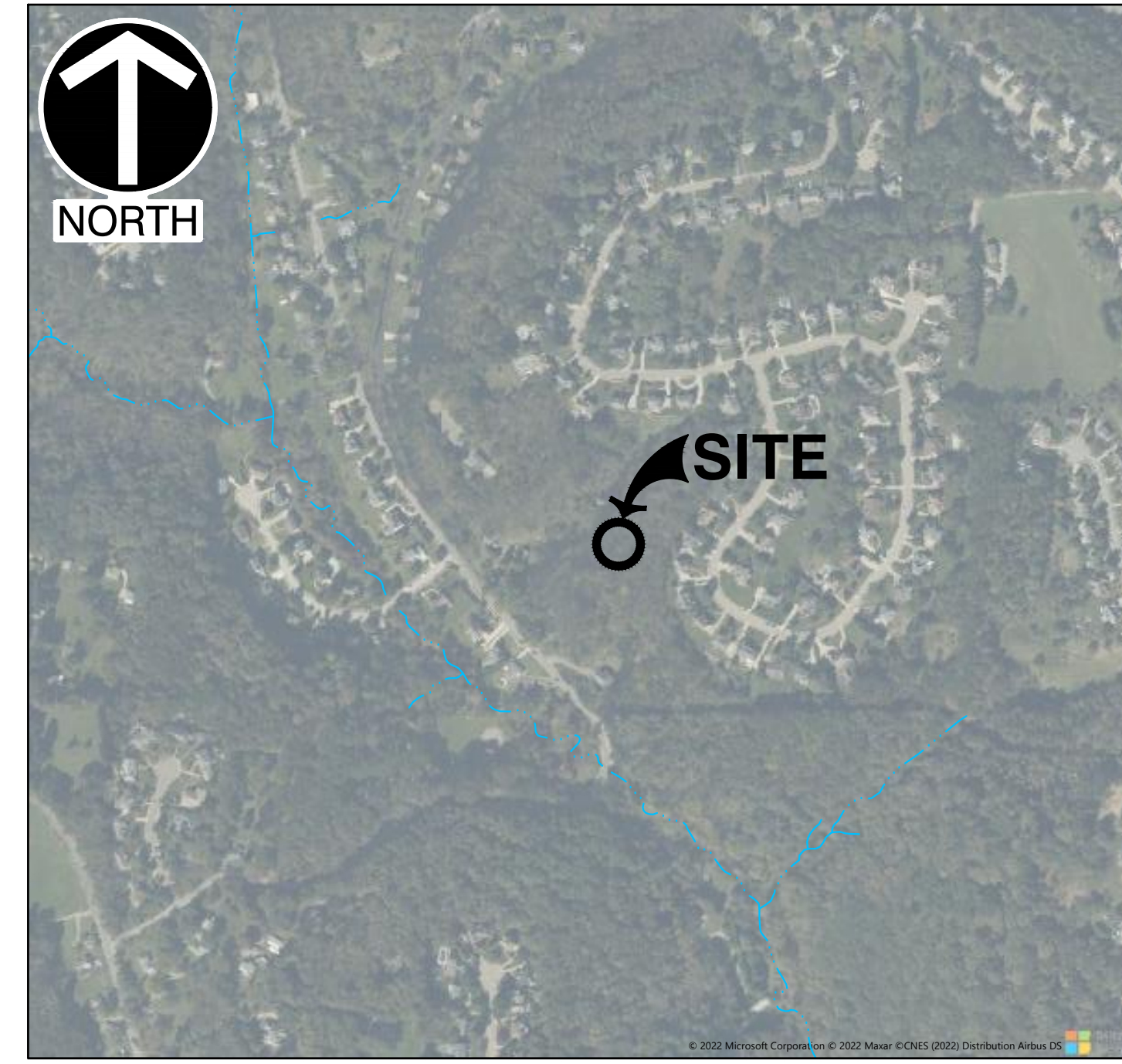
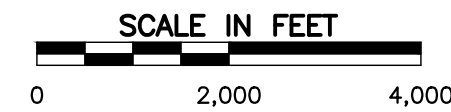
OCTOBER 2022

PREPARED BY:
 CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
 700 CHERRINGTON PARKWAY
 MOON TOWNSHIP, PA 15108
 CONTACT: JUSTIN C. WAGNER, P.E.

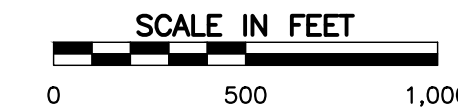
PREPARED FOR:
 FRANKLIN PARK BOROUGH
 2344 WEST INGOMAR ROAD
 PITTSBURGH, PA 15237
 CONTACT: REGIS J. EBNER JR.



U.S.G.S. MAP
 U.S.G.S. 7.5 MIN. TOPOGRAPHIC MAP,
 EMSWORTH QUADRANGLE, PA, DATED 1993
 1"=2,000'



VICINITY MAP
 BASE IMAGE FROM BING MAPS
 ACCESSED JUNE 2022
 1"=500'



SHEET INDEX	
DWG NO.	TITLE
C000	COVER SHEET
C001	TYPICAL NOTES
C100	EXISTING CONDITIONS PLAN
C900	EROSION AND SEDIMENTATION CONTROL PLAN
C901-C902	EROSION AND SEDIMENTATION CONTROL DETAILS

NO.	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
 412-429-2324 · 800-365-2324
 www.cecinc.com

**FRANKLIN PARK BOROUGH
 MS4 SEDIMENT REDUCTION
 MATTERHORN BASIN
 FRANKLIN PARK BOROUGH
 ALLEGHENY COUNTY, PENNSYLVANIA**

UTILITY CONTACTS

PEOPLES GAS COMPANY LLC
ADDRESS: 375 NORTH SHORE DR
 PITTSBURGH, PA. 15212
CONTACT: MICHAEL DENNY
EMAIL: michael.denny@peoples-gas.com

MCCANDLESS TOWNSHIP SANITARY AUTH
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 PITTSBURGH, PA. 15237
CONTACT: DENNIS BLAKLEY
EMAIL: dennisblakley@mtsaonline.org

COLUMBIA GAS OF PA
ADDRESS: 1600 DUBLIN RD
 COLUMBUS, OH. 43215
CONTACT: LISA COLLINS
EMAIL: ldugan@nsource.com

CONSOLIDATED COMMUNICATIONS
ADDRESS: 4008 GIBSONIA RD.
 GIBONIA, PA. 15044
CONTACT: GABE WHITE
EMAIL: gabe.white@consolidated.com

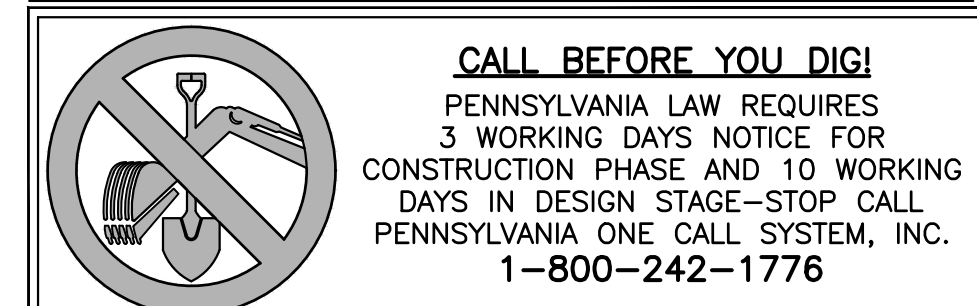
COMCAST
ADDRESS: 1530 CHARTIERS AVE
 PITTSBURGH, PA. 15204
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EMAIL: charles_detwiler@cable.comcast.com

FIRST ENERGY PENELEC
ADDRESS: 21 S MAIN ST
 AKRON, OH. 44308
CONTACT: CARA WARREN
EMAIL: carawarren@firstenergycorp.com

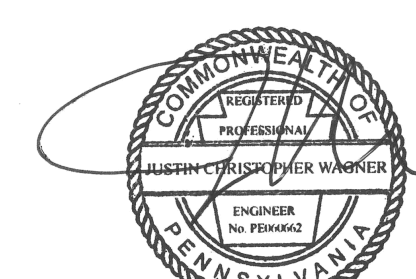
FRANKLIN PARK BOROUGH
ADDRESS: 2344 W INGOMAR ROAD
 PITTSBURGH, PA. 15237
CONTACT: KURT HARTMAN
EMAIL: DPW@FRANKLINPARKBOROUGH.US

WEST VIEW WATER AUTHORITY
ADDRESS: 2428 ROCHESTER ROAD
 SEWICKLEY, PA. 15143
CONTACT: SARA CALORE
EMAIL: scalore@westviewwater.org

ONE CALL SERIAL NO.: 20222141906



PENNSYLVANIA ACT 287 (1974) AS AMENDED BY ACT 50 (2017), REQUIRES NO LESS THAN 3 WORKING DAYS NOTICE NOR MORE THAN 10 WORKING DAYS NOTICE FROM EXCAVATORS WHO ARE ABOUT TO DIG, DRILL, BORE, AUGER, BORE, GRADE, TRENCH OR DEMOLISH WHEN IN THE CONSTRUCTION PHASE. FOR LOCATION REQUESTS IN THE STATE OF PENNSYLVANIA, CALL TOLL FREE 1-800-242-1776. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THE LOCATION MUST BE CONSIDERED APPROXIMATE. OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN ALL PHYSICAL LOCATIONS OF UTILITY LINES PRIOR TO THE TIME OF CONSTRUCTION. IN NO WAY SHALL THE CONTRACTOR HOLD THE SURVEYOR RESPONSIBLE FOR ANY UTILITY LOCATION SHOWN ON THIS PLAN.



COVER SHEET	DATE: OCTOBER 2022	TLW
	DWG SCALE: AS SHOWN	DW
	PROJECT NO: 315-219	DRAFT
	APPROVED BY:	

C000

P:\10-2020\115-219-C000\DWG\C001\115219-C001-Cover Sheet Matterhorn Basin.dwg - LSC:10/18/2022 8:30 AM

GENERAL NOTES

- 1. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT...
2. EXISTING SITE INFORMATION / TOPOGRAPHIC SURVEY WAS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (CEC), DATED MAY, 2022.
3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES (INCLUDING THOSE LABELED PER RECORD DATA) PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS...

DEMOLITION NOTES

- 1. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD BY THE CONTRACTOR.
2. NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
3. TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THE ALLEGHENY COUNTY, AND FRANKLIN PARK BOROUGH STANDARDS - OR IN ACCORDANCE WITH THE DETAILED DRAWINGS...

LAYOUT NOTES

- 1. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, OR AS NECESSARY FOR CONSTRUCTION.
3. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.

GRADING NOTES

- 1. ALL PROPOSED GRADES SHOWN ARE FINAL GRADES, TOP OF GROUND LEVEL, OR TOP OF PAVEMENT, OR GRATE ELEVATION AT THE DRAWDOWN POINT, UNLESS INDICATED OTHERWISE.
2. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
3. CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION & SEDIMENT CONTROL PLAN PREPARED FOR THIS PROJECT.

STORM DRAINAGE NOTES

- 1. DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW STORMWATER MANAGEMENT FACILITIES CONSTRUCTION.
3. ALL STORMWATER MANAGEMENT FACILITIES, INCLUDING COLLECTION AND CONVEYANCE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.

STANDARD E&S CONTROL NOTES

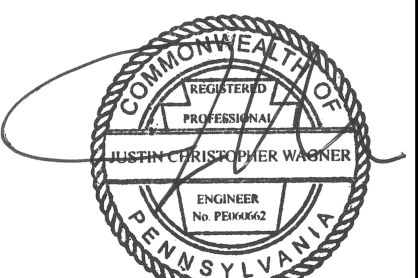
- 1. THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL THE EXISTING UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AND 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.
3. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARER, THE POSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE POSM PLAN, AND A REPRESENTATIVE FROM THE LOCAL CONSERVATION DISTRICT TO AN ON-SITE RECONSTRUCTION MEETING.

- 32. ANY DAMAGE THAT OCCURS IN WHOLE OR IN A PART AS A RESULT OF BASIN DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGE PROPERTY.
33. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
34. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPs.

REVISION RECORD table with columns: NO, DATE, DESCRIPTION

Civil & Environmental Consultants, Inc.
700 Cherrington Parkway - Moon Township, PA 15108
412-429-2324 - 800-365-2324
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FRANKLIN PARK BOROUGH
MS4 SEDIMENT REDUCTION
MATTERHORN BASIN
FRANKLIN PARK BOROUGH
ALLEGHENY COUNTY, PENNSYLVANIA



TYPICAL NOTES
DATE: OCTOBER 2022
DRAWN BY: T.L.W.
DWG SCALE: N.T.S.
CHECKED BY: D.W.
PROJECT NO: 315-219
APPROVED BY: DRAFT

DRAWING NO: C001

Path: P:\10-2001\315-219-C001\DWG\001\315219-D01-General Notes_Matterhorn.dwg(2021.10.10.12.26:32) - nweaverj - LP: 10/19/2022, 9:40 AM



LEGEND

---	385	EXISTING INDEX (MAJOR) CONTOUR
---		EXISTING INTERMEDIATE (MINOR) CONTOUR
---		EXISTING EDGE OF PAVEMENT
⊕		EXISTING CATCH BASIN
⊙		EXISTING MANHOLE
ST		EXISTING STORM PIPE
W		EXISTING WATER LINE
SAN		EXISTING SANITARY SEWER LINE
---		LIMIT OF CEC SURVEY AREA
---		EXISTING STORMPIPE FROM RECORD
---		EXISTING GRAVEL DRIVE
---		EXISTING PAVEMENT
---		EXISTING EASEMENT
---		EXISTING TREE LINE
---		PROPERTY LINE



REVISION RECORD

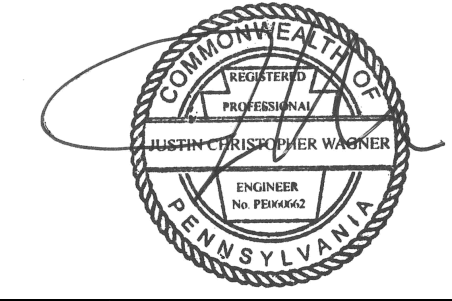
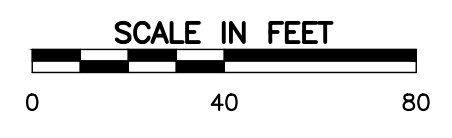
NO	DATE	DESCRIPTION

C&E
Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
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**FRANKLIN PARK BOROUGH
 MS4 SEDIMENT REDUCTION
 MATTERHORN BASIN
 FRANKLIN PARK BOROUGH
 ALLEGHENY COUNTY, PENNSYLVANIA**

EXISTING CONDITIONS PLAN

DATE:	OCTOBER 2022	DRAWN BY:	TLW
DWG SCALE:	1"=40'	CHECKED BY:	DJW
PROJECT NO.:	315-219	APPROVED BY:	JCV
DRAWING NO.:	C100		



REFERENCES

- EXISTING TOPOGRAPHY AND FEATURES WITHIN SURVEY BOUNDARY SHOWN HEREON BASED ON SURVEY PERFORMED BY CEC, INC. MAY 2022.
- EXISTING TOPOGRAPHY SHOWN OUTSIDE OF SURVEY BOUNDARY DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL CONSTRUCTED FROM PAMAP LIDAR (LIGHT DETECTION AND RANGING) ELEVATION POINTS, TOPOGRAPHIC CONTOURS MAPPED AT AN INTERVAL OF 2 FEET; DEVELOPED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY; DATED 2020.
- EXISTING STORMPIPES OUTSIDE THE SURVEY BOUNDARY PROVIDED TO CEC BY FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING TAX PARCEL LINES OBTAINED FROM ALLEGHENY COUNTY PUBLICLY AVAILABLE GIS DATABASE DATED 2021.
- STREAM AND WETLAND BOUNDARY BASED ON FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING AERIAL PHOTOS TAKEN FROM GOOGLE EARTH PRO, DATED NOVEMBER 2022.
- DEED AND EASEMENT LINES WERE PLOTTED FROM MARSHALLANDS PLAN OF LOTS, REV. 6 5-23-89, PBV 160 PAGE 192 AND WERE PLACED USING AVAILABLE AERIAL IMAGERY. NO FIELD SURVEY TO CONFIRM PROPERTY LINES OR LINES OF OCCUPATION WAS COMPLETED BY CEC.

OPERATION AND MAINTENANCE OF EROSION CONTROL BMPS

THE E&S CONTROL FACILITIES PROPOSED FOR THE PROJECT ARE SHOWN ON THE E&S CONTROL PLAN. CONTROL MEASURES SHOWN ON THIS PLAN ARE MINIMUM CONTROLS NECESSARY TO REDUCE THE POTENTIAL FOR OFFSITE AREAS TO RECEIVE SEDIMENT-LADEN RUNOFF. ADDITIONAL CONTROLS MAY BE REQUIRED DEPENDING ON THE PROGRESS OF CONSTRUCTION AND VARYING CONDITIONS ENCOUNTERED.

ROCK CONSTRUCTION ENTRANCE

A ROCK CONSTRUCTION ENTRANCE WILL BE PROVIDED AT THE LOCATION SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL.

INSTALLATION:

- EXCAVATE THE AREA WHERE THE ROCK CONSTRUCTION ENTRANCE WILL BE CONSTRUCTED A MINIMUM OF 8 INCHES.
- PLACE A LAYER OF SEPARATION GEOTEXTILE ALONG THE FULL LENGTH AND WIDTH OF THE PAD. THE STONE PAD SHOULD BE AT LEAST 50 FEET IN LENGTH AND 20 FEET IN WIDTH.
- PLACE STONE ACROSS THE FULL LENGTH AND WIDTH OF THE VEHICLE INGRESS AND EGRESS AREA. STONE IS TO BE A MINIMUM OF 8 INCHES THICK.

COMPOST FILTER SOCK

COMPOST FILTER SOCK SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE STANDARD DETAIL AND SPECIFICATIONS PROVIDED.

INSTALLATION:

- COMPOST FILTER SOCK SHALL BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA, PERPENDICULAR TO SHEET FLOW.
- STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE FILTER SOCK ON 10 FT. CENTERS, USING 2-INCH BY 2-INCH BY 4-FOOT WOODEN STAKES.
- STAKING DEPTH FOR SAND AND SILT LOAM SOILS SHALL BE 12-INCH, AND 8-INCH FOR CLAY SOILS.
- LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE FILTER SOCK, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.

MAINTENANCE:

- COMPOST FILTER SOCKS SHOULD BE REGULARLY INSPECTED TO MAKE SURE THEY HOLD THEIR SHAPE AND ARE PRODUCING ADEQUATE FLOW THROUGH.
- ACCUMULATED SEDIMENTS SHALL BE REMOVED IN ALL CASES WHERE ACCUMULATIONS HAVE REACHED HALF THE ABOVE-GROUND HEIGHT OF THE SOCK.
- IF THE SOCK HAS BEEN DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR.

WHEN CONSTRUCTION IS COMPLETED ONSITE, THE COMPOST FILTER SOCKS MAY BE DISPERSED WITH A LOADER, RAKE, BULLDOZER OR OTHER DEVICE TO BE INCORPORATED IN THE SOIL OR LEFT ON TOP OF THE SOIL FOR FINAL SEEDING TO OCCUR. THE MESH NETTING MATERIAL SHALL BE COLLECTED AND DISPOSED OF IN A NORMAL TRASH CONTAINER OR REMOVED BY THE CONTRACTOR. IN CASES WHERE BIODEGRADABLE OR PHOTODEGRADABLE PRODUCTS ARE USED, THEY MAY BE LEFT ONSITE AT THE DIRECTION OF THE OWNER.

EROSION CONTROL BLANKET

THE NORTH AMERICAN GREEN S150BN EROSION CONTROL BLANKET, OR AN APPROVED EQUAL, SHALL BE INSTALLED ON ALL SLOPES 3:1 OR STEEPER. THE EROSION CONTROL BLANKETS WILL PROVIDE EROSION PROTECTION AND ASSIST WITH VEGETATION ESTABLISHMENT FOR UP TO 12 MONTHS. AFTER A 12 MONTH PERIOD THE BLANKETS WILL BIODEGRADE LEAVING A STABLE VEGETATED ROOT STRUCTURE.

INSTALLATION:

- PREPARE SOIL ON ALL ESTABLISHED TEMPORARY AND PERMANENT SLOPES AND ANY NECESSARY APPLICATION OF FERTILIZER AND SEED. SEE THE "SEEDING CRITERIA" TABLE LOCATED ON THE EROSION AND SEDIMENTATION CONTROL NOTES DRAWING BEFORE INSTALLING EROSION CONTROL BLANKET.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE EROSION CONTROL BLANKET IN A 6 INCH BY 6 INCH WIDE TRENCH WITH APPROXIMATELY 12 INCHES OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES APPROXIMATELY 12 INCHES APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12 INCH PORTION OF THE EROSION CONTROL BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES SPACED APPROXIMATELY 12 INCHES APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE EROSION CONTROL BLANKET DOWN THE SLOPE. BLANKET WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES IN APPROPRIATE LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2 TO 5 INCH OVERLAP.

INLET PROTECTION

CURB AND GRATED INLETS ARE PROTECTED FROM THE INTRUSION OF SEDIMENT THROUGH A VARIETY OF MEASURES AS SHOWN ON THE DETAILS INCLUDED IN THE CONSTRUCTION DRAWINGS. THE PRIMARY MECHANISM IS TO PLACE CONTROLS IN THE PATH OF FLOW SUFFICIENT TO SLOW THE SEDIMENT-LADEN WATER TO ALLOW SETTLEMENT OF SUSPENDED SOILS BEFORE DISCHARGING INTO THE STORM SEWER. IT IS POSSIBLE THAT AS CONSTRUCTION PROGRESSES FROM STORM SEWER INSTALLATION THROUGH TO PAVING THAT THE INLET PROTECTION DEVICES WILL CHANGE. NOTE TO GENERAL CONTRACTOR: ALL INLET PROTECTION DEVICES CREATE PONDING OF STORMWATER THAT CAN RESULT IN FLOODING OR BY-PASS CONDITIONS.

INSTALLATION: THE INLET PROTECTION FILTERS SHALL BE INSTALLED IN THE LOCATIONS SHOWN ON THE PLAN AND IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

MAINTENANCE: 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 REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

PUMPED WATER FILTER BAG

PUMPED WATER FILTER BAGS MAY BE USED, IF NECESSARY, TO PREVENT SEDIMENT LADEN WATER THAT MAY BE PUMPED FROM TRENCHES FROM DISCHARGING INTO WETLANDS AND STREAMS OR OFFSITE. THEY SHALL BE MADE FROM NON-WOVEN GEOTEXTILE MATERIAL AND SHALL TRAP PARTICLES LARGER THAN 150 MICRONS. PUMPING RATES SHALL NOT EXCEED ONE-HALF MANUFACTURER'S SPECIFICATIONS, OR 750 GPM, WHICHEVER IS LESS. THE FOLLOWING INSTRUCTIONS SHALL SPECIFY CONDITIONS FOR ITS USE.

INSTALLATION:

- INSTALL BAGS ON A WELL-VEGETATED, EROSION-RESISTANT AREA.
- BAGS SHALL NOT BE PLACED ON A SLOPE GREATER THAN 5%.

- BAGS MUST BE PLACED ON A DRY AREA, AWAY FROM STREAMS AND WETLANDS.
- PUMP INTAKES SHOULD BE FLOATING AND SCREENED.

MAINTENANCE:

- FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE UNTIL THE PROBLEM IS CORRECTED.
- FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME HALF FULL WITH SEDIMENT.
- A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES MUST BE PROVIDED.
- SPARE BAGS SHALL BE KEPT AVAILABLE ONSITE.
- ALL CLEAN OUT MATERIAL SHALL BE DISCARDED IN AN UPLAND AREA, REMOTE OF ANY STREAM OR WETLAND, WITHIN THE CONSTRUCTION RIGHT-OF-WAY. ALL AREAS WILL BE STABILIZED.

OUTLET PROTECTION (RIPRAP APRONS)

RIPRAP APRONS ARE USED TO PREVENT SCOUR AND REDUCE THE POTENTIAL FOR EROSION TO OCCUR AT AND OUTFALL. APRONS SHOULD BE CONSTRUCTED AT OR NEAR ZERO GRADE FROM FRONT TO BACK AND SIDE TO SIDE. IN NO CASE SHOULD THE RIPRAP APRON BE CONSTRUCTED WITH A BACK TO FRONT GRADIENT EXCEEDING 0.05FT/FT.

INSTALLATION:

- APRONS SHOULD BE CONSTRUCTED AT OR NEAR ZERO GRADE FROM FRONT TO BACK AND SIDE TO SIDE.
- IN NO CASE SHOULD THE RIPRAP APRON BE CONSTRUCTED WITH A BACK TO FRONT SLOPE EXCEEDING 5%.
- TERMINAL WIDTHS OF RIPRAP APRONS SHOULD BE ADJUSTED AS NECESSARY TO MATCH RECEIVING CHANNEL.

MAINTENANCE:

- RIPRAP APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.
- DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

WATERBAR

WATERBARS SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THE DETAIL PROVIDED. WATERBARS SHALL BE INSTALLED ACROSS THE ENTIRE ROAD.

INSTALLATION:

- WATERBARS SHALL BE CONSTRUCTED AT A SLOPE OF 2%
- DISCHARGE WATERBAR TO AN 18" COMPOST FILTER SOCK J HOOK.

MAINTENANCE:

- WATERBARS SHALL BE INSPECTED DAILY AND AFTER EACH RUNOFF EVENT TOTALING 0.25 INCHES OR GREATER PER 24-HOUR PERIOD.
- DAMAGED OR ERODED WATERBARS SHALL BE RESTORED TO ORIGINAL DIMENSIONS WITHIN 24 HOURS OF INSPECTION.

LEGEND

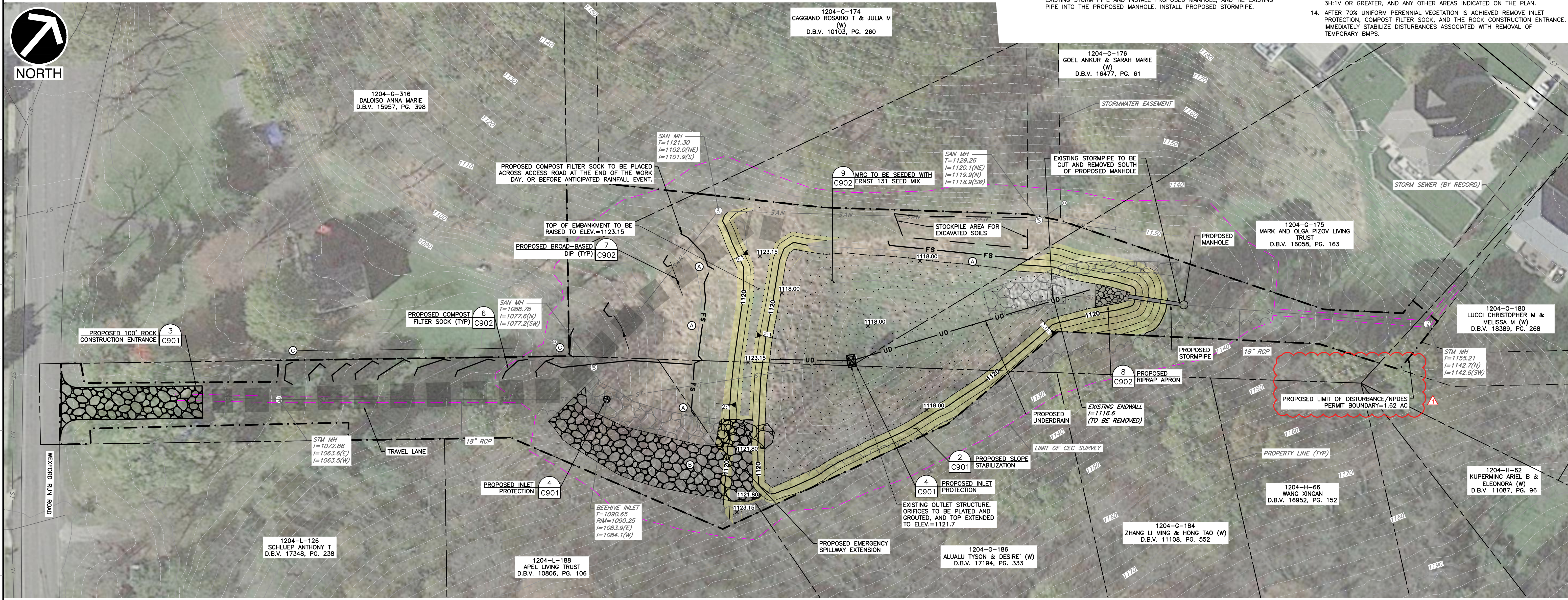
---	EXISTING INDEX (MAJOR) CONTOUR	- - - - -	PROPOSED LIMIT OF DISTURBANCE/NPDES PERMIT BOUNDARY
---	EXISTING INTERMEDIATE (MINOR) CONTOUR	- - - - -	PROPOSED COMPOST FILTER SOCK
---	EXISTING EDGE OF PAVEMENT	---X---	PROPOSED ROCK CONSTRUCTION ENTRANCE
(D)	EXISTING STORM MANHOLE	(S)	PROPOSED INLET PROTECTION
---	EXISTING STORM PIPE	---	PROPOSED WATERBAR
---	EXISTING SANITARY SEWER LINE	---	ACCESS ROAD
---	LIMIT OF CEC SURVEY AREA	---	
---	EXISTING STORMPIPE FROM RECORD PROPERTY LINE	---	
---	EXISTING EASEMENT	---	
---	PROPOSED INDEX CONTOUR	---	
---	PROPOSED INTERMEDIATE CONTOUR	---	
---	PROPOSED STORM PIPE	---	
---	PROPOSED UNDERDRAIN	---	
(U)	PROPOSED INLET	(U)	
(M)	PROPOSED STORM MANHOLE	(M)	
---	PROPOSED AREA OF SOIL AMENDMENTS	---	

CONSTRUCTION SEQUENCE

AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, ALLEGHENY COUNTY CONSERVATION DISTRICT, AND THE E&S PLAN PREPARER TO AN ON-SITE PRECONSTRUCTION MEETING.

AT LEAST THREE (3) DAYS BEFORE STARTING EARTH DISTURBANCE ACTIVITIES, THE CONTRACTOR SHALL NOTIFY THE PENNSYLVANIA ONE-CALL SYSTEM TO LOCATE UTILITIES.

- LAYOUT THE LIMITS OF THE CONSTRUCTION AND ESTABLISH BENCHMARKS AND REFERENCE POINTS.
- STAKE OUT THE LIMIT OF DISTURBANCE AS INDICATED ON THE PLANS.
- INSTALL ROCK CONSTRUCTION ENTRANCE. ALL CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THROUGH THE ROCK CONSTRUCTION ENTRANCE.
- INSTALL THE COMPOST FILTER SOCK AT THE LOCATIONS SHOWN ON THE PLANS. INSTALL INLET PROTECTION ON THE EXISTING BEEHIVE INLET. INSTALL THE BROAD BASED DIPS.
- BEGIN ROUGH GRADING OPERATIONS TO BRING BASIN FOOTPRINT TO THE BOTTOM OF SOIL AMENDMENTS ELEVATION (1114.0). THIS WILL REQUIRE IMPORT OF SOIL.
- AS FILL OPERATIONS PROGRESS, IN THE NORTHERN SECTION OF THE BMP, CUT EXISTING STORM PIPE AND INSTALL PROPOSED MANHOLE, AND THE EXISTING PIPE INTO THE PROPOSED MANHOLE. INSTALL PROPOSED STORMPIPE.
- WHERE OUT IS NEEDED TO INSTALL SOIL AMENDMENTS, THE CONTRACTOR SHALL EXCAVATE NO MORE THAN CAN BE HAULED OUT IN ONE DAY. CARE SHALL BE TAKEN TO NOT COMPACT THE BOTTOM OF THE SOIL MEDIA AREA.
- DEWATER AS NECESSARY USING A PUMPED WATER FILTER BAG UNTIL THE NEW OUTLET STRUCTURE EXTENSION IS INSTALLED AND ONLINE.
- INSTALL PROPOSED UNDERDRAINS, INCLUDING PIPING, AGGREGATE ENVELOPE, AND GEOTEXTILE ACCORDING TO THE DETAIL PROVIDED.
- PLACE AMENDED MEDIA. CARE SHALL BE TAKEN TO NOT COMPACT SOIL MEDIA OR SUBGRADE, TO THE MAXIMUM EXTENT PRACTICABLE. PLACEMENT OF SOIL MEDIA SHOULD BE DONE OUTSIDE OF THE AMENDED SOILS FOOTPRINT TO AVOID COMPACTING. EQUIPMENT SHALL NOT DRIVE OVER PLACED SOIL MEDIA WITHOUT CONSTRUCTION MATTING.
- INSTALL RIPRAP APRON.
- INSTALL OUTLET STRUCTURE EXTENSION, AND OUTLET PROTECTION AROUND OUTLET STRUCTURE.
- APPLY SEED, PRESCRIBED ON THE DETAILS. INSTALL EROSION CONTROL BLANKET OR HYDRAULICALLY APPLIED SLOPE STABILIZATION ON ALL SLOPES 3:1V OR GREATER, AND ANY OTHER AREAS INDICATED ON THE PLAN.
- AFTER 70% UNIFORM PERENNIAL VEGETATION IS ACHIEVED REMOVE INLET PROTECTION, COMPOST FILTER SOCK, AND THE ROCK CONSTRUCTION ENTRANCE. IMMEDIATELY STABILIZE DISTURBANCES ASSOCIATED WITH REMOVAL OF TEMPORARY BMPS.



REFERENCES

- EXISTING TOPOGRAPHY AND FEATURES WITHIN SURVEY BOUNDARY SHOWN HEREON BASED ON SURVEY PERFORMED BY CEC, INC. MAY 2022.
- EXISTING TOPOGRAPHY SHOWN OUTSIDE OF SURVEY BOUNDARY DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL CONSTRUCTED FROM PAMAP LIDAR (LIGHT DETECTION AND RANGING) ELEVATION POINTS, TOPOGRAPHIC CONTOURS MAPPED AT AN INTERVAL OF 2 FEET; DEVELOPED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY, DATED 2020.
- EXISTING STORMPIPES OUTSIDE THE SURVEY BOUNDARY PROVIDED TO CEC BY FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING TAX PARCEL LINES OBTAINED FROM ALLEGHENY COUNTY PUBLICLY AVAILABLE GIS DATABASE DATED 2021.
- STREAM AND WETLAND BOUNDARY BASED ON FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING AERIAL PHOTOS TAKEN FROM GOOGLE EARTH PRO, DATED NOVEMBER 2022.
- DEED AND EASEMENT LINES WERE PLOTTED FROM MARSHALLANDS PLAN OF LOTS REV. 6 5-23-89, PBV 160 PAGE 192 AND WERE PLACED USING AVAILABLE AERIAL IMAGERY. NO FIELD SURVEY TO CONFIRM PROPERTY LINES OR LINES OF OCCUPATION WAS COMPLETED BY CEC.

ID	SIZE
(A)	12
(B)	
(C)	

OFF-SITE FACILITIES

ALL OFF-SITE BORROW SITES SHALL HAVE AN APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IN PLACE, OR OBTAIN AN NPDES PERMIT BEFORE MATERIAL IS EXCAVATED.

CONSTRUCTION WASTE RECYCLING/DISPOSAL

CONSTRUCTION WASTES ARE REFUSE MATERIALS THAT ARE EXISTING ON-SITE OR GENERATED DURING THE COURSE OF CONSTRUCTION AND MAY INCLUDE, BUT ARE NOT LIMITED TO, PAPER, PLASTIC, WOOD, FOOD, TEXTILE, AND METAL PRODUCTS.

INSTALLATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING WASTE RECYCLING/DISPOSAL AREAS ON THE EROSION AND SEDIMENT CONTROL PLANS ONCE THEY HAVE BEEN DETERMINED. WASTE DISPOSAL STOCKPILES SHALL BE PLACED UPSTREAM OF TEMPORARY E&S CONTROL MEASURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL WASTE RECYCLING/DISPOSAL PERMITS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

MAINTENANCE: ALL CONSTRUCTION WASTE SHALL BE REMOVED BY THE CONTRACTOR AND DISPOSED OF AT A STATE APPROVED WASTE SITE AND IN ACCORDANCE WITH ALL LOCAL AND STATE CODES AND PERMIT REQUIREMENTS. THE BURNING OF WASTE MATERIALS SHALL NOT BE PERMITTED.



NO.	DATE	DESCRIPTION	REVISED PER APPROVED COMMENTS SHEET 1/10/2022

DATE:	OCTOBER 2022	DRAWN BY:	TLW
DWG SCALE:	1"=30'	CHECKED BY:	DJW
PROJECT NO.:		APPROVED BY:	315-219 JCV

EROSION AND SEDIMENTATION CONTROL PLAN

FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA

C900

REVISION RECORD

Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
 412-429-2324 • 800-365-2324
 www.cecinc.com

FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA

EROSION AND SEDIMENTATION CONTROL PLAN

FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA

C900

SEED MIXTURE USE	
SITE CONDITION	SEED MIXTURE (SELECT ONE)*
CUT SLOPES AND FILLS (NOT MOWED) WELL DRAINED	4
CUT SLOPES AND FILLS (NOT MOWED) VARIABLE DRAINAGE	4
CUT SLOPES AND FILLS (MOWED)	1
CUT SLOPES AND FILLS (GRAZED/HAY)	1 OR 2
GULLIES AND ERODED AREAS	4
EROSION CONTROL BMPs - CHANNELS, DRAINAGE DITCHES, TRAPS, EMBANKMENTS, ETC.	1
EROSION CONTROL BMPs - FOR HAY OR SILAGE	2
RIGHT-OF-WAY, WELL-DRAINED	1, 2, OR 4
RIGHT-OF-WAY, VARIABLE DRAINAGE	2 OR 3
RIGHT-OF-WAY, WELL-DRAINED AREAS FOR GRAZING/HAY	2
STRIP MINED AREAS - SPOILS, WASTE AREAS, FLY ASH, SLAG, ETC.	2, 3, OR 4
STRIP MINED AREAS - FOR GRAZING/HAY	2 OR 4

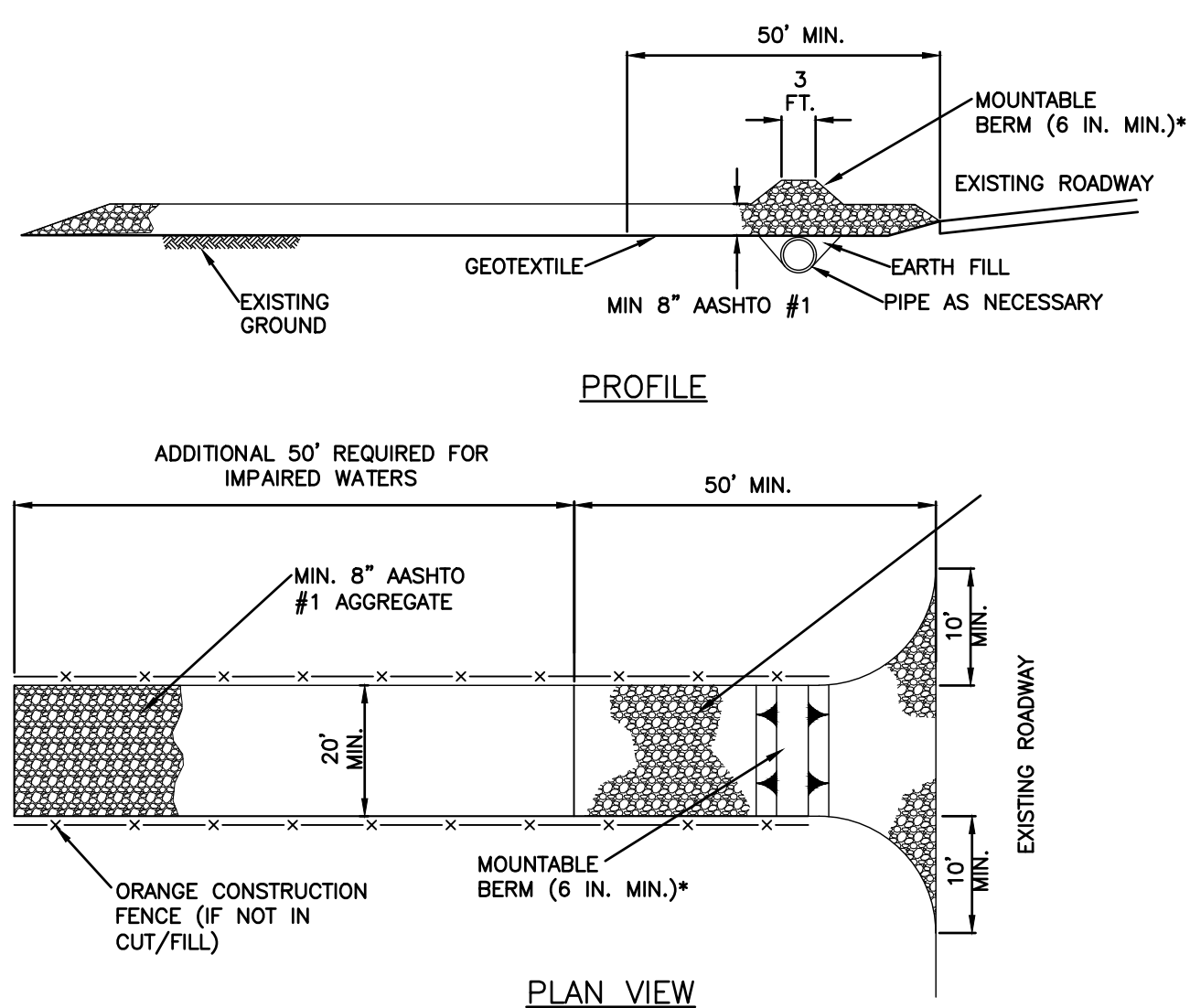
* PLUS "NURSE CROP" OF 64 LBS/ACRE OF OATS OR 112 LBS/ACRE OF WINTER RYE

PERMANENT SEED MIXTURES			
MIXTURE NUMBER	SEASON	SPECIES	SEEDING RATE LB/AC
1	COOL	FINE FESCUE, PLUS REDTOP, PLUS BIRDSFOOT TREFOLI	46 4 8
2	COOL	ORCHARDGRASS PLUS BIRDSFOOT TREFOLI	26 8
3	WARM	DEERTONGUE, PLUS BIRDSFOOT TREFOLI	21 8
4	WARM	SWITCHGRASS OR BIG BLUESTEM, PLUS BIRDSFOOT TREFOLI	15 15 8

NOTES:

- TEMPORARY SEED MIX: 64 LBS/AC OF OATS OR 112 LBS/AC OF WINTER RYE
ALTERNATE SEED MIXTURES MAY BE UTILIZED TO COMPLY WITH SPECIFIC LANDOWNER REQUESTS WITH PRIOR APPROVAL BY THE PROJECT OWNER AND THE ENGINEER.
- IT IS RECOMMENDED THAT A SOIL TEST BE PERFORMED TO DETERMINE THE TYPE AND RATE OF APPLICATION OF SOIL AMENDMENTS REQUIRED FOR THE PROJECT AREA. IN THE ABSENCE OF A SOIL TEST, THE FOLLOWING SOIL AMENDMENTS SHALL BE USED:
 - LIME SHOULD BE APPLIED AT A RATE OF AT LEAST 6 TONS/ACRE FOR PERMANENT SEEDING. FOR TEMPORARY SEEDING, A LIMING RATE OF 1 TON/ACRE IS ACCEPTABLE.
 - FERTILIZER SHOULD BE APPLIED AT THE RATE OF 100 LB. N, 200 LB. OF P205, AND 200 LB. OF K2O PER ACRE (E.G., 1000 LB./ACRE OF 10-20-20 FERTILIZER). FOR TEMPORARY SEEDING, A RATE OF 50 LB. N, 50 LB. P205, AND 50 LB. K2O PER ACRE (E.G., 500 LB. OF 10-10-10 FERTILIZER) IS ACCEPTABLE.

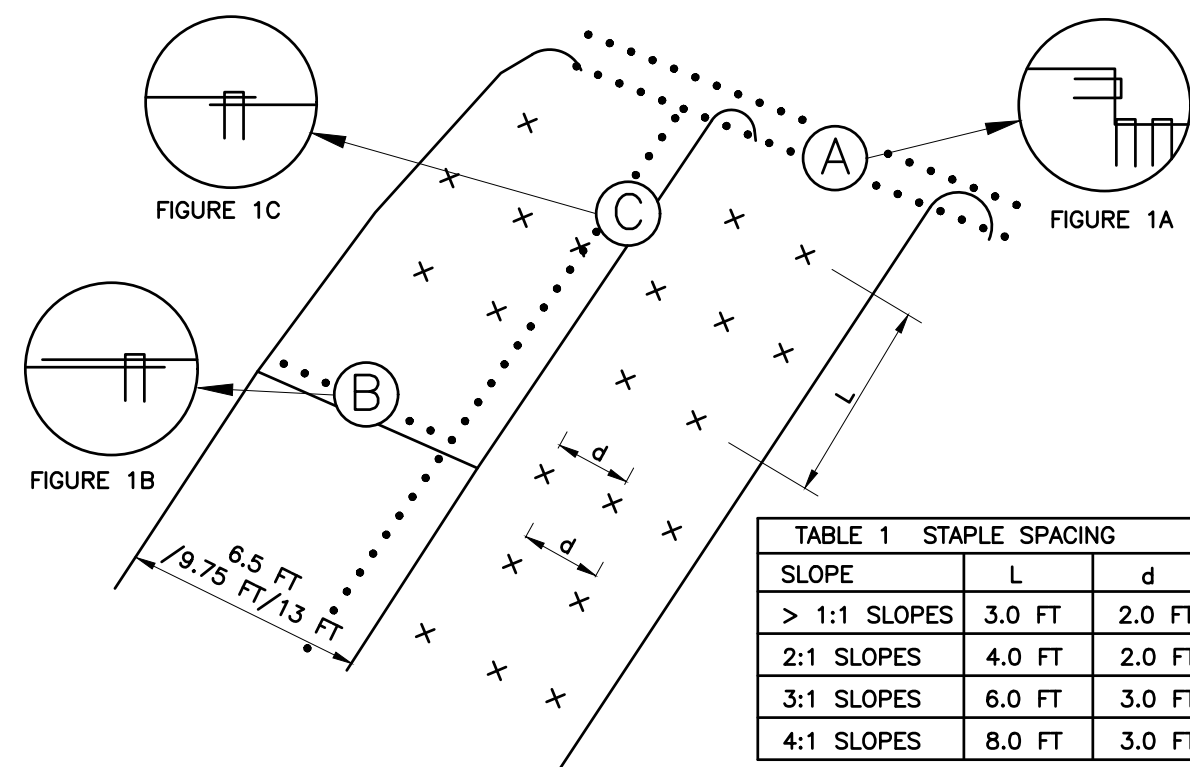
DETAIL 1 SEEDING



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.
MAINTENANCE: ROCK CONSTRUCTION ENTRANCE THICKNESS SHALL BE CONSTANTLY MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK. A STOOPLIKE BERM IS 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, EXTEND LENGTH OF ROCK CONSTRUCTION ENTRANCE BY 50 FOOT INCREMENTS UNTIL CONDITION IS ALLEVIATED OR INSTALL WASH RACK, WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE COURSES IS NOT ACCEPTABLE.

DETAIL 3 50' EXTENDED ROCK CONSTRUCTION ENTRANCE



NOTES:

- EROSION CONTROL BLANKETS SHALL BE INSTALLED OVERTOP OF ALL SLOPES GREATER THAN OR EQUAL TO 3:1 (HORIZONTAL:VERTICAL). EROSION CONTROL BLANKETS SHALL BE NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL.
- USE BIODEGRADABLE EROSION CONTROL MATS (JUTE, COIR, ETC.) WHERE SPECIFIED ON STREAM BANKS, DITCHES, AND STEEP SLOPES FOR TEMPORARY STABILIZATION OF UNVEGETATED SOIL.
- PREPARE SOIL, INCLUDING GRADING, APPLICATION OF SOIL AMENDMENTS, AND SEED. THE SURFACE OF THE SOIL SHOULD BE SMOOTH AND FREE OF ROCKS, ROOTS AND OTHER OBSTRUCTIONS.
- LAY BLANKETS ON STREAM BANKS AT RIGHT ANGLE TO THE STREAM CHANNEL, UNLESS THE ENTIRE STREAM BANK (FROM TOE TO TOP OF BANK) CAN BE COVERED BY A SINGLE WIDTH LAID PARALLEL TO THE CHANNEL. LAY MATS LOOSELY ON THE GROUND ALLOWING GOOD CONTACT BETWEEN SOIL AND BLANKETS.
- ANCHOR MATS IN A 6-INCH DEEP x 6-INCH WIDE ANCHOR TRENCH AT THE TOE OF THE STREAM BANK OR SHORELINE, STAPLE/STAKE THE MAT IN THE TRENCH. BACKFILL AND COMPACT THE TRENCH WITH SOIL.
- STAPLE THE OPEN MAT EDGE USING ONE ROW OF STAPLES AT 1.5 - 2 FOOT INTERVALS. THE MIDDLE OF THE MAT SHOULD BE STAPLED USING A PREFERRED STAPLE PATTERN (TABLE 1).
- WHEN MAT SPLICING DOWN THE SLOPE IS NECESSARY, OVERLAP MATS 8 INCHES WITH THE UPSLOPE MAP EDGE ON TOP. USE TWO ROWS OF STAPLES/STAKES AND 12-INCH SPACING TO ANCHOR MATS (FIG. 1B). TO SPLICE MATS ACROSS THE SLOPE, OVERLAP THE SIDES OF MATS AT LEAST 6 INCHES WITH THE TRAILING EDGE OF THE TOP OVERLAPPING MAT ORIENTED IN A DOWNSTREAM DIRECTION. USE ONE ROW OF STAPLES/STAKES AND 12-INCH SPACING TO ANCHOR MATS (FIG. 1C).
- ANCHOR THE MAT AT THE TOP OF THE SLOPE IN A 6-INCH DEEP x 6-INCH WIDE ANCHOR TRENCH. PLACE MAT, STAPLE/STAKE, BACKFILL AND COMPACT (FIG. 1A)

SOURCE: MODIFIED FROM ROLANKA INTERNATIONAL, HTTP://WWW.ROLANKA.COM/

INSPECTION: STABILIZED AREAS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE STABILIZED AREA.

MAINTENANCE: DAMAGED OR DISPLACED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

OPTION 1 EROSION CONTROL BLANKET

INSTALLATION

STRICTLY COMPLY WITH EQUIPMENT MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. USE APPROVED HYDRO-SPRAYING MACHINES WITH FAN-TYPE NOZZLE (50-DEGREE TIP). TO ACHIEVE OPTIMUM SOIL SURFACE COVERAGE, APPLY HP-FGM FROM OPPOSING DIRECTIONS TO SOIL SURFACE. ROUGH SURFACES (ROCKY TERRAIN, CAT TRACKS AND RIPPED SOILS) MAY REQUIRE HIGHER APPLICATION RATES TO ACHIEVE 100% COVER. SLOPE INTERRUPTION DEVICES OR WATER DIVERSION TECHNIQUES ARE RECOMMENDED WHEN SLOPE LENGTHS EXCEED 100 FEET. MAXIMUM SLOPE LENGTH IS FOR PRODUCT APPLICATIONS ON A 3H:1V SLOPE. FOR APPLICATION ON STEEPER SLOPES, SLOPE INTERRUPTION LENGTHS MAY NEED TO BE DECREASED BASED ON ACTUAL SITE CONDITIONS. NOT RECOMMENDED FOR CHANNELS OR AREAS WITH CONCENTRATED WATER FLOW. NO CHEMICAL ADDITIVES WITH THE EXCEPTION OF FERTILIZER, LIMING AND BIOSTIMULANT MATERIALS SHOULD BE ADDED TO THIS PRODUCT. TO ENSURE PROPER APPLICATION RATES, MEASURE AND STAKE AREA. FOR MAXIMUM PERFORMANCE, APPLY HP-FGM IN A TWO-STEP PROCESS AS FOLLOWS:

- STEP ONE: APPLY FERTILIZER WITH SPECIFIED PRESCRIPTIVE AGRONOMIC FORMULATIONS AND 50% OF SEED WITH A SMALL AMOUNT OF HP-FGM FOR VISUAL METERING.
- STEP TWO: MIX BALANCE OF SEED AND APPLY HP-FGM AT A RATE OF 50 LB PER 125 GALLONS OF WATER OVER FRESHLY SEEDING SURFACES. CONFIRM LOADING RATES WITH EQUIPMENT MANUFACTURER. DO NOT LEAVE SEEDING SURFACES UNPROTECTED, ESPECIALLY IF PRECIPITATION IS IMMINENT.

APPLICATION RATES: THESE APPLICATION RATES ARE FOR STANDARD CONDITIONS. DESIGNERS MAY WISH TO REDUCE RATES TO ENCOURAGE FASTER VEGETATION ESTABLISHMENT OR MAY NEED TO INCREASE APPLICATION RATES ON ROUGH SURFACES. CONSULT APPLICATION AND LOADING CHARTS TO DETERMINE NUMBER OF BAGS TO BE ADDED FOR DESIRED AREA AND APPLICATION RATE.

SLOPE GRADIENT / CONDITION APPLICATION RATE

≤ 4H TO 1V	2500 LB/AC
> 4H TO 1V AND ≤ 3H TO 1V	3000 LB/AC
> 3H TO 1V AND ≤ 2H TO 1V	3500 LB/AC
> 2H TO 1V AND ≤ 1H TO 1V	4000 LB/AC
1H TO 1V	4500 LB/AC
BELOW ECB OR TRM	1500 LB/AC
AS INFILL FOR TRM	3500 LB/AC

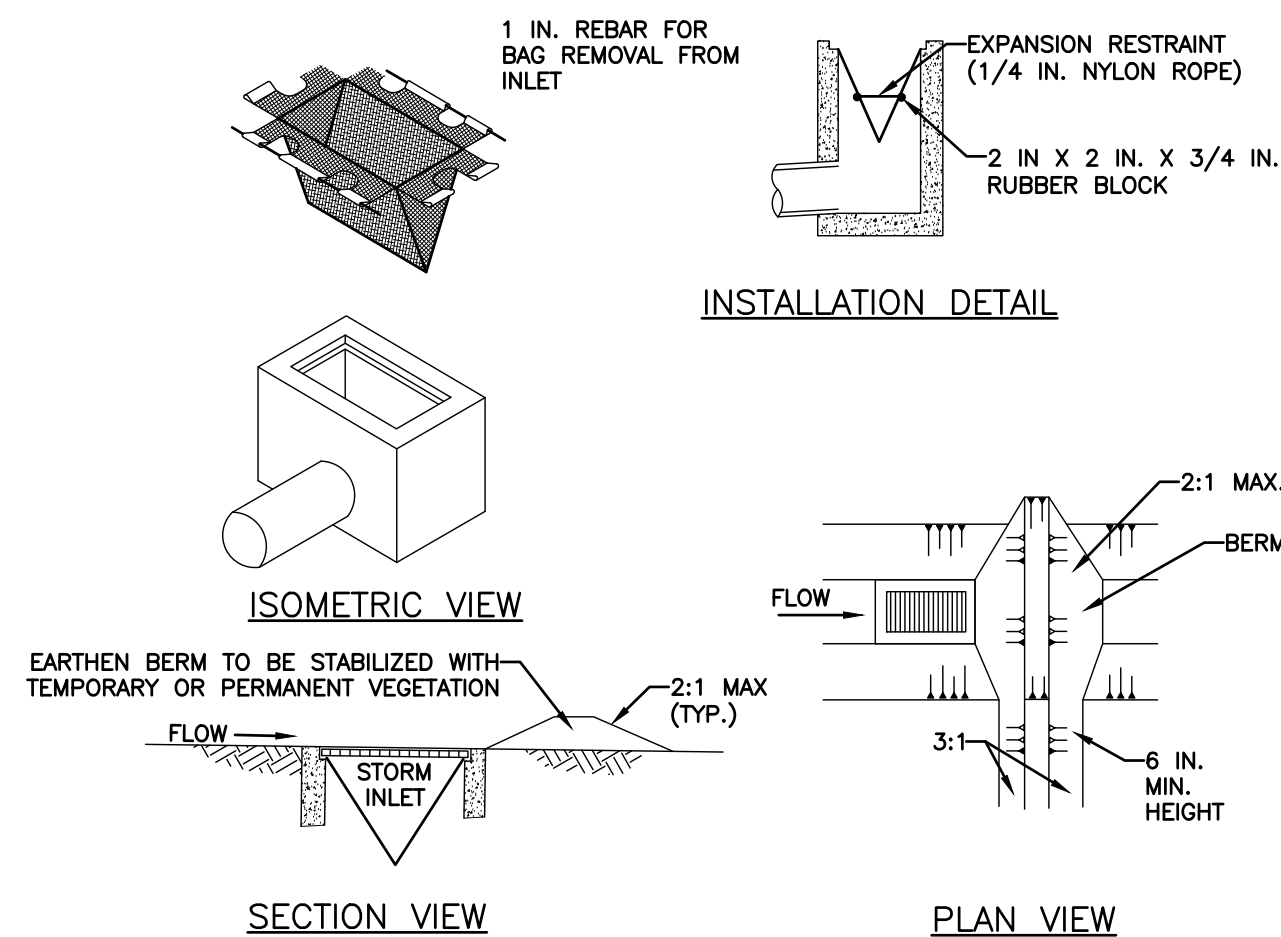
SOURCE: MODIFIED FROM ACF ENVIRONMENTAL, HTTP://ACFENVIRONMENTAL.COM

INSPECTION: STABILIZED AREAS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT UNTIL PERENNIAL VEGETATION IS ESTABLISHED TO A MINIMUM UNIFORM 70% COVERAGE THROUGHOUT THE STABILIZED AREA.

MAINTENANCE: DAMAGED OR DISPLACED HYDRAULICALLY APPLIED BLANKETS SHALL BE RESTORED OR REPLACED WITHIN 4 CALENDAR DAYS.

OPTION 2 HYDRAULICALLY APPLIED SLOPE STABILIZATION

DETAIL 2 SLOPE STABILIZATION



ADAPTED FROM PENNDOT RC-70, 2008 EDITION

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.
- 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.
- 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 WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. 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.

DETAIL 4 INLET PROTECTION

N.T.S.

MULCH TYPE	APPLICATION RATE (MIN.)			NOTES
	PER ACRE	PER 1,000 SQ. FT.	PER 1,000 SQ. YD.	
STRAW	3 TONS	140 LB.	1240	EITHER WHEAT OR OAT STRAW, FREE OF WEEDS, NOT CHOPPED OR FINELY BROKEN
HAY	3 TONS	140 LB.	1240	TIMOTHY, MIXED CLOVER AND TIMOTHY OR OTHER NATIVE FORAGE GRASSES
WOOD CHIPS	4-6 TONS	185-275 LB.	1650-2500	MAY PREVENT GERMINATION OF GRASSES AND LEGUMES
HYDROMULCH	1 TON	47 LB.	415	SEE LIMITATIONS BELOW

NOTES:

- MULCH MAY BE USED ON SLOPES NO STEEPER THAN 3H:1V. FOR SLOPES 3H:1V AND STEEPER, EROSION CONTROL BLANKETS OR HYDRAULICALLY APPLIED SLOPE STABILIZATION SHALL BE USED.
- MULCH SHALL BE APPLIED AT THE RATES SHOWN IN THE TABLE ABOVE.
- STRAW AND HAY MULCH SHOULD BE ANCHORED OR TACKIFIED IMMEDIATELY AFTER APPLICATION TO PREVENT BEING WINDBLOWN. A TRACTOR-DRAWN IMPLEMENT MAY BE USED TO "CRIMP" THE STRAW OR HAY INTO THE SOIL. THIS METHOD SHOULD BE LIMITED TO SLOPES NO STEEPER THAN 3H:1V. THE MACHINERY SHOULD BE OPERATED PARALLEL TO THE CONTOUR. CRIMPING HAY OR STRAW BY RUNNING OVER IT WITH TRACKED MACHINERY IS NOT RECOMMENDED.
- POLYMERIC AND GUM TACKIFIERS MIXED AND APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS MAY BE USED TO TACK MULCH. AVOID APPLICATION DURING RAIN AND ON WINDY DAYS. A 24-HOUR CURING PERIOD AND A SOIL TEMPERATURE HIGHER THAN 45°F ARE TYPICALLY REQUIRED. APPLICATION SHOULD GENERALLY BE HEAVIEST AT EDGES OF SEEDING AREAS AND AT CRESTS OF RIDGES AND BANKS TO PREVENT LOSS BY WIND. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ON TO THE SOIL. APPLYING STRAW AND BINDER TOGETHER IS GENERALLY MORE EFFECTIVE.
- SYNTHETIC BINDERS, OR CHEMICAL BINDERS, MAYBE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH PROVIDED SUFFICIENT DOCUMENTATION IS PROVIDED TO SHOW THEY ARE NON-TOXIC TO NATIVE PLANT AND ANIMAL SPECIES.
- MULCH ON SLOPES OF 8% OR STEEPER SHOULD BE HELD IN PLACE WITH NETTING. LIGHTWEIGHT PLASTIC, FIBER, OR PAPER NETS MAY BE STAPLES OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- SHREDDED PAPER HYDROMULCH SHOULD NOT BE USED ON SLOPES STEEPER THAN 5% WOOD FIBER HYDROMULCH MAY BE APPLIED ON STEEPER SLOPES PROVIDED A TACKIFIER IS USED. THE APPLICATION RATE FOR ANY HYDROMULCH SHOULD BE 2,000 LB/ACRE AT A MINIMUM.

OPTION 3 MULCHING

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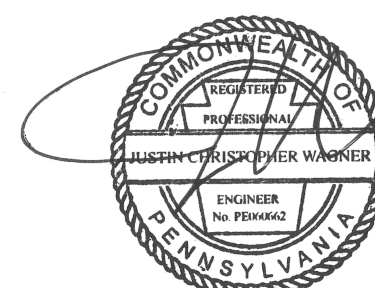
**FRANKLIN PARK BOROUGH
MS4 SEDIMENT REDUCTION
MATTERHORN BASIN
FRANKLIN PARK BOROUGH
ALLEGHENY COUNTY, PENNSYLVANIA**

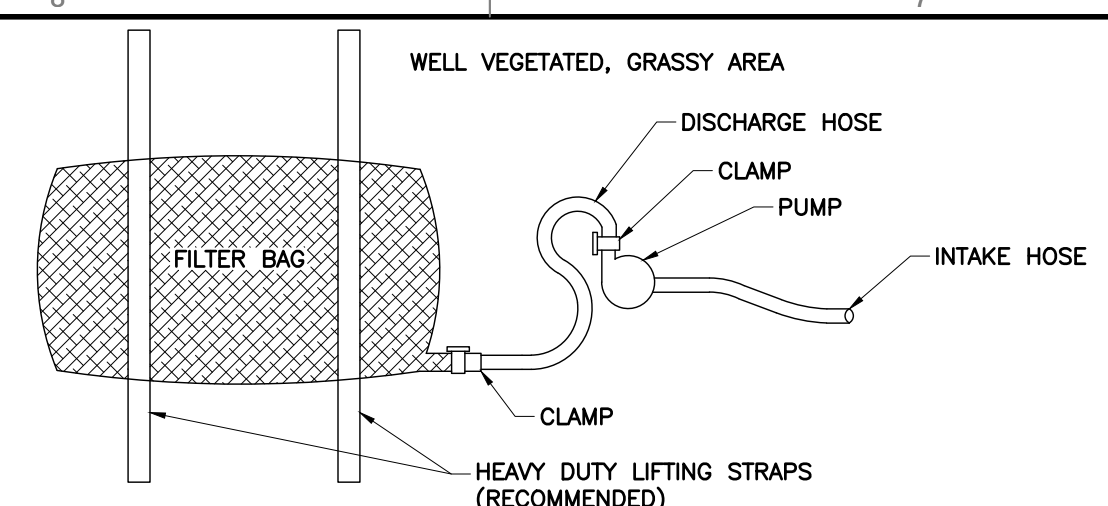
EROSION AND SEDIMENTATION CONTROL DETAILS

DATE: OCTOBER 2022 DRAWN BY: TLW
DWG SCALE: N.T.S. CHECKED BY: DW
PROJECT NO: 315-219
APPROVED BY: DRAFT

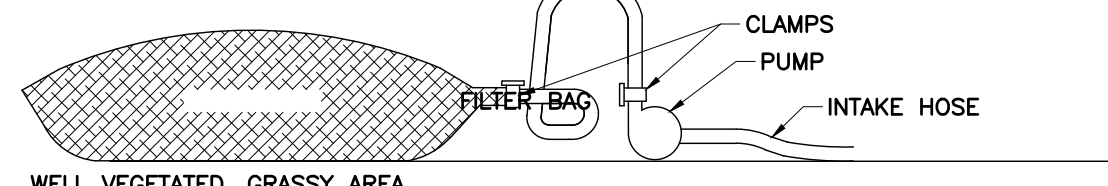
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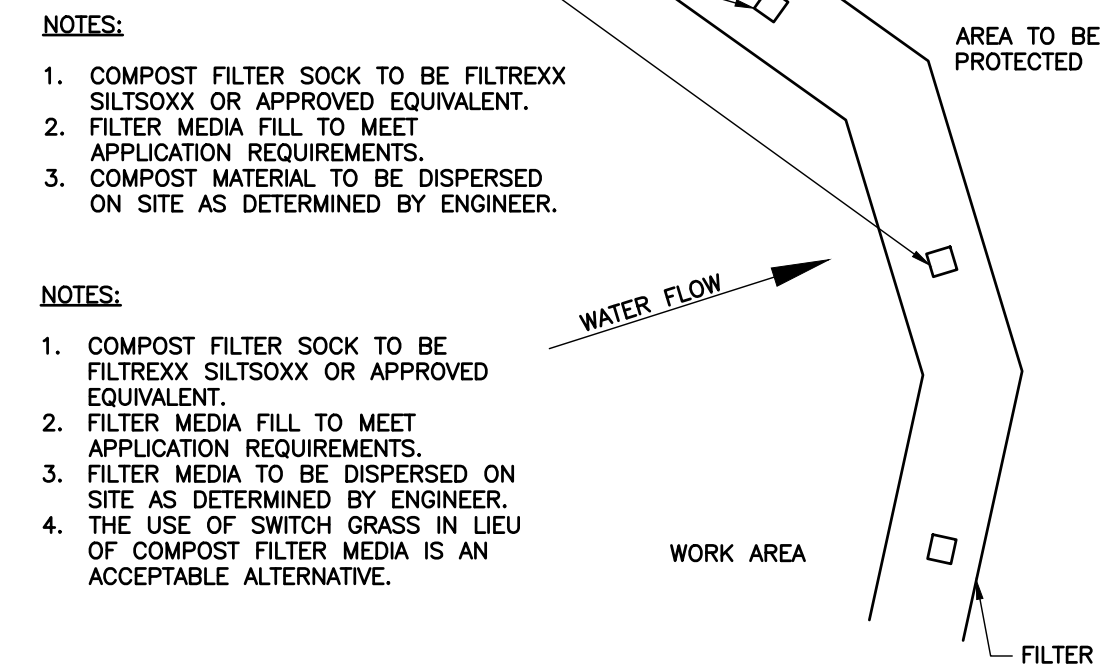
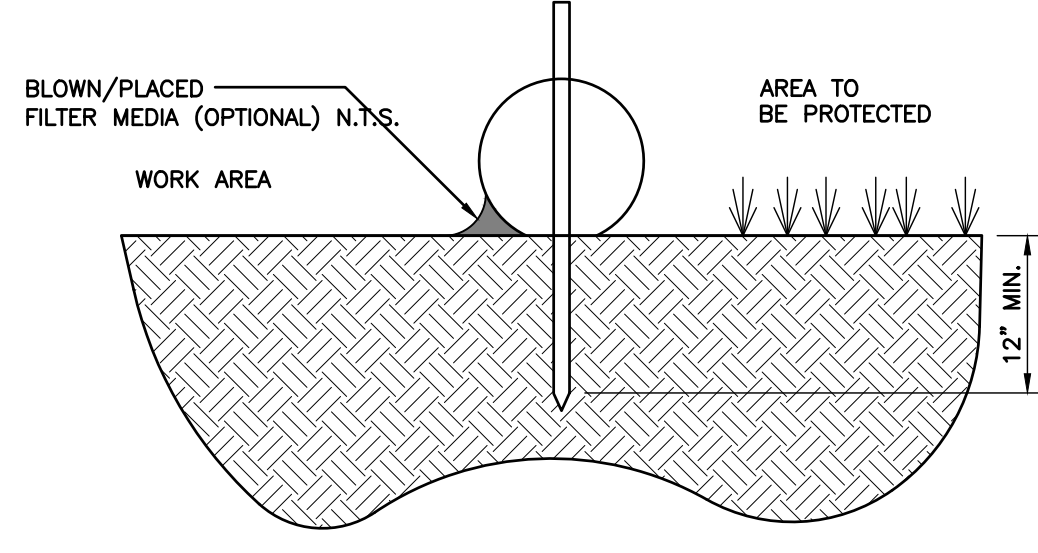
PLAN VIEW



ELEVATION VIEW

PROPERTY	TEST METHOD	MINIMUM STANDARD
AVG. WIDE WIDTH STRENGTH	ASTM D-4884	60 LB/IN
GRAB TENSILE	ASTM D-4632	205 LB
PUNCTURE	ASTM D-4833	110 LB
MULLEN BURST	ASTM D-3786	350 PSI
UV RESISTANCE	ASTM D-4355	70%
AOS % RETAINED	ASTM D-4751	80 SIEVE

- 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:
 - 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 EY 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.



- NOTES:**
- COMPOST FILTER SOCK TO BE FILTREXX SILTSOXX OR APPROVED EQUIVALENT.
 - FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
 - COMPOST MATERIAL TO BE DISPERSED ON SITE AS DETERMINED BY ENGINEER.
- NOTES:**
- COMPOST FILTER SOCK TO BE FILTREXX SILTSOXX OR APPROVED EQUIVALENT.
 - FILTER MEDIA FILL TO MEET APPLICATION REQUIREMENTS.
 - FILTER MEDIA TO BE DISPERSED ON SITE AS DETERMINED BY ENGINEER.
 - THE USE OF SWITCH GRASS IN LIEU OF COMPOST FILTER MEDIA IS AN ACCEPTABLE ALTERNATIVE.

INSPECTION: SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.

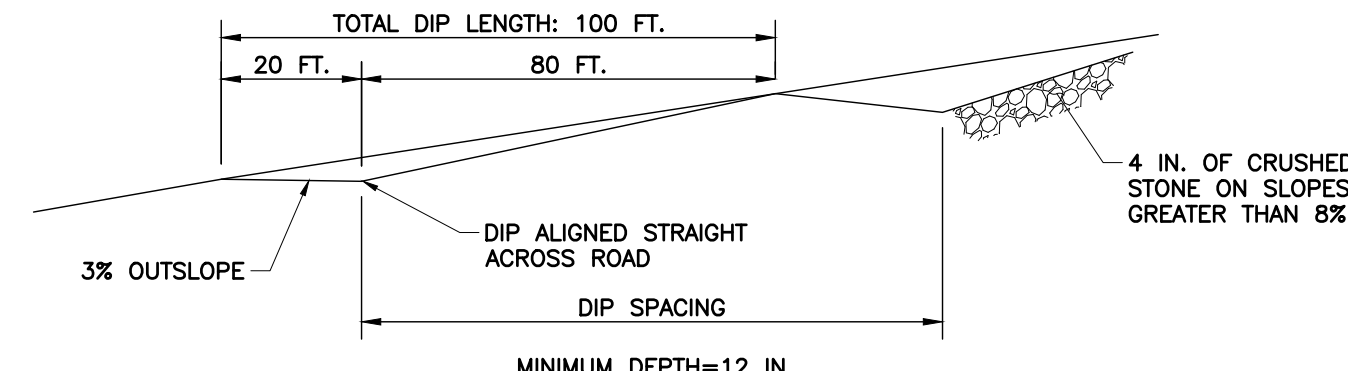
MAINTENANCE: DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.

ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND REDISTRIBUTED ON SITE.

BIODEGRADABLE 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.

COMPOST FILTER SOCK EQUIVALENCY CHART	
COMPOST FILTER SOCK	STACKED COMPOST FILTER SOCK
12" COMPOST FILTER SOCK	--
18" COMPOST FILTER SOCK	3-12" SOCKS
24" COMPOST FILTER SOCK	2-18" SOCKS, 1-12" SOCK
32" COMPOST FILTER SOCK	2-24" SOCKS, 1-18" SOCK



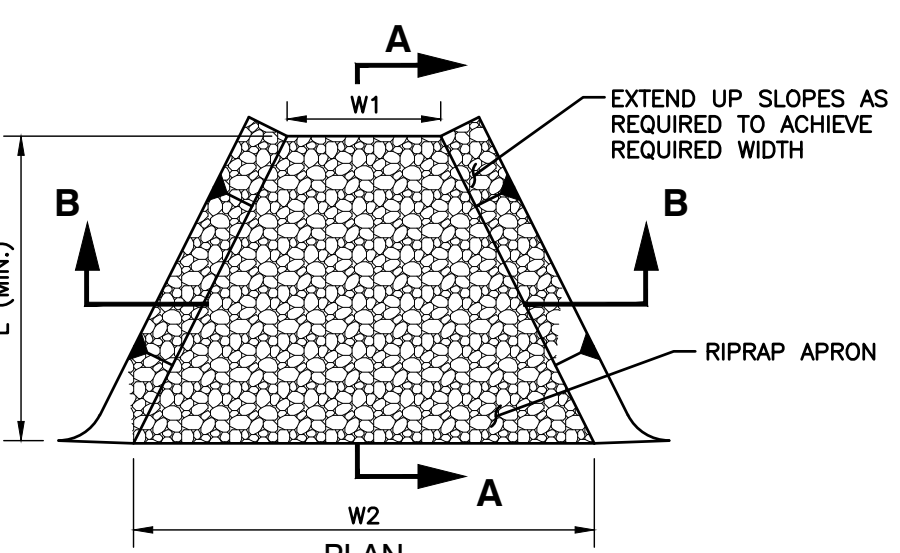
PROFILE VIEW

- NOTES:**
- BROAD-BASED DIPS SHALL BE CONSTRUCTED TO THE DIMENSIONS SHOWN AND AT THE LOCATIONS SHOWN ON THE PLAN DRAWINGS.
 - DIPS SHALL BE ORIENTED SO AS TO DISCHARGE TO THE LOW SIDE OF THE ROADWAY.
 - DIPS SHALL BE INSPECTED DAILY. DAMAGED OR NON-FUNCTIONING DIPS SHALL BE REPAIRED BY THE END OF THE WORKDAY.
 - MAXIMUM SPACING OF BROAD-BASED DIPS SHALL BE AS SHOWN IN TABLE 3.2 OF THE PA DEP EROSION CONTROL MANUAL.

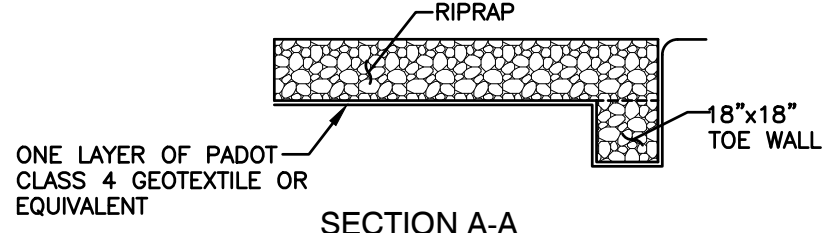
REQUIRED SPACING FOR BROAD BASED DIPS	
PERCENT SLOPE	SPACING (FT)
<5	250
5-15	150
15-30	100
>30	50

**DETAIL 7
BROAD BASED DIP**
NOT TO SCALE

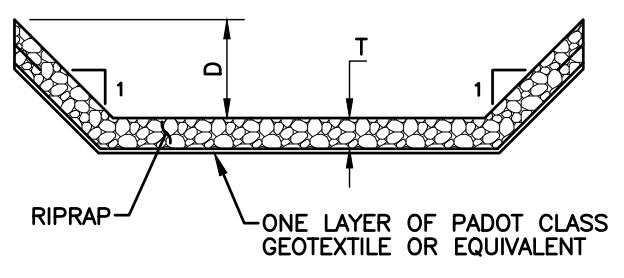
**DETAIL 5
PUMPED WATER FILTER BAG**
N.T.S.



RIPRAP APRON DIMENSION TABLE							
RIPRAP APRON	L (FT)	W1 (FT)	W2 (FT)	DSO (IN)	D (FT)	T (IN)	NSA NO.
1	16.0	6.0	22.0	12	1.5	36	R-6



SECTION A-A



SECTION B-B

NOTE: THE DIMENSIONS INDICATED ABOVE ARE THE MINIMUM APRON DIMENSIONS DETERMINED IN ACCORDANCE WITH THE PA DEP EROSION AND SEDIMENTATION POLLUTION CONTROL MANUAL. ACTUAL APRON CONFIGURATIONS DEPICTED ON THE PLAN HAVE BEEN ADJUSTED BASED ON SITE SPECIFIC CONDITIONS AND SUPERCEDE THOSE LISTED IN THIS TABLE.

INSPECTION: APRONS SHALL BE INSPECTED AT LEAST WEEKLY AND AFTER EACH RUNOFF EVENT.

MAINTENANCE: DISPLACED RIPRAP WITHIN THE APRON SHALL BE REPLACED IMMEDIATELY.

**DETAIL 8
RIPRAP APRON**
N.T.S.

**DETAIL 6
COMPOST FILTER SOCK**
N.T.S.

ERNMX-131
Ernst Conservation Seeds
Application: 20 lbs/acre with a cover crop at 30 lbs/acre (dry sites-grain oats, Jan-Aug; or grain r.

Percent by No. of seeds (not weight)	Scientific Name	Common Name
25.6%	Carex vulpinoidea, PA Ecotype	Fox Sedge, PA Ecotype
15.0%	Carex lurida, PA Ecotype	Lurid Sedge, PA Ecotype
14.0%	Carex lupulina, PA Ecotype	Hop Sedge, PA Ecotype
12.0%	Carex scoparia, PA Ecotype	Blunt Broom Sedge, PA Ecotype
6.4%	Carex stipata, PA Ecotype	Awl Sedge, PA Ecotype
3.0%	Elymus virginicus, Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype
4.0%	Vernonia hastata, PA Ecotype	Blue Veron, PA Ecotype
3.7%	Sparganium eurycarpum, PA Ecotype	Giant Bur Reed, PA Ecotype
3.0%	Asclepias incarnata, PA Ecotype	Swamp Milkweed, PA Ecotype
3.0%	Juncus effusus	Soft Rush
2.0%	Bidens cernua, PA Ecotype	Nodding Bur Marigold, PA Ecotype
1.5%	Sparganium americanum	Eastern Bur Reed
1.0%	Helianthus autumnalis, PA Ecotype	Common Sneezeweed, PA Ecotype
1.0%	Vernonia noveboracensis, PA Ecotype	New York Ironweed, PA Ecotype
0.6%	Aster novae-angliae, PA Ecotype	New England Aster, PA Ecotype
0.5%	Eupatorium perfoliatum, PA Ecotype	Boneset, PA Ecotype
0.5%	Labella alphitica, PA Ecotype	Great Blue Lobelia, PA Ecotype
0.5%	Scirpus cyperinus, PA Ecotype	Woodgrass, PA Ecotype
0.4%	Aster prenanthoides, PA Ecotype	Zigzag Aster, PA Ecotype
0.3%	Eupatorium fistulosum, PA Ecotype	Joe Pye Weed, PA Ecotype

**DETAIL 9
MRC SEEDING DETAIL**
N.T.S.

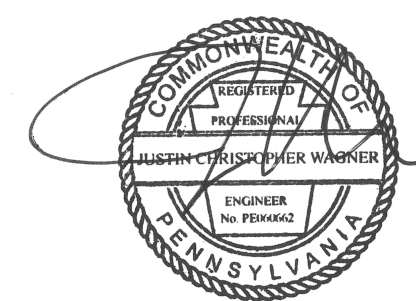
REVISION RECORD	
NO.	DATE

Civil & Environmental Consultants, Inc.
700 Cherrington Parkway - Moon Township, PA 15108
412-429-2324 · 800-365-2324
www.cedinc.com

**FRANKLIN PARK BOROUGH
MS4 SEDIMENT REDUCTION
MATTERHORN BASIN
FRANKLIN PARK BOROUGH
ALLEGHENY COUNTY, PENNSYLVANIA**

EROSION AND SEDIMENTATION CONTROL DETAILS

DATE: OCTOBER 2022
DRAWN BY: N.T.S.
CHECKED BY: N.T.S.
PROJECT NO: 315-219
APPROVED BY: DRAFT



DRAWING NO: **C902**

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NPDES GENERAL PERMIT (PAG-02)

POST CONSTRUCTION STORMWATER MANAGEMENT

CONTROL PLAN

MATTERHORN BASIN RETROFIT

FRANKLIN PARK BOROUGH, ALLEGHENY COUNTY, PENNSYLVANIA

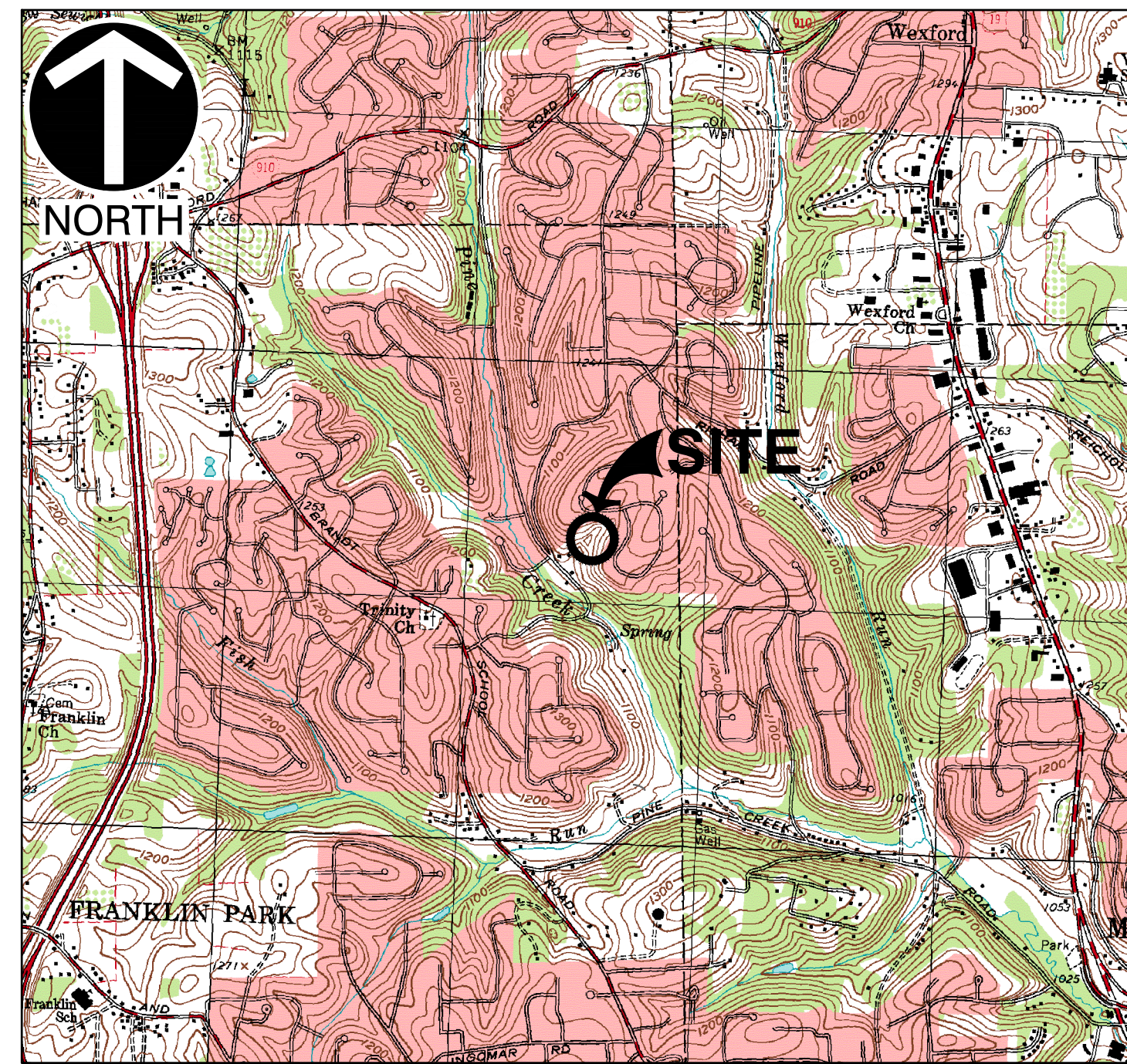
OCTOBER 2022

PREPARED BY:

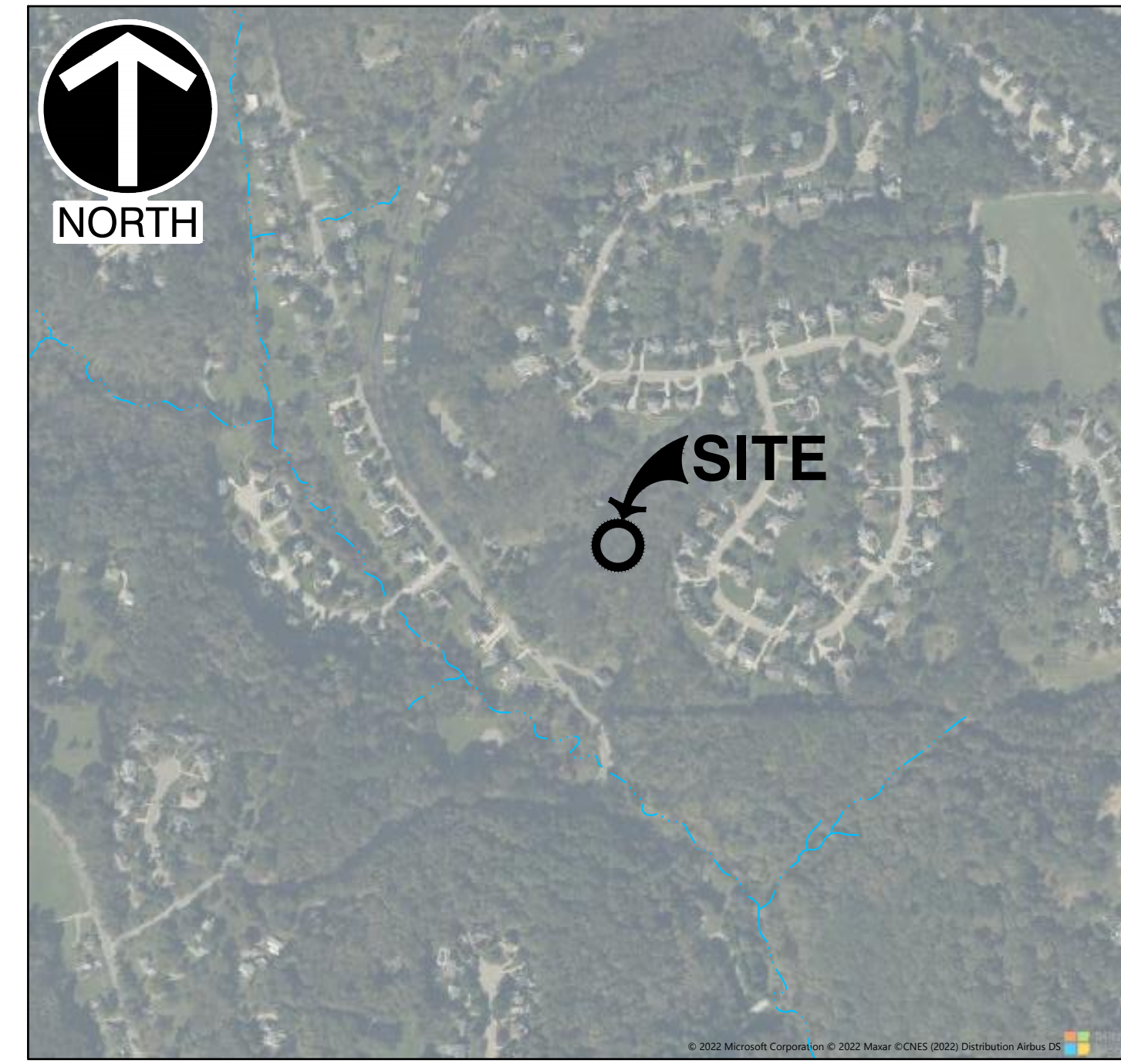
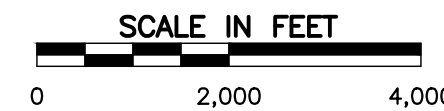
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
 700 CHERRINGTON PARKWAY
 MOON TOWNSHIP, PA 15108
 CONTACT: JUSTIN C. WAGNER, P.E.

PREPARED FOR:

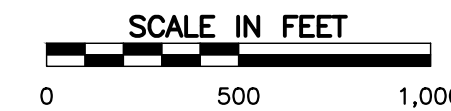
FRANKLIN PARK BOROUGH
 2344 WEST INGOMAR ROAD
 PITTSBURGH, PA 15237
 CONTACT: REGIS J. EBNER JR.



U.S.G.S. MAP
 U.S.G.S. 7.5 MIN. TOPOGRAPHIC MAP,
 EMSWORTH QUADRANGLE, PA, DATED 1993
 1"=2,000'



VICINITY MAP
 BASE IMAGE FROM BING MAPS
 ACCESSED JUNE 2022
 1"=500'



SHEET INDEX	
DWG NO.	TITLE
C000	COVER SHEET
C001	TYPICAL NOTES
C100	EXISTING CONDITIONS PLAN
C400	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN
C401	BASIN CROSS SECTIONS
C402	POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS

UTILITY CONTACTS

PEOPLES GAS COMPANY LLC
 ADDRESS : 375 NORTH SHORE DR
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 CONTACT: MICHAEL DENNY
 EMAIL: michael.denny@peoples-gas.com

MCCANDLESS TOWNSHIP SANITARY AUTH
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 PITTSBURGH, PA. 15237
 CONTACT: DENNIS BLAKLEY
 EMAIL: dennisblakley@mtsasonline.org

COLUMBIA GAS OF PA
 ADDRESS : 1600 DUBLIN RD
 COLUMBUS, OH. 43215
 CONTACT: LISA COLLINS
 EMAIL: ldugan@nisource.com

CONSOLIDATED COMMUNICATIONS
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 GIBONIA, PA. 15044
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 EMAIL: gabe.white@consolidated.com

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FIRST ENERGY PENELEC
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 AKRON, OH. 44308
 CONTACT: CARA WARREN
 EMAIL: carawarren@firstenergycorp.com

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 CONTACT: KURT HARTMAN
 EMAIL: DPW@FRANKLINPARKBOROUGH.US

WEST VIEW WATER AUTHORITY
 ADDRESS: 2428 ROCHESTER ROAD
 SEWICKLEY, PA. 15143
 CONTACT: SARA CALORE
 EMAIL: scalore@westviewwater.org

ONE CALL SERIAL NO.: 20222141906

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE—STOP CALL
 PENNSYLVANIA ONE CALL SYSTEM, INC.
 1-800-242-1776

PENNSYLVANIA ACT 287 (1974) AS AMENDED BY ACT 50 (2017), REQUIRES NO LESS THAN 3 WORKING DAYS NOTICE NOR MORE THAN 10 WORKING DAYS NOTICE FROM EXCAVATORS WHO ARE ABOUT TO DIG, DRILL, BORE, AUGER, BORE, GRADE, TRENCH OR DEMOLISH WHEN IN THE CONSTRUCTION PHASE. FOR LOCATION REQUESTS IN THE STATE OF PENNSYLVANIA, CALL TOLL FREE 1-800-242-1776. UNDERGROUND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE INFORMATION AND THE LOCATION MUST BE CONSIDERED APPROXIMATE. OTHER UNDERGROUND UTILITIES MAY EXIST WHICH ARE NOT SHOWN. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN ALL PHYSICAL LOCATIONS OF UTILITY LINES PRIOR TO THE TIME OF CONSTRUCTION. IN NO WAY SHALL THE CONTRACTOR HOLD THE SURVEYOR RESPONSIBLE FOR ANY UTILITY LOCATION SHOWN ON THIS PLAN.

REVISION RECORD

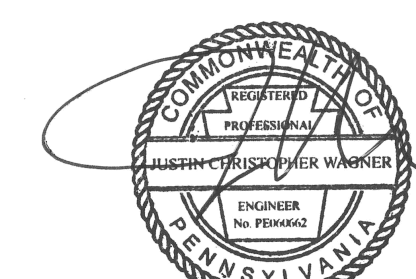
Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
 412-429-2324 · 800-365-2324
 www.cecinc.com

FRANKLIN PARK BOROUGH
 MS4 SEDIMENT REDUCTION
 MATTERHORN BASIN
 FRANKLIN PARK BOROUGH
 ALLEGHENY COUNTY, PENNSYLVANIA

COVER SHEET

DATE: OCTOBER 2022
 DWG SCALE: AS SHOWN
 PROJECT NO: 315-219
 APPROVED BY: [Signature]

DRAWING NO: **C000**



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GENERAL NOTES

- 1. EXISTING CONDITIONS AS DEPICTED ON THESE PLANS ARE GENERAL AND ILLUSTRATIVE IN NATURE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS PRIOR TO BIDDING ON THIS PROJECT...
2. EXISTING SITE INFORMATION / TOPOGRAPHIC SURVEY WAS PREPARED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. (CEC), DATED MAY, 2022.
3. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITIES (INCLUDING THOSE LABELED PER RECORD DATA) PRIOR TO THE BEGINNING OF CONSTRUCTION OR EARTH MOVING OPERATIONS...

DEMOLITION NOTES

- 1. CLEARING LIMITS SHALL BE PHYSICALLY MARKED IN THE FIELD BY THE CONTRACTOR.
2. NO TREES SHALL BE REMOVED, NOR VEGETATION DISTURBED BEYOND THE LIMITS OF CONSTRUCTION WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
3. TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THE ALLEGHENY COUNTY, AND FRANKLIN PARK BOROUGH STANDARDS - OR IN ACCORDANCE WITH THE DETAILED DRAWINGS...

LAYOUT NOTES

- 1. THE CONTRACTOR SHALL CHECK EXISTING GRADES, DIMENSIONS, AND INVERTS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE OWNER'S REPRESENTATIVE PRIOR TO BEGINNING WORK.
2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES, INCLUDING IRRIGATION LINES. TAKE CARE TO PROTECT UTILITIES THAT ARE TO REMAIN. RELOCATE EXISTING UTILITIES AS INDICATED, OR AS NECESSARY FOR CONSTRUCTION.
3. THE CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN IN ACCORDANCE WITH THE SPECIFICATIONS.

GRADING NOTES

- 1. ALL PROPOSED GRADES SHOWN ARE FINAL GRADES, TOP OF GROUND LEVEL, OR TOP OF PAVEMENT, OR GRATE ELEVATION AT THE DRAWDOWN POINT, UNLESS INDICATED OTHERWISE.
2. ALL ELEVATIONS SHOWN ARE FINISHED GRADE ELEVATIONS.
3. CONTRACTOR SHALL STRICTLY ADHERE TO THE EROSION & SEDIMENT CONTROL PLAN PREPARED FOR THIS PROJECT.

STORM DRAINAGE NOTES

- 1. DISTANCES SHOWN ON PIPING ARE HORIZONTAL DISTANCES FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE, UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE INSTALLATION, INSPECTION, TESTING AND FINAL ACCEPTANCE OF ALL NEW STORMWATER MANAGEMENT FACILITIES CONSTRUCTION.
3. ALL STORMWATER MANAGEMENT FACILITIES, INCLUDING COLLECTION AND CONVEYANCE STRUCTURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES AND REGULATIONS.

STANDARD E&S CONTROL NOTES

- 1. THE LOCATION OF EXISTING UTILITIES AND UNDERGROUND STRUCTURES SHOWN ARE APPROXIMATE AND THOSE SHOWN ARE NOT NECESSARILY ALL THE EXISTING UTILITIES AND STRUCTURES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXACT LOCATION OF ALL ABOVE AND BELOW GROUND UTILITIES AND STRUCTURES PRIOR TO INITIATING CONSTRUCTION ACTIVITIES.
2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AND 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.
3. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES, INCLUDING CLEARING AND GRUBBING, THE OWNER AND/OR OPERATOR SHALL INVITE ALL CONTRACTORS, THE LANDOWNER, APPROPRIATE MUNICIPAL OFFICIALS, THE E&S PLAN PREPARED BY THE POSM PLAN PREPARER, THE LICENSED PROFESSIONAL RESPONSIBLE FOR OVERSIGHT OF CRITICAL STAGES OF IMPLEMENTATION OF THE POSM PLAN...

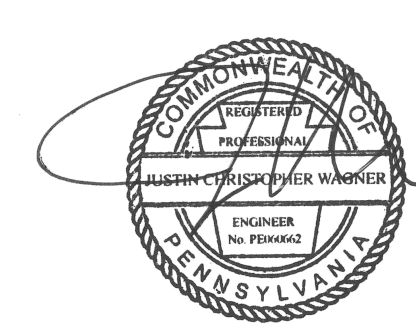
- 32. ANY DAMAGE THAT OCCURS IN WHOLE OR IN A PART AS A RESULT OF BASIN DISCHARGE SHALL BE IMMEDIATELY REPAIRED BY THE PERMITEE IN A PERMANENT MANNER SATISFACTORY TO THE MUNICIPALITY, LOCAL CONSERVATION DISTRICT, AND THE OWNER OF THE DAMAGE PROPERTY.
33. EROSION CONTROL BLANKETING SHALL BE INSTALLED ON ALL SLOPES 3H:1V OR STEEPER WITHIN 50 FEET OF A SURFACE WATER AND ON ALL OTHER DISTURBED AREAS SPECIFIED ON THE PLAN MAPS AND/OR DETAIL SHEETS.
34. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE OWNER AND/OR OPERATOR SHALL CONTACT THE LOCAL CONSERVATION DISTRICT FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE E&S BMPS.

Table with 2 columns: NO., DATE, and DESCRIPTION.

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Civil & Environmental Consultants, Inc.
700 Cherrington Parkway - Moon Township, PA 15108

FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA

TYPICAL NOTES
DATE: OCTOBER 2022
DWG SCALE: N.T.S.
PROJECT NO: 315-219
APPROVED BY: DRAFT



C001

Project metadata and file path information.



LEGEND

--- 385	EXISTING INDEX (MAJOR) CONTOUR
---	EXISTING INTERMEDIATE (MINOR) CONTOUR
---	EXISTING EDGE OF PAVEMENT
⊘	EXISTING CATCH BASIN
⊙	EXISTING MANHOLE
ST	EXISTING STORM PIPE
W	EXISTING WATER LINE
SAN	EXISTING SANITARY SEWER LINE
---	LIMIT OF CEC SURVEY AREA
ST	EXISTING STORMPIPE FROM RECORD
---	EXISTING GRAVEL DRIVE
---	EXISTING PAVEMENT
---	EXISTING EASEMENT
---	EXISTING TREE LINE
---	PROPERTY LINE



REVISION RECORD

NO.	DATE	DESCRIPTION

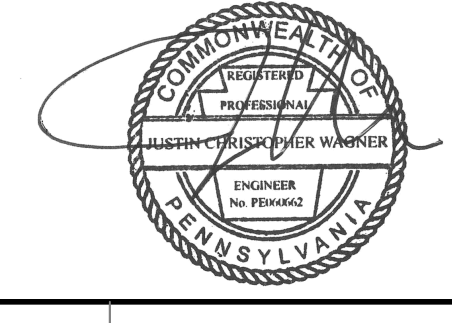
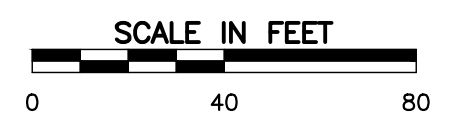
CEE
Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
 412-429-2324 • 800-365-2324
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**FRANKLIN PARK BOROUGH
 MS4 SEDIMENT REDUCTION
 MATTERHORN BASIN
 FRANKLIN PARK BOROUGH
 ALLEGHENY COUNTY, PENNSYLVANIA**

EXISTING CONDITIONS PLAN

DATE:	OCTOBER 2022	DRAWN BY:	TLW
DWG. SCALE:	1"=40'	CHECKED BY:	DJW
PROJECT NO.:	315-219	APPROVED BY:	JCV

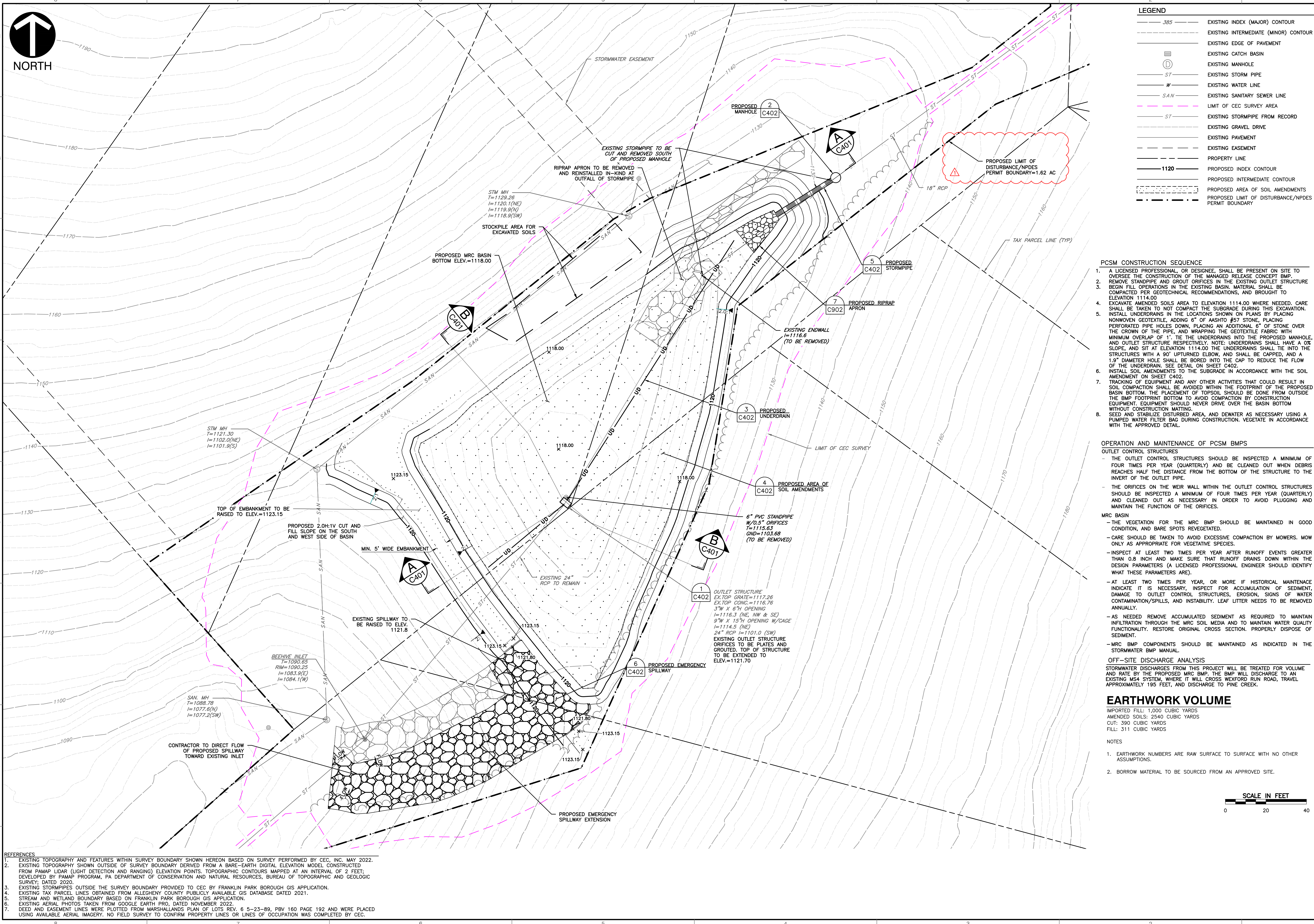
DRAWING NO. **C100**



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 P:\1710-2020\1710-2191-0000\Map\CP1\1710-2191-0001-001-001-001.dwg - LPS: 10/24/2022 10:16 AM

REFERENCES

- EXISTING TOPOGRAPHY AND FEATURES WITHIN SURVEY BOUNDARY SHOWN HEREON BASED ON SURVEY PERFORMED BY CEC, INC. MAY 2022.
- EXISTING TOPOGRAPHY SHOWN OUTSIDE OF SURVEY BOUNDARY DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL CONSTRUCTED FROM PAMAP LIDAR (LIGHT DETECTION AND RANGING) ELEVATION POINTS, TOPOGRAPHIC CONTOURS MAPPED AT AN INTERVAL OF 2 FEET; DEVELOPED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY; DATED 2020.
- EXISTING STORMPIPES OUTSIDE THE SURVEY BOUNDARY PROVIDED TO CEC BY FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING TAX PARCEL LINES OBTAINED FROM ALLEGHENY COUNTY PUBLICLY AVAILABLE GIS DATABASE DATED 2021.
- STREAM AND WETLAND BOUNDARY BASED ON FRANKLIN PARK BOROUGH GIS APPLICATION.
- EXISTING AERIAL PHOTOS TAKEN FROM GOOGLE EARTH PRO, DATED NOVEMBER 2022.
- DEED AND EASEMENT LINES WERE PLOTTED FROM MARSHALLANDS PLAN OF LOTS, REV. 6 5-23-89, PBV 160 PAGE 192 AND WERE PLACED USING AVAILABLE AERIAL IMAGERY. NO FIELD SURVEY TO CONFIRM PROPERTY LINES OR LINES OF OCCUPATION WAS COMPLETED BY CEC.



LEGEND

---	385	EXISTING INDEX (MAJOR) CONTOUR
---	---	EXISTING INTERMEDIATE (MINOR) CONTOUR
---	---	EXISTING EDGE OF PAVEMENT
⊕	---	EXISTING CATCH BASIN
⊕	---	EXISTING MANHOLE
ST	---	EXISTING STORM PIPE
W	---	EXISTING WATER LINE
SAN	---	EXISTING SANITARY SEWER LINE
---	---	LIMIT OF CEC SURVEY AREA
---	---	EXISTING STORMPIPE FROM RECORD
---	---	EXISTING GRAVEL DRIVE
---	---	EXISTING PAVEMENT
---	---	EXISTING EASEMENT
---	---	PROPERTY LINE
---	1120	PROPOSED INDEX CONTOUR
---	---	PROPOSED INTERMEDIATE CONTOUR
---	---	PROPOSED AREA OF SOIL AMENDMENTS
---	---	PROPOSED LIMIT OF DISTURBANCE/NPDES PERMIT BOUNDARY

- PCSM CONSTRUCTION SEQUENCE**
1. A LICENSED PROFESSIONAL, OR DESIGNEE, SHALL BE PRESENT ON SITE TO OVERSEE THE CONSTRUCTION OF THE MANAGED RELEASE CONCEPT BMP.
 2. REMOVE STANDPIPE AND GROUT ORIFICES IN THE EXISTING OUTLET STRUCTURE
 3. BEGIN FILL OPERATIONS IN THE EXISTING BASIN. MATERIAL SHALL BE COMPACTED PER GEOTECHNICAL RECOMMENDATIONS, AND BROUGHT TO ELEVATION 1114.00
 4. EXCAVATE AMENDED SOILS AREA TO ELEVATION 1114.00 WHERE NEEDED. CARE SHALL BE TAKEN TO NOT COMPACT THE SUBGRADE DURING THIS EXCAVATION.
 5. INSTALL UNDERDRAINS IN THE LOCATIONS SHOWN ON PLANS BY PLACING NONWOVEN GEOTEXTILE, ADDING 6" OF AASHTO #57 STONE, PLACING PERFORATED PIPE HOLES DOWN, PLACING AN ADDITIONAL 6" OF STONE OVER THE CROWN OF THE PIPE, AND WRAPPING THE GEOTEXTILE FABRIC WITH MINIMUM OVERLAP OF 1'. TIE THE UNDERDRAINS INTO THE PROPOSED MANHOLE, AND OUTLET STRUCTURE RESPECTIVELY. NOTE: UNDERDRAINS SHALL HAVE A 0% SLOPE, AND SIT AT ELEVATION 1114.00. THE UNDERDRAINS SHALL TIE INTO THE STRUCTURES WITH A 90° UPTURNED ELBOW, AND SHALL BE CAPPED, AND A 1.9" DIAMETER HOLE SHALL BE BORED INTO THE CAP TO REDUCE THE FLOW OF THE UNDERDRAIN. SEE DETAIL ON SHEET C402.
 6. INSTALL SOIL AMENDMENTS TO THE SUBGRADE IN ACCORDANCE WITH THE SOIL AMENDMENT ON SHEET C402.
 7. TRACKING OF EQUIPMENT AND ANY OTHER ACTIVITIES THAT COULD RESULT IN SOIL COMPACTION SHALL BE AVOIDED WITHIN THE FOOTPRINT OF THE PROPOSED BASIN BOTTOM. THE PLACEMENT OF TOPSOIL SHOULD BE DONE FROM OUTSIDE THE BMP FOOTPRINT BOTTOM TO AVOID COMPACTION BY CONSTRUCTION EQUIPMENT. EQUIPMENT SHOULD NEVER DRIVE OVER THE BASIN BOTTOM WITHOUT CONSTRUCTION MATTING.
 8. SEED AND STABILIZE DISTURBED AREA, AND DEWATER AS NECESSARY USING A PUMPED WATER FILTER BAG DURING CONSTRUCTION. VEGETATE IN ACCORDANCE WITH THE APPROVED DETAIL.

- OPERATION AND MAINTENANCE OF PCSM BMPS**
- OUTLET CONTROL STRUCTURES**
- THE OUTLET CONTROL STRUCTURES SHOULD BE INSPECTED A MINIMUM OF FOUR TIMES PER YEAR (QUARTERLY) AND BE CLEANED OUT WHEN DEBRIS REACHES HALF THE DISTANCE FROM THE BOTTOM OF THE STRUCTURE TO THE INVERT OF THE OUTLET PIPE.
 - THE ORIFICES ON THE WEIR WALL WITHIN THE OUTLET CONTROL STRUCTURES SHOULD BE INSPECTED A MINIMUM OF FOUR TIMES PER YEAR (QUARTERLY) AND CLEANED OUT AS NECESSARY IN ORDER TO AVOID PLUGGING AND MAINTAIN THE FUNCTION OF THE ORIFICES.
- MRC BASIN**
- THE VEGETATION FOR THE MRC BMP SHOULD BE MAINTAINED IN GOOD CONDITION, AND BARE SPOTS REVEGETATED.
 - CARE SHOULD BE TAKEN TO AVOID EXCESSIVE COMPACTION BY MOWERS. MOW ONLY AS APPROPRIATE FOR VEGETATIVE SPECIES.
 - INSPECT AT LEAST TWO TIMES PER YEAR AFTER RUNOFF EVENTS GREATER THAN 0.8 INCH AND MAKE SURE THAT RUNOFF DRAINS DOWN WITHIN THE DESIGN PARAMETERS (A LICENSED PROFESSIONAL ENGINEER SHOULD IDENTIFY WHAT THESE PARAMETERS ARE).
 - AT LEAST TWO TIMES PER YEAR, OR MORE IF HISTORICAL MAINTENANCE INDICATE IT IS NECESSARY, INSPECT FOR ACCUMULATION OF SEDIMENT, DAMAGE TO OUTLET CONTROL STRUCTURES, EROSION, SIGNS OF WATER CONTAMINATION/SPILLS, AND INSTABILITY. LEAF LITTER NEEDS TO BE REMOVED ANNUALLY.
 - AS NEEDED REMOVE ACCUMULATED SEDIMENT AS REQUIRED TO MAINTAIN INFILTRATION THROUGH THE MRC SOIL MEDIA AND TO MAINTAIN WATER QUALITY FUNCTIONALITY. RESTORE ORIGINAL CROSS SECTION. PROPERLY DISPOSE OF SEDIMENT.
 - MRC BMP COMPONENTS SHOULD BE MAINTAINED AS INDICATED IN THE STORMWATER BMP MANUAL.
- OFF-SITE DISCHARGE ANALYSIS**
- STORMWATER DISCHARGES FROM THIS PROJECT WILL BE TREATED FOR VOLUME AND RATE BY THE PROPOSED MRC BMP. THE BMP WILL DISCHARGE TO AN EXISTING MS4 SYSTEM, WHERE IT WILL CROSS WEXFORD RUN ROAD, TRAVEL APPROXIMATELY 195 FEET, AND DISCHARGE TO PINE CREEK.

EARTHWORK VOLUME

IMPORTED FILL: 1,000 CUBIC YARDS
 AMENDED SOILS: 2540 CUBIC YARDS
 CUT: 390 CUBIC YARDS
 FILL: 311 CUBIC YARDS

NOTES

1. EARTHWORK NUMBERS ARE RAW SURFACE TO SURFACE WITH NO OTHER ASSUMPTIONS.
2. BORROW MATERIAL TO BE SOURCED FROM AN APPROVED SITE.



- REFERENCES**
1. EXISTING TOPOGRAPHY AND FEATURES WITHIN SURVEY BOUNDARY SHOWN HEREON BASED ON SURVEY PERFORMED BY CEC, INC. MAY 2022.
 2. EXISTING TOPOGRAPHY SHOWN OUTSIDE OF SURVEY BOUNDARY DERIVED FROM A BARE-EARTH DIGITAL ELEVATION MODEL CONSTRUCTED FROM PAMAP LIDAR (LIGHT DETECTION AND RANGING) ELEVATION POINTS, TOPOGRAPHIC CONTOURS MAPPED AT AN INTERVAL OF 2 FEET; DEVELOPED BY PAMAP PROGRAM, PA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES, BUREAU OF TOPOGRAPHIC AND GEOLOGIC SURVEY; DATED 2020
 3. EXISTING STORMPIPES OUTSIDE THE SURVEY BOUNDARY PROVIDED TO CEC BY FRANKLIN PARK BOROUGH GIS APPLICATION.
 4. EXISTING TAX PARCEL LINES OBTAINED FROM ALLEGHENY COUNTY PUBLICLY AVAILABLE GIS DATABASE DATED 2021.
 5. STREAM AND WETLAND BOUNDARY BASED ON FRANKLIN PARK BOROUGH GIS APPLICATION.
 6. EXISTING AERIAL PHOTOS TAKEN FROM GOOGLE EARTH PRO, DATED NOVEMBER 2022.
 7. DEED AND EASEMENT LINES WERE PLOTTED FROM MARSHALLANDS PLAN OF LOTS, REV. 6 5-23-89, PBV 160 PAGE 192 AND WERE PLACED USING AVAILABLE AERIAL IMAGERY. NO FIELD SURVEY TO CONFIRM PROPERTY LINES OR LINES OF OCCUPATION WAS COMPLETED BY CEC.

REVISION RECORD

NO.	DATE	DESCRIPTION
1	11/10/2022	REVISED PER ADDED COMMENTS SHEET 1/10/2022

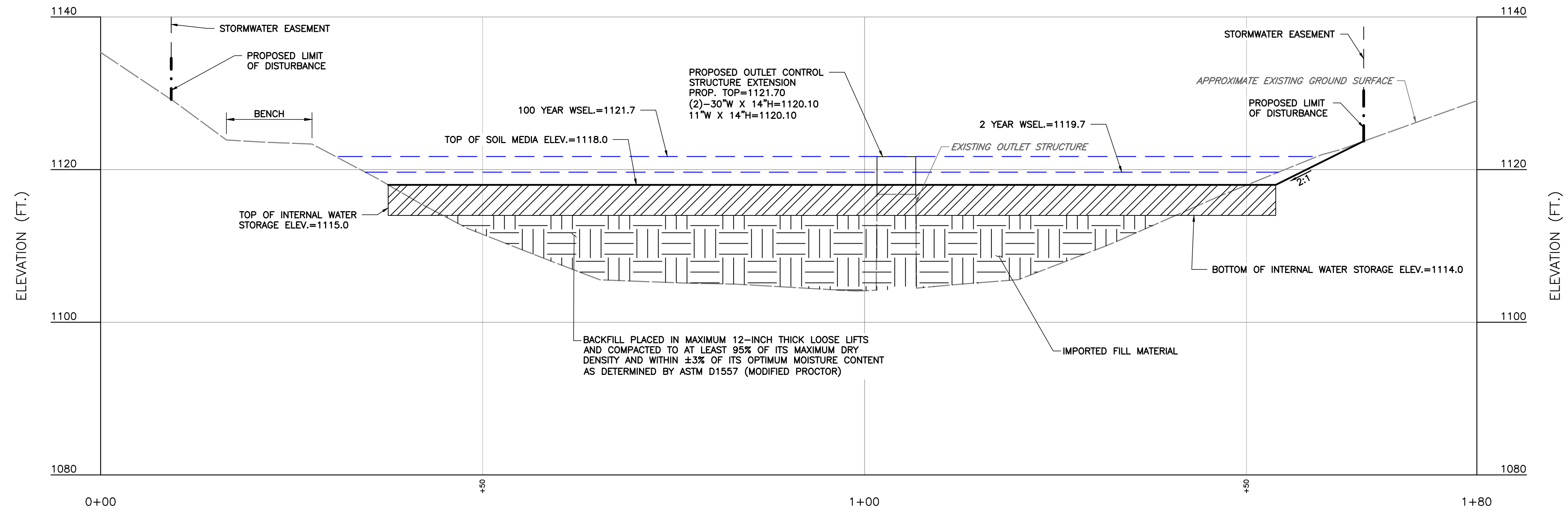
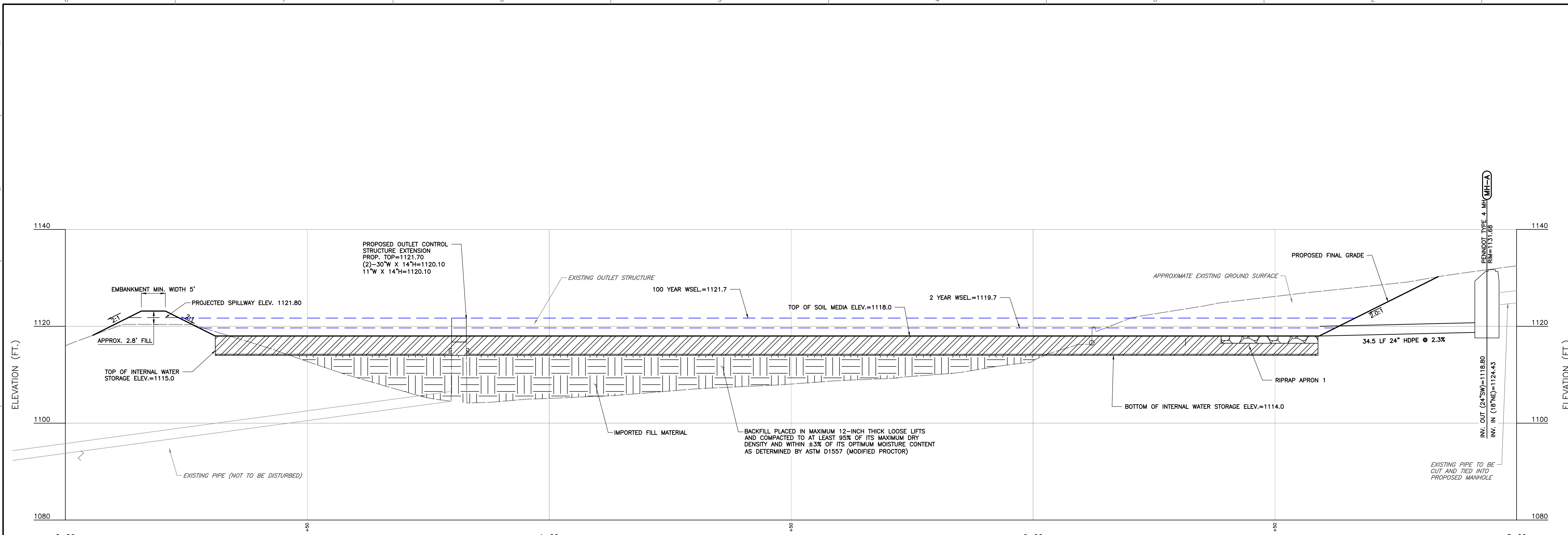
Civil & Environmental Consultants, Inc.
 700 Cherrington Parkway - Moon Township, PA 15108
 412-429-2324 · 800-365-2324
 www.cecinc.com

FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA

POST CONSTRUCTION STORMWATER MANAGEMENT PLAN

DATE: OCTOBER 2022 DRAWN BY: TLW
 DWG SCALE: 1"=20' CHECKED BY: DJW
 PROJECT NO: 315-219
 APPROVED BY: JCV

DRAWING NO: **C400**

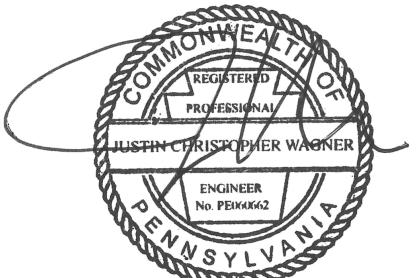


NO.	DATE	REVISION RECORD
		DESCRIPTION

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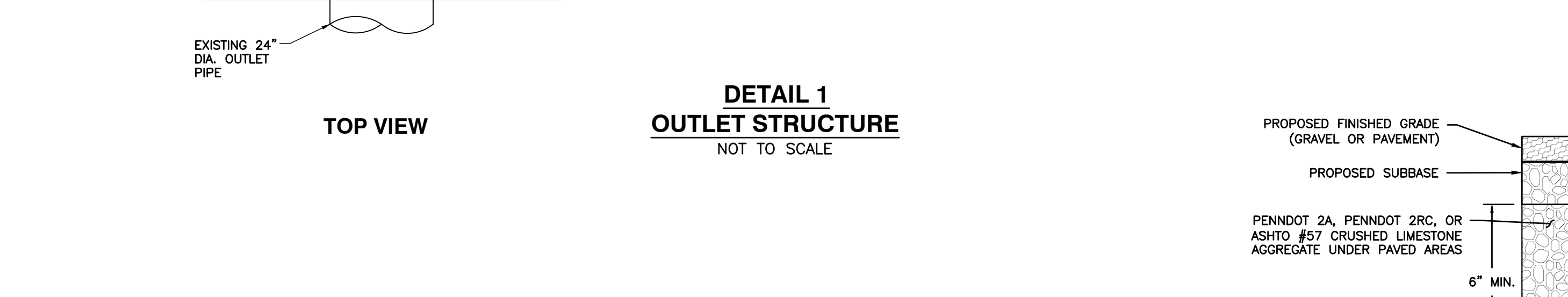
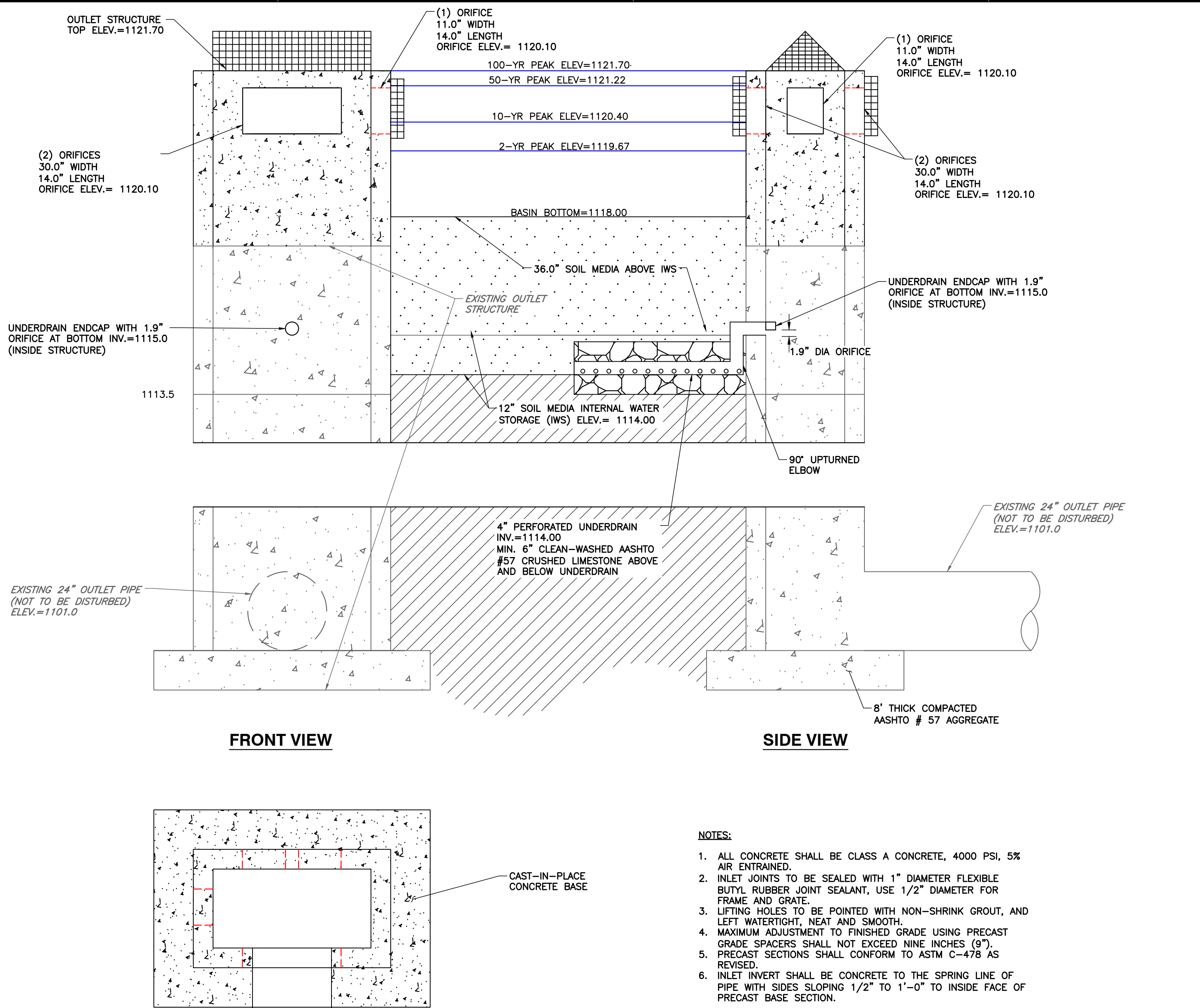
**FRANKLIN PARK BOROUGH
 MS4 SEDIMENT REDUCTION
 MATTERHORN BASIN
 FRANKLIN PARK BOROUGH
 ALLEGHENY COUNTY, PENNSYLVANIA**

BASIN CROSS SECTIONS	
DATE:	OCTOBER 2022
DRAWN BY:	TLW
CHECKED BY:	DJW
PROJECT NO.:	315-219
APPROVED BY:	JCV



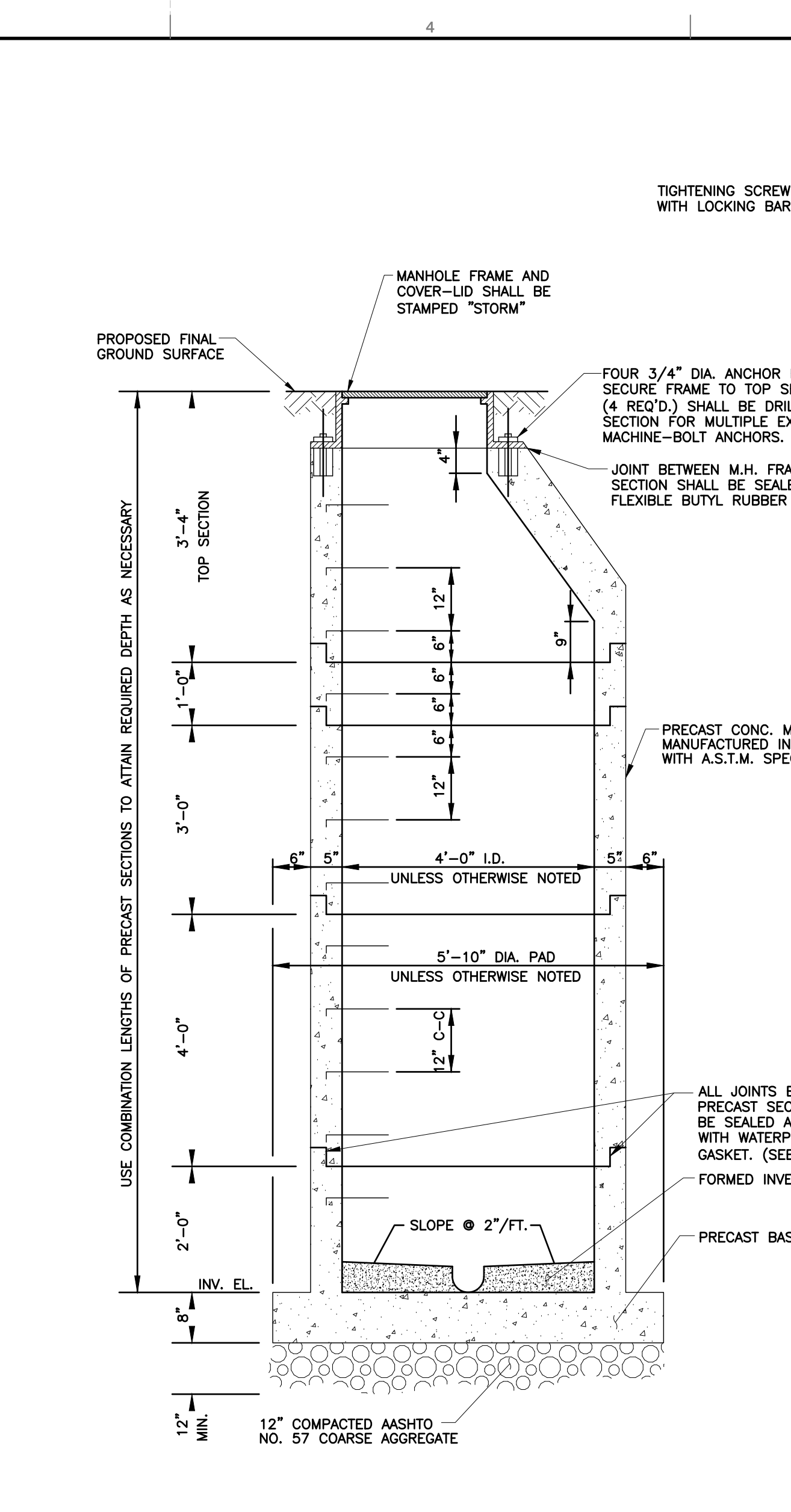
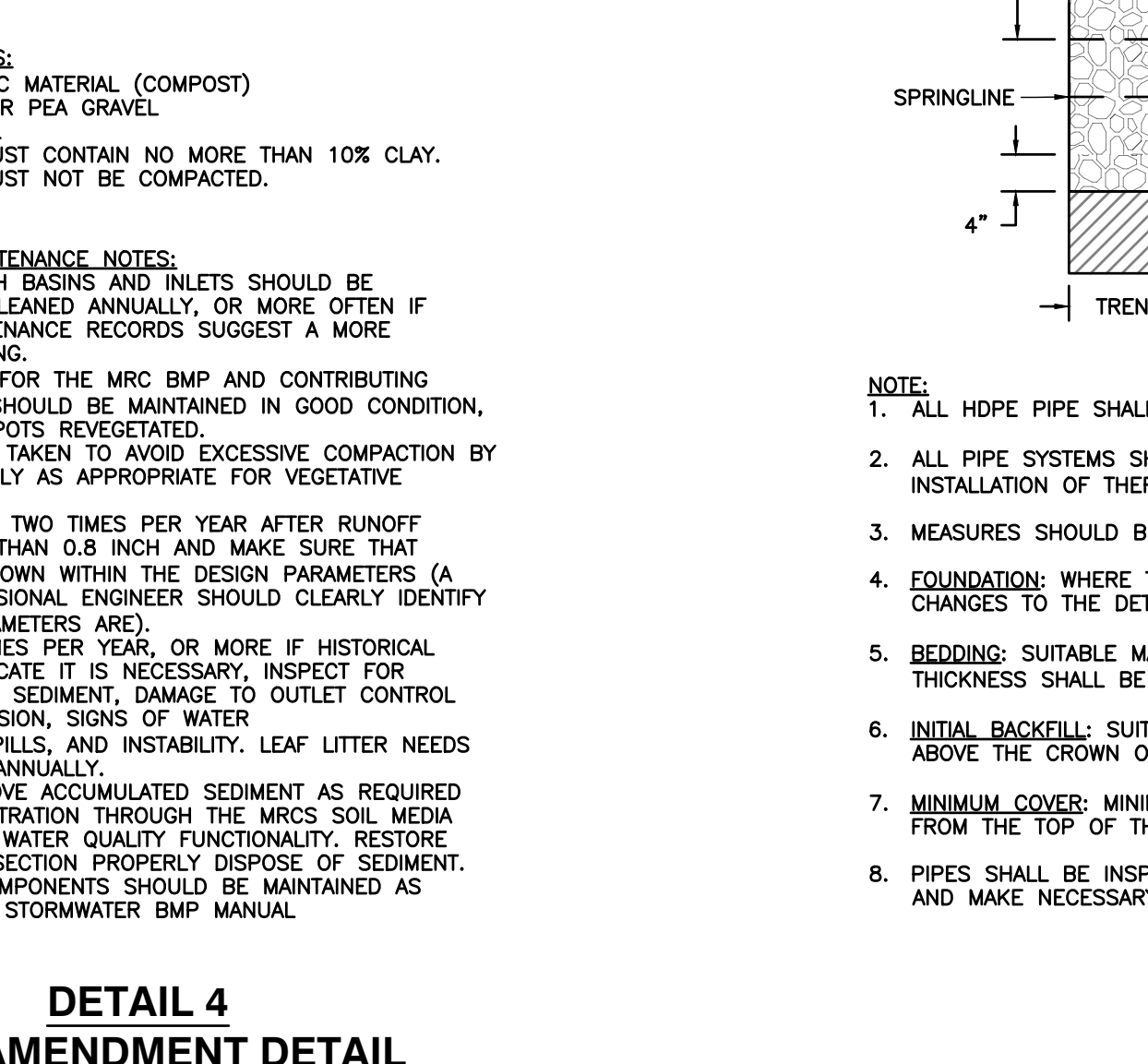
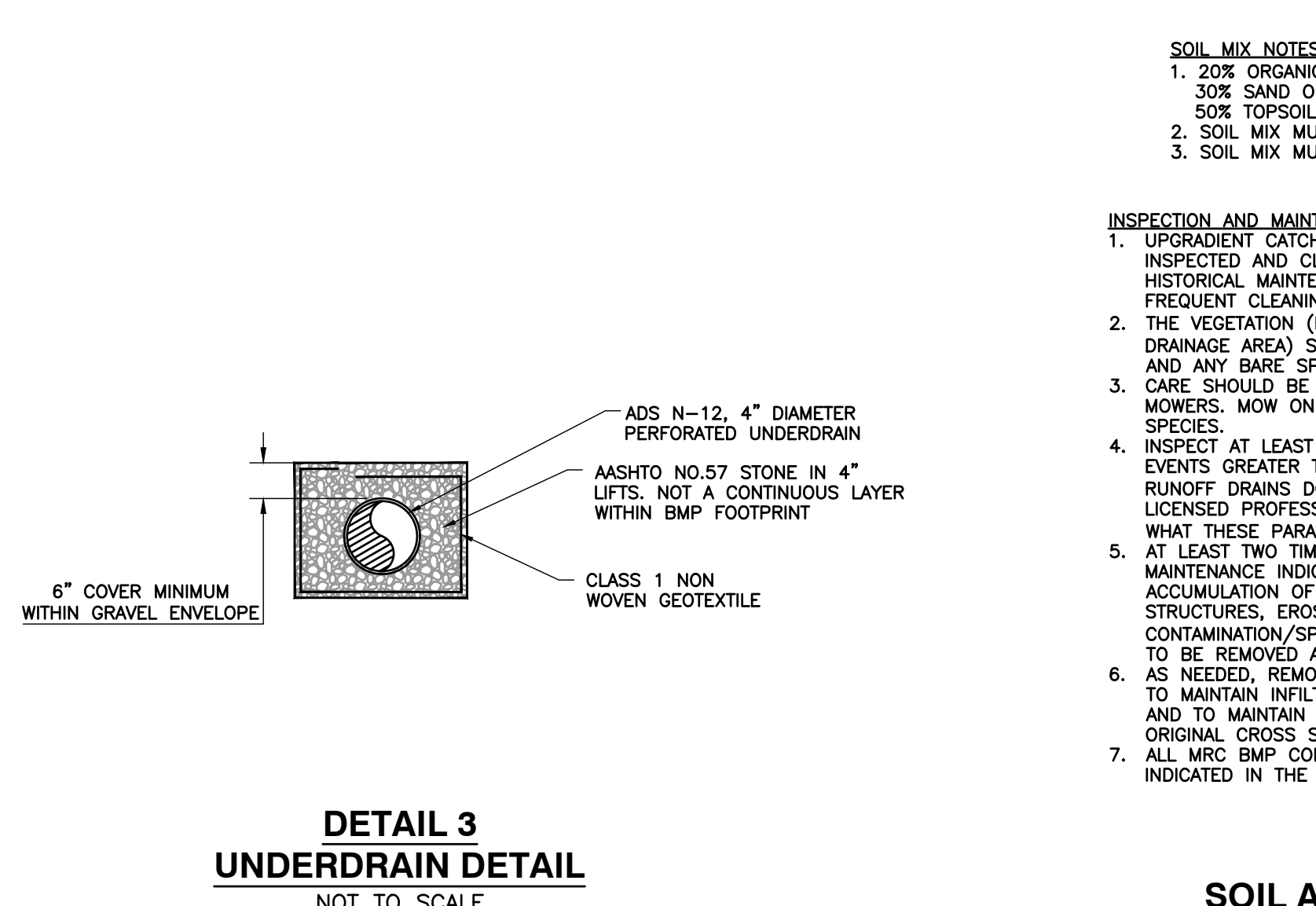
DRAWING NO. **C401**

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NOTES:

1. ALL CONCRETE SHALL BE CLASS A CONCRETE, 4000 PSI, 5% AIR ENTRAINED.
2. INLET JOINTS TO BE SEALED WITH 1" DIAMETER FLEXIBLE BUTYL RUBBER JOINT SEALANT, USE 1/2" DIAMETER FOR FRAME AND GRATE.
3. LIFTING HOLES TO BE POINTED WITH NON-SHRINK GROUT, AND LEFT WATERTIGHT, NEAT AND SMOOTH.
4. MAXIMUM ADJUSTMENT TO FINISHED GRADE USING PRECAST GRADE SPACERS SHALL NOT EXCEED NINE INCHES (9").
5. PRECAST SECTIONS SHALL CONFORM TO ASTM C-478 AS REVISED.
6. INLET INVERT SHALL BE CONCRETE TO THE SPRING LINE OF PIPE WITH SIDES SLOPING 1/2" TO 1'-0" TO INSIDE FACE OF PRECAST BASE SECTION.



SECTION
33 7/16" +/-
1 1/2"
43 1/2" +/-
27"
4-3/4" DIA. BOLTS
TIGHTENING SCREW WITH LOCKING BAR

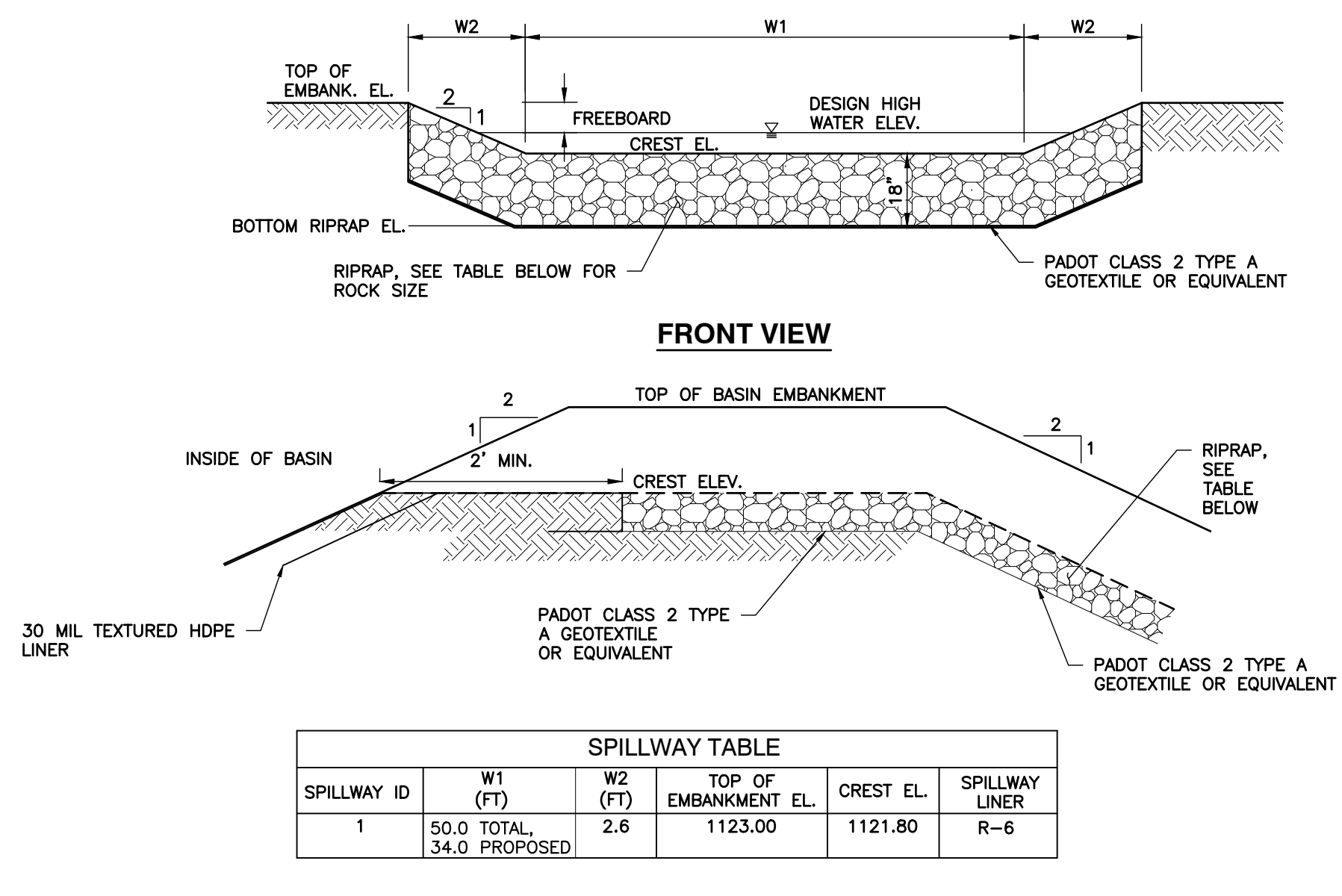
NOTES:

1. PER PENNDOT PUB. 408 SEC. 704 STANDARDS.
2. REFER TO LOCAL STANDARDS FOR FURTHER DETAILS.

PRECAST MANHOLE COVER AND FRAME

NOTES:

1. CONSTRUCT IN ACCORDANCE WITH THE REQUIREMENTS OF COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT) PUBLICATION 408, SECTION 605.
2. REFER TO PENNDOT BUREAU OF HIGHWAY DESIGN'S STANDARDS FOR ROADWAY CONSTRUCTION, SERIES RC-0 TO RC-100, SHEETS 1 THROUGH 5 OF RC-39, FOR DETAILS OF THE MANHOLE SECTIONS, GRADE ADJUSTMENT RINGS, STEPS, FRAMES AND COVERS.
3. ALL CEMENT CONCRETE USED TO CONSTRUCT THE MANHOLES SHALL BE CLASS AA, AND SATISFY THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 704.
4. ALL REINFORCEMENT STEEL USED TO CONSTRUCT THE MANHOLES SHALL BE ASTM-A615, GRADE 60, DEFORMED OR PLAIN STEEL BARS, AND SATISFY THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 709.1 AND 709.2 (IF APPLICABLE).
5. PRE-CAST REINFORCED CONCRETE MANHOLE SECTIONS AND GRADE ADJUSTMENT RINGS SHALL CONFORM TO THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 714, AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI.
6. ALL FRAMES AND COVERS/GRATES FOR STORM SEWER MANHOLES SHALL BE NON-ROCKING AND MADE OF HEAVY DUTY CAST IRON, AND SATISFY THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 605.2(b). ALL FRAMES SHALL BE SET IN A FULL BED OF MORTAR AND ANCHORED TO THE CONICAL TOP SECTION USING MINIMUM 2 ANCHOR BOLTS ON OPPOSITE SIDES. ALL STORM SEWER MANHOLE COVERS SHALL BE LABELED "STORM".
7. ALL GRADE ADJUSTMENT RINGS SHALL BE OF MASONRY OR PRECAST CONCRETE CONSTRUCTION.
8. A RUBBER GASKET THAT SATISFIES THE REQUIREMENTS OF ASTM C-443 SHALL BE INSTALLED BETWEEN ALL STORM SEWER MANHOLE SECTIONS.
9. ALL MANHOLE SECTIONS SHALL BE SET IN PLACE IN NON-SHRINK MORTAR OR BITUMINOUS MATERIAL.
10. ALL MANHOLES SHALL HAVE LADDER RUNGS, SPACED 12 INCHES APART, TO FACILITATE ACCESS TO THE MANHOLE. ALL LADDER RUNGS SHALL BE MINIMUM NO. 3 REINFORCEMENT BARS THAT ARE COATED WITH CO-POLYMER POLYPROPYLENE PLASTIC THAT MEET THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 605.2(c). ALL LADDER RUNGS MUST MEET THE PERFORMANCE CRITERIA OF ASTM C478.
11. A MINIMUM OF 12" OF AASHTO #57 STONE SHALL BE USED AS BEDDING FOR THE MANHOLES. THE AASHTO #57 STONE SHALL BE PLACED IN MAXIMUM 6-INCH THICK LIFT AND COMPACTED TO AT LEAST 75% OF ITS RELATIVE DENSITY. ALL AASHTO #57 STONE SHALL BE CRUSHED LIMESTONE AND SATISFY THE REQUIREMENTS OF PENNDOT PUBLICATION 408, SECTION 703. ALL SOIL BACKFILL PLACED AROUND THE MANHOLES, AND ABOVE THE BEDDING, SHALL BE PLACED IN MAXIMUM 6-INCH THICK LIFT AND COMPACTED TO AT LEAST 95% OF ITS MAXIMUM DRY DENSITY AND WITHIN +/-3% OF ITS OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D1557 (MODIFIED PROCTOR).
12. CONTRACTOR SHALL FURNISH AND INSTALL MODIFIED STRUCTURE AS REQUIRED TO ACCOMMODATE STORM SEWER PIPES INCIDENTAL TO CONSTRUCTION.



SPILLWAY TABLE

SPILLWAY ID	W1 (FT)	W2 (FT)	TOP OF EMBANKMENT EL.	CREST EL.	SPILLWAY LINER
1	50.0 TOTAL 34.0 PROPOSED	2.6	1123.00	1121.80	R-6

<p>REVISION RECORD</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:10%;">NO.</th> <th style="width:30%;">DATE</th> <th style="width:60%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	NO.	DATE	DESCRIPTION										<p>POST CONSTRUCTION STORMWATER MANAGEMENT PLAN DETAILS</p> <p>DATE: OCTOBER 2022 DRAWN BY: N.T.S. CHECKED BY: N.T.S. PROJECT NO: 315-219 APPROVED BY: JCV</p> <p>FRANKLIN PARK BOROUGH MS4 SEDIMENT REDUCTION MATTERHORN BASIN FRANKLIN PARK BOROUGH ALLEGHENY COUNTY, PENNSYLVANIA</p> <p>Civil & Environmental Consultants, Inc. 700 Cherrington Parkway - Moon Township, PA 15108 412-429-2324 • 800-365-2324 www.cecinc.com</p> <p>ENGINEER NO. 12476 PENNSYLVANIA</p> <p>DRAWING NO: C402</p>
NO.	DATE	DESCRIPTION											

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