

 LOCATION MAP
NTS

Northeast Shores Development Corp. Collinwood Arts District Azure Green Parking Lot

15602 WATERLOO ROAD
CLEVELAND
CUYAHOGA COUNTY, OHIO

100% REVIEW SET - January 16, 2013

Prepared for:
Northeast Shores
317 East 156th Street,
Cleveland, Ohio 44110

PROJECT DESCRIPTION:

THE INTENT OF THE PROJECT IS TO EXPAND AN APPROXIMATE 12 CAR PARKING LOT WITH 9 NEW SPACES, 565 SQUARE FEET OF BIORETENTION, 54 LF GABION WALL AND LANDSCAPING. THIS WORK WILL BE INSTALLED ALONG WATERLOO ROAD IN THE COLLINWOOD ARTS DISTRICT.

PREPARED BY:

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DRAWING LIST

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UNDERGROUND UTILITIES
2 WORKING DAYS
BEFORE YOU DIG
Call...800-362-2764 (Toll Free)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

GENERAL

PROJECT OBJECTIVE

THE INTENT OF THE PROJECT IS TO EXPAND AN APPROXIMATE 12 CAR PARKING LOT WITH 9 NEW SPACES, 565 SQUARE FEET OF BIORETENTION, 54 LF GABION WALL AND LANDSCAPING. THIS WORK WILL BE INSTALLED ALONG WATERLOO ROAD IN THE COLLINWOOD ARTS DISTRICT.

ODOT SPECIFICATIONS

THE STANDARD CONSTRUCTION AND MATERIAL SPECIFICATIONS 2012 (CMS) OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT PROJECT, EXCEPT AS NOTED IN THIS SET OF DRAWINGS, WITHIN THE CONTRACT AND SPECIFICATION BOOK.

REGULATIONS

ALL WORK MUST COMPLY WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS IN ALL RESPECTS, INCLUDING COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

DO NOT INTERFERE WITH THE OPERATION OF ANY FIRE HYDRANT, FIRE CALL BOX, OR POLICE CALL BOX.

BASIS FOR DESIGN

IN THE PREPARATION OF THE WORKING DRAWINGS AND SPECIFICATIONS, NORTHEAST SHORES DEVELOPMENT CORP. HAS RELIED UPON THE SITE MAPPING PROVIDED BY DAN GERSON P.E./P.S., URS CORPORATION. PARCEL BOUNDARIES WERE PROVIDED BY THE CUYAHOGA COUNTY ENGINEER'S GIS DATA 2008. IF THERE ARE ANY QUESTIONS REGARDING THE SURVEY, PLEASE CALL DAN GERSON FROM URS CORPORATION AT 216-622-2400.

CONSTRUCTION COMMENCEMENT

THE CONTRACTOR SHALL NOT COMMENCE ANY FORM OF CONSTRUCTION WITHOUT CONTACTING THE OWNER AND THE OFFICE OF THE DIRECTOR OF ENGINEERING FROM THE CITY OF CLEVELAND TO CONFIRM ALL REQUIRED INSPECTION.

SUBMITTALS/SPECIFICATIONS/CUT SHEETS

MANUFACTURERS SUBMITTALS/SPECIFICATIONS/CUT SHEETS FOR ALL CONSTRUCTION MATERIALS SHALL BE PROVIDED PRIOR TO THE START OF CONSTRUCTION.

CONTRACTOR COORDINATION & PHASING

THE PERFORMANCE OF THIS CONTRACT WILL REQUIRE THE CONTRACTOR TO COORDINATE ALL ACTIVITY WITH THE NORTHEAST SHORES DEVELOPMENT CORP., CITY OF CLEVELAND, AND OTHER REGULATING AGENCIES, INCLUDING DEMOLITION AND CONCRETE WORK. NORTHEAST SHORES WILL BE PROCURING ALL PERMITS FOR THE PROJECT. CONTRACTOR TO COORDINATE ALL INSPECTIONS WITH NORTHEAST SHORES. CONTRACTOR TO REGISTER WITH THE CITY OF CLEVELAND FOR THE DURATION OF THE PROJECT. CONTRACTOR TO COORDINATE ALL WORK WITH THE WATERLOO ROAD STREET SCAPE PROJECT.

PERMITTING

THE OWNER SHALL SUBMIT A NOTICE OF INTENT (N.O.I.) APPLICATION TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY (E.P.A.) AND OBTAIN AUTHORIZATION FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (N.P.D.E.S.) OR THE LATEST FEDERAL, STATE AND/OR LOCAL REGULATIONS.

CONTRACTOR ACKNOWLEDGEMENT

BY SUBMITTING A BID, THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS SATISFIED HIMSELF/HERSELF AS TO THE NATURE AND LOCATION OF THE WORK, THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE BEARING UPON THE HANDLING OF MATERIALS, AVAILABILITY OF LABOR AND NECESSARY UTILITIES, THE UNCERTAINTIES OF WEATHER, GROUNDWATER TABLE OR SIMILAR CONDITIONS AT THE SITE, THE CONFORMATION AND CONDITIONS OF THE SOILS AND GROUND SURFACE, THE CHARACTER OF EQUIPMENT AND FACILITIES NEEDED PRIOR TO AND DURING THE PROSECUTION OF THE WORK, AND ALL OTHER MATTER WHICH CAN IN ANY WAY AFFECT THE WORK OR COST THEREOF UNDER THIS CONTRACT. ANY FAILURE OF THE CONTRACTOR TO ACQUAINT HIMSELF/HERSELF WITH THE AVAILABLE INFORMATION CONCERNING THE CONDITIONS WILL NOT RELIEVE HIM/HER FROM RESPONSIBILITY FOR ESTIMATING PROPERLY THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.

ACCESS TO PROJECT

ALL CONSTRUCTION ACCESS TO THE PROJECT SHALL BE FROM WATERLOO RD. AS SHOWN ON THE PLANS, UNLESS OTHERWISE DIRECTED BY THE OWNER OR LANDSCAPE ARCHITECT. CONTRACTOR TO PROVIDE ROAD, DRIVEWAY AND EMERGENCY VEHICLE ACCESS TO RESIDENTS AT ALL TIMES. AS SHOWN ON THE PLANS, CONTRACTOR TO PROVIDE TEMPORARY ACCESS AND BARRIERS AS SHOWN ON DRAWINGS AND AS PER CITY OF CLEVELAND CODE.

CONSTRUCTION NOISE

ACTIVITIES AND LAND USE ADJACENT TO THIS PROJECT MAY BE AFFECTED BY CONSTRUCTION NOISE. IN ORDER TO MINIMIZE ANY ADVERSE CONSTRUCTION NOISE IMPACTS, DO NOT OPERATE POWER-OPERATED CONSTRUCTION-TYPE DEVICES BETWEEN THE HOURS OF 7 PM AND 7 AM. IN ADDITION, DO NOT OPERATE AT ANY TIME ANY DEVICE IN SUCH A MANNER THAT THE NOISE CREATED SUBSTANTIALLY EXCEEDS THE NOISE CUSTOMARILY AND NECESSARILY ATTENDANT TO THE REASONABLE AND EFFICIENT PERFORMANCE OF SUCH EQUIPMENT.

WORK LIMITS

THE WORK LIMITS SHOWN ON THESE PLANS ARE FOR PHYSICAL CONSTRUCTION ONLY. PROVIDE THE INSTALLATION AND OPERATION OF ALL WORK ZONE TRAFFIC CONTROL AND WORK ZONE PEDESTRIAN CONTROL DEVICES REQUIRED BY THESE PLANS WHETHER INSIDE OR OUTSIDE THESE WORK LIMITS.

PLANT TICKETS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PLANT TICKETS FOR ALL MATERIALS DELIVERED TO THE SITE. PLANT TICKETS MUST SHOW NET QUANTITY OF DELIVERED MATERIAL. MATERIAL DELIVERED OR PLACED WITHOUT PLANT TICKETS SHALL BE REMOVED AND PROPERLY DISPOSED AT THE EXPENSE OF THE CONTRACTOR.

AFFIDAVIT

MANUFACTURERS OR SUPPLIERS AFFIDAVIT FOR ALL CONSTRUCTION MATERIALS SHALL BE PROVIDED PRIOR TO THE START OF CONSTRUCTION.

UTILITIES

THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT, THE OHIO UTILITIES PROTECTION SERVICE (OUPS), THE OHIO & GAS PROCEDURES UNDERGROUND PROTECTION SERVICE (OGPUPS), AND ALL NON REGISTERED UTILITY OWNERS AT LEAST TWO (2) WORKING DAYS PRIOR TO COMMENCING CONSTRUCTION OPERATIONS IN ALL AREAS

OUPS 1-800-362-2764 (CONTACT LIMITED BASIS PARTICIPANTS ONLY)
OGPUPS 1-800-925-0988

ALL UTILITIES ON THE DRAWINGS ARE SHOWN AS PER DRAWINGS PROVIDED TO URS BY THE CITY OF CLEVELAND, OSBORNE ENGINEERING, AND NORTHEAST SHORES DEVELOPMENT CORP.. CONTRACTOR IS RESPONSIBLE FOR LOCATING AND CONFIRMING LOCATION OF UTILITIES PRIOR TO CONSTRUCTION.

ALL UTILITIES AND APPURTENANCES DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AND REINSTALLED IN ACCORDANCE WITH THE LATEST ODOT C.M.S. AND CITY OF CLEVELAND BUILDING CODES AT NO ADDITIONAL COST TO THE OWNER.

DISTURBANCE TO EXISTING FEATURES

CONSTRUCTION MUST NOT DAMAGE TREES, OTHER DESIRABLE VEGETATION, AND PAVEMENT TO REMAIN IN THE PROJECT AREA .

CONTRACTOR TO MARK PROPOSED TREE PLANTING, GABION WALL, AND BIORETENTION AREA, AND AVOID DISTURBANCE OR COMPACTION WITH CONSTRUCTION EQUIPMENT IN THESE AREAS. CONTRACTOR TO ALSO MARK OTHER CONSTRUCTION FEATURES AS NOTED IN PLANS.

ALL EXISTING APPURTENANCES (UTILITY POLES, VALVES, HYDRANTS, MANHOLES, ETC.) ARE TO BE MAINTAINED BY THE CONTRACTOR UNLESS OTHERWISE SHOWN ON THE PLANS.

TREE REMOVAL & PRUNING

WHERE TREE REMOVAL OR PRUNING IS NECESSARY FOR CONSTRUCTION, NORTHEAST SHORES DEVELOPMENT CORP. SHALL BE NOTIFIED A MINIMUM OF FORTY EIGHT (48) HOURS PRIOR TO ANY TREE PRUNING OR REMOVAL. WHERE BRANCHES AND TRUNKS ARE DAMAGED, PROPER DRESSING SHALL BE APPLIED. IT SHALL BE PROPERLY DONE. ALL WORK SHALL BE IN ACCORDANCE WITH ODOT ITEM 661.14 AND/OR CITY OF CLEVELAND CODE.

PROJECT KICKOFF MEETING

A PRECONSTRUCTION MEETING WITH THE CONTRACTOR AND REPRESENTATIVES FROM NORTHEAST SHORES DEVELOPMENT CORP. WILL OCCUR PRIOR TO ANY CONSTRUCTION ACTIVITY TO FAMILIARIZE CONTRACTOR WITH THE PLAN.

BEGINNING CONSTRUCTION

THE CONTRACTOR WILL NOTIFY NORTHEAST SHORES DEVELOPMENT CORP. SEVENTY TWO (72) HOURS PRIOR TO BEGINNING ACTUAL CONSTRUCTION.

CONSTRUCTION DEFECTS

ANY DEFECTS IN THE CONSTRUCTION, INCLUDING MATERIALS OR WORKMANSHIP, SHALL BE REPLACED OR CORRECTED BY REMOVAL AND REPLACEMENT OR OTHER OWNER APPROVED METHODS PRIOR TO ACCEPTANCE BY NORTHEAST SHORES DEVELOPMENT CORP. WITHOUT ANY EXTRA COST TO NORTHEAST SHORES DEVELOPMENT CORP..

CONSTRUCTION DOCUMENTS

THE CONTRACTOR SHALL MAINTAIN A CURRENT SET OF CONSTRUCTION DRAWINGS, SPECIFICATIONS, AND PREVAILING WAGE RATES PREPARED BY NORTHEAST SHORES DEVELOPMENT CORP. ON SITE AND SHALL RECORD ON THESE DRAWINGS THE EXACT LOCATION OF ALL SERVICE CONNECTIONS ONSITE INSTALLED AS PART OF PROJECT.

EACH WORK DAY

NO TRENCH SHALL BE LEFT OPEN OVERNIGHT, EXCEPT FOR A LENGTH NOT EXCEEDING 2 FEET, WHICH SHALL BE COVERED OVERNIGHT BY A TARP AND BLOCKED BY TEMPORARY CONSTRUCTION FENCING, AT ALL SIDES OF THE TRENCH. IN CASE WORK MUST BE SUSPENDED BECAUSE OF INCLEMENT WEATHER OR OTHER REASONS, THE UNCOMPLETED TRENCH SHALL BE TEMPORARILY BACKFILLED AT THE DIRECTION OF THE LANDSCAPE ARCHITECT WITHOUT ANY EXTRA COST TO THE OWNER.

TRAFFIC CONTROL

ANY TRAFFIC CONTROL REQUESTED OR REQUIRED BY THE CONTRACTOR WILL BE PROVIDED BY THE CONTRACTOR AT NO COST TO THE OWNER.

CLEAN-UP

AT THE CONCLUSION OF CONSTRUCTION, THE CONTRACTOR SHALL CLEAN UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND SHALL RESTORE ALL SURFACES, STRUCTURES, LANDSCAPE, AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER.

THE CONTRACTOR SHALL CLEAN THE PROJECT AREA AT THE END OF EACH DAY FOR THE DURATION OF THE PROJECT. ALL ADJOINING ROADWAYS SHALL BE FREE OF DIRT, MUD AND DEBRIS.

PROPOSED CHANGES

ALL CONTRACTOR PROPOSED CHANGES TO APPROVED DRAWINGS AND/OR SPECIFICATIONS MUST BE PREAPPROVED BY THE OWNER/LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION.

PAVING MATERIAL

ALL PAVING MATERIAL MUST BE PROVIDED BY ODOT CERTIFIED SUPPLIER. WRITTEN PROOF SHALL BE REQUIRED UPON DELIVERY OF MATERIALS. THE CERTIFIED MIX DESIGN MUST BE SUBMITTED TO, AND APPROVED BY, THE OWNER PRIOR TO SCHEDULING A PRE-CONSTRUCTION MEETING.

WORK SCHEDULE CHANGE

IF ANY CHANGE IN THE WORK SCHEDULE BECOMES NECESSARY, IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE INSPECTOR TO AVOID UNNECESSARY INSPECTION COSTS. IF NO NOTIFICATION IS MADE WITH REGARD TO CANCELLATION OF WORK, THE CONTRACTOR WILL BE CHARGED FOR THE INSPECTION TIME INCURRED.

CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL CONFINE HIS ACTIVITIES TO THE PROJECT SITE UNDER DEVELOPMENT, THE EXISTING RIGHT-OF-WAYS CONSTRUCTION AND PERMANENT EASEMENTS AND SHALL NOT TRESPASS UPON OTHER PROPERTY WITHOUT THE WRITTEN CONSENT OF THE OWNER/CONSTRUCTION MANAGER.

UTILITIES AND STRUCTURES SHOWN ON THE PLANS

THE LOCATION OF EXISTING UTILITIES AND STRUCTURES ARE SHOWN ON THE PLANS FROM DATA AVAILABLE AT THE TIME OF SURVEY AND ARE NOT NECESSARILY COMPLETE. DETERMINATION OF THE SAME SHALL BE RESPONSIBILITY OF THE CONTRACTOR. DURING CONSTRUCTION THE CONTRACTOR SHALL USE DUE DILIGENCE IN PROTECTING FROM DAMAGE ALL EXISTING UTILITIES AND STRUCTURES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR RESTORATION OF SAME IN ACCORDANCE WITH THE DIRECTIONS OF THE LANDSCAPE ARCHITECT AND OF ANY RESULTING CONTINGENT DAMAGE.

SAFETY OF CONSTRUCTION

COMPLIANCE WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT (LATEST) IS REQUIRED OF ALL CONTRACTORS ON THIS PROJECT

CONFLICT

WHERE CONFLICT ARISES BETWEEN ALL SPECIFICATIONS (BOOK OR PLAN BASED) INCLUDING CITY REQUIREMENTS, THE MORE CONSERVATIVE SPECIFICATION SHALL PREVAIL.

FINAL CLEANUP

THE CONTRACTOR SHALL CLEAN-UP ALL DEBRIS AND MATERIALS RESULTING FROM CONSTRUCTION AND SHALL RESTORE ALL SURFACES, STRUCTURES, DITCHES AND PROPERTY TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER AND ALL APPLICABLE GOVERNMENTAL AND SITE REGULATORY AGENCIES.

SITE

ITEM SPECIAL, CLEARING, DEMOLITION, MOBILIZATION, TEMPORARY MAINTENANCE OF TRAFFIC AND SWPPP, AS PER PLAN

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CLEAR AND GRUB AS SHOWN ON PLANS, PERFORM PROJECT MOBILIZATION, MAINTENANCE OF TRAFFIC, PERFORM ALL SWPPP MEASURES AND TO REMOVE ALL CONCRETE AS SHOWN ON DRAWINGS AND IN CONFORMANCE WITH ODOT CMS 201, 202 AND 624.

THIS INCLUDES THE REMOVAL OF GRUBBING, ROOT REMOVAL, AND TAKING ALL CHIPS AND DEBRIS ASSOCIATED WITH THIS WORK OFF SITE; ALL INCIDENTALS NECESSARY FOR CONSTRUCTION MOBILIZATION INCLUDING TEMPORARY FENCING, CONES AND TEMPORARY MEASURES AS SHOWN ON DRAWINGS; TEMPORARY MAINTENANCE OF TRAFFIC MEASURES SHOWN ON THESE DRAWINGS AND IN CONFORMANCE WITH CITY OF CLEVELAND CODES; AND INSTALL OF TEMPORARY MEASURES OF THE STORMWATER POLLUTION PREVENTION PLANS. THIS ITEM INCLUDES ALL SWPPP ITEMS AS PER PLAN INCLUDING INLET PROTECTION, CONCRETE WASHOUT AREA, TEMPORARY SEEDING, AND CONSTRUCTION ENTRANCE.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, CLEARING, DEMOLITION, MOBILIZATION, TEMPORARY MAINTENANCE OF TRAFFIC AND SWPPP, LUMP SUM. OVERALL CONTRACT IS LUMP SUM.

ITEM 203 - EXCAVATION AND HAUL AWAY

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS TO PERFORM EXCAVATION AND FINISH GRADING AS SHOWN ON PLAN AND IN CONFORMANCE WITH ODOT CMS 203 AND DRAWINGS. BIORETENTION AREA EXCAVATION WILL NOT BE COMPACTED AND SUBBASE WILL BE SCARIFIED.

CONTRACTOR SHALL USE EXCAVATED MATERIALS IN THE WORK WHEN MATERIALS CONFORM TO SPECIFICATIONS. IF NOT THAN RECYCLE OR DISPOSE OF MATERIAL ACCORDING TO ODOT 105.16 AND 105.17, AND IS RESPONSIBLE FOR MAINTAINING THE PROJECT AREA IN A FREE DRAINING CONDITION AT ALL TIMES. AFTER EXCAVATION AND PART OF THIS ITEM, THE CONTRACTOR SHALL MEET FINISHED GRADES AND COMPACTION IN ACCORDANCE WITH THE PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 203, BIOSWALE EXCAVATION AND HAUL AWAY, CY. OVERALL CONTRACT IS LUMP SUM

PAVEMENT

ITEM SPECIAL, CONCRETE CURB INLETS

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT CURBING WITH CONCRETE CURB INLETS AS PER PLAN, DETAILS, AND IN CONFORMANCE WITH ODOT ITEM 609. ITEM INCLUDES CONCRETE, FORMING AND AGGREGATE BASE. THIS ITEM ALSO INCLUDES ANY REPAIR TO THE EXISTING CURB THAT WILL REMAIN, AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, CONCRETE CURB INLETS, EACH. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL - TYPE 6 CURB

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT CONCRETE TYPE 6 CURB AS PER PLAN, DETAILS, AND IN CONFORMANCE WITH ODOT ITEM 609. ITEM INCLUDES CONCRETE, FORMING AND AGGREGATE BASE, AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, TYPE 6 CURB, LF. OVERALL CONTRACT IS LUMP SUM.



ISSUED FOR BIDDING		
DATE	BY	
ADDENDUM REVISIONS		
ADDENDUM NO	ADDENDUM DATE	BY

ISSUED FOR CONSTRUCTION			
DATE	BY		
CONSTRUCTION REVISIONS			
NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS			
DATE	BY		

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JOB NO	13816154
SCALE	

GRAPHIC SCALE

GENERAL NOTES

COLLINWOOD ARTS DISTRICT AZURE GREEN PARKING LOT

0002

PAVEMENT (CONT.)

ITEM SPECIAL DRIVE APRON (GRAVEL)

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, LABOR, AND MATERIAL NECESSARY TO INSTALL DRIVE APRON AS PER PLANS, CITY OF CLEVELAND STANDARDS AND IN ACCORDANCE WITH ODOT CMS 304. THIS ITEM INCLUDES GRAVEL, FILTER FABRIC AND FORMING.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, DRIVE APRON (GRAVEL), SF. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – ASPHALT PAVEMENT

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT ASPHALT PAVEMENT AS PER PLAN, DETAILS, AND IN CONFORMANCE WITH ODOT ITEM 448, 304 & 203, 407 & 408. ITEM INCLUDES ASPHALT AND FORMING, STONE BASE, PRIME COAT, TACK COAT, INTERMEDIATE COURSE, AND SURFACE COURSE, AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, ASPHALT PAVEMENT, CY. OVERALL CONTRACT IS LUMP SUM.

ITEM 304, GRAVEL SUB-BASE

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT GRAVEL SUB-BASE AS PER PLAN, DETAILS, AND IN CONFORMANCE WITH ODOT ITEM 304. ITEM INCLUDES GRAVEL, FORMING AND AGGREGATE BASE.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 304, GRAVEL SUB-BASE, CY. OVERALL CONTRACT IS LUMP SUM.

DRAINAGE

CONSTRUCTION STANDARDS FOR STORM SEWERS

ALL SEWER CONSTRUCTION SHALL CONFORM TO ODOT ITEM 603, CITY OF CLEVELAND, NEORS, AND WITH THE SPECIFIC PROVISIONS INCLUDED HEREIN. ALL DRAINAGE PIPES TO BE PVC AS PER THE PLANS.

REVIEW OF DRAINAGE FACILITIES

BEFORE ANY WORK IS STARTED ON THE PROJECT AND AGAIN BEFORE FINAL ACCEPTANCE BY THE OWNER, REPRESENTATIVES OF THE OWNER AND THE CONTRACTOR SHALL MAKE AN INSPECTION OF ALL EXISTING SEWERS WHICH ARE TO REMAIN IN SERVICE AND WHICH MAY BE AFFECTED BY THE WORK. THE CONDITION OF THE EXISTING CONDUITS AND THEIR APPURTENANCE SHALL BE DETERMINED FROM FIELD OBSERVATIONS. RECORDS OF THE INSPECTION SHALL BE KEPT IN WRITING BY THE CONTRACTOR.

ALL NEW CONDUITS AND INLETS CONSTRUCTED AS A PART OF THE PROJECT SHALL BE FREE OF ALL FOREIGN MATTER AND IN A CLEAN CONDITION BEFORE THE PROJECT WILL BE ACCEPTED BY THE OWNER.

ALL EXISTING SEWERS INSPECTED INITIALLY BY THE ABOVE MENTIONED PARTIES SHALL BE MAINTAINED AND LEFT IN A CONDITION REASONABLY COMPARABLE TO THAT DETERMINED BY THE ORIGINAL INSPECTION. ANY CHANGE IN THE CONDITION RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE CORRECTED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNERS REPRESENTATIVE.

PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE OVERALL CONTRACT PRICE.

CROSSINGS AND CONNECTIONS TO EXISTING PIPES AND UTILITIES

WHERE PLANS PROVIDE FOR A PROPOSED CONDUIT TO BE CONNECTED TO, OR CROSS OVER OR UNDER AN EXISTING SEWER OR UNDERGROUND UTILITY, THE CONTRACTOR SHALL LOCATE THE EXISTING PIPES OR UTILITIES BOTH AS TO LINE AND GRADE BEFORE STARTING TO LAY THE PROPOSED CONDUIT.

IF IT IS DETERMINED THAT THE ELEVATION OF THE EXISTING CONDUIT, OR EXISTING APPURTENANCE TO BE CONNECTED, DIFFERS FROM THE PLAN ELEVATION OR RESULTS IN A CHANGE IN THE PLAN CONDUIT SLOPE, THE OWNERS REPRESENTATIVE SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WILL BE AFFECTED BY THE VARIANCE IN THE EXISTING ELEVATIONS.

IF IT IS DETERMINED THAT THE PROPOSED CONDUIT WILL INTERSECT AN EXISTING SEWER OR UNDERGROUND UTILITY IF CONSTRUCTED AS SHOWN ON THE PLAN, THE OWNER SHALL BE NOTIFIED BEFORE STARTING CONSTRUCTION OF ANY PORTION OF THE PROPOSED CONDUIT WHICH WOULD BE AFFECTED BY THE INTERFERENCE WITH AN EXISTING FACILITY.

PAYMENT FOR ALL THE OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE.

ITEM SPECIAL – PVC PIPE UNDERDRAIN

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS TO CONSTRUCT 6" PVC PIPE CONNECTION FROM EXISTING MODIFIED CATCH BASIN TO BIORETENTION AREA, AND FROM THE BIORETENTION AREA TO EXISTING CATCH BASIN, AS PER PLAN, DETAILS, AND IN CONFORMANCE WITH ODOT ITEM 605. ITEM INCLUDES GRAVEL AND FORMING.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, PVC PIPE UNDERDRAIN, LF. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – MODIFY EXISTING CATCH BASIN

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO MODIFY EXISTING CATCH BASIN AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, MODIFY EXISTING CATCH BASIN, EA. OVERALL CONTRACT IS LUMP SUM.

LANDSCAPING

ITEM 652 – TOPSOIL FURNISH & PLACE

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE 4" TOPSOIL IN CONFORMANCE WITH ODOT CMS 652, UNDER ALL SEEDED AREAS AND AS SHOWN ON PLANS.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 652, TOPSOIL FURNISH & PLACE, CY. OVERALL CONTRACT IS LUMP SUM.

ITEM 659 – SEEDING AND MULCHING

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO SEED, MULCH AND REPAIR ANY GRASS AREAS THAT ARE DISTURBED DURING CONSTRUCTION AS PER ODOT 659 AND AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, SEEDING AND MULCHING, CY. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – HARDWOOD MULCH

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE HARDWOOD MULCH IN CONFORMANCE WITH ODOT CMS 661 AND AS SHOWN ON PLANS. MULCH SHALL BE FINE, DOUBLE SHREDDED ORGANIC HARDWOOD, FREE OF WEED SEEDS, ROOTS, OR ANY OTHER SUBSTANCE NOT CONSISTING OF EITHER HOLE OR BRANCH WOOD AND BARK. THE MULCH SHALL BE UNIFORMLY APPLIED IN 3 INCH DEPTH IN AREAS SHOWN ON PLANS. DO NOT FERTILIZE.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, HARDWOOD MULCH, CY. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – BIORETENTION AREA

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL BIORETENTION AREA AS SHOWN IN PLAN.

ITEM INCLUDES MATERIAL AND INSTALLATION OF: BIOSWALE SOIL, WEED BARRIER MAT, FILTER FABRIC, UNDERDRAINS AND CONNECTORS, CONNECTION TO CATCH BASINS, OVERFLOW PIPES, AND WASHED #57 STONE.

BIOSWALE SOIL SHALL HAVE THE FOLLOWING ATTRIBUTES (UNLESS EXISTING SOIL IS APPROVED FOR REUSE BY LANDSCAPE ARCHITECT):

- * TEXTURE CLASS: SANDY LOAM OR LOAMY SAND. HAVING NO LESS THAN 72% SAND AND NO GREATER THAN 10% CLAY CONSIDERING ONLY THE MINERAL FRACTION OF THE SOIL.
- * CONTRACTOR SHALL SUBMIT BIOSWALE SOIL SAMPLE OR PRODUCT SHEET FOR APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

WEED BARRIER MAT SHALL BE BLACK, NON WOVEN, GEOTEXTILE FABRIC WHICH IS UV STABILIZED, PERMEABLE TO AIR AND WATER, AND A MINIMUM WEIGHT OF 2 OZ/SQ YD. WEED MAT SHALL PROVIDE WEED CONTROL AND BE GUARANTEED BY MANUFACTURER TO LAST FOR 15 YEARS IN EXPOSED CONDITIONS. WEED MAT SHALL BE STAPLED TO SOIL AS PER MANUFACTURER'S DIRECTIONS, WITH MULCH PLACED ON TOP OF WEED MAT.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, BIORETENTION AREA, SF. OVERALL CONTRACT IS LUMP SUM.

ITEM 651 – DECIDUOUS TREE, AS PER PLAN

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE DECIDUOUS TREES LISTED IN CONFORMANCE WITH ODOT CMS 651 AND AS PER PLAN. THIS INCLUDES SOIL BACKFILL AND TREE STABILIZATION.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 651, DECIDUOUS TREE, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM 651 – SHRUBS

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE SHRUBS LISTED IN CONFORMANCE WITH ODOT CMS 651 AND AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 651, SHRUBS, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM 651 – PERENNIALS

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE PERENNIALS LISTED IN CONFORMANCE WITH ODOT CMS 651 AND AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 651, PERENNIALS, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM 651 – BULBS

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO FURNISH AND PLACE BULBS LISTED IN CONFORMANCE WITH ODOT CMS 651 AND AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 651, BULBS, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM 838 – GABION WALL

CONTRACTOR IS TO FURNISH ALL EQUIPMENT, MATERIAL, AND LABOR TO INSTALL GABION BASKETS AS PER PLAN AND AS PER ODOT 838. ITEM INCLUDES ALL ITEMS TO COMPLETE GABION WALL AS SHOWN, INCLUDING: STONE, GLASS ROCK, BASKETS, AND TIES.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 838, GABION BASKET, CY. OVERALL CONTRACT IS LUMP SUM.

MISCELLANEOUS

ITEM 642 – PARKING LOT MARKING

CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS NEEDED TO STRIPE PARKING STALLS INCLUDING HANDICAP STRIPING, HANDICAP SYMBOLS AND NO PARKING AREAS, AS PER PLAN AND IN CONFORMANCE WITH ODOT ITEM 640, TYPE 1.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM 642, PARKING LOT MARKING, LUMP SUM. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – ADA SIGN

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL ADA SIGNS AND POSTS AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, ADA SIGN, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – CONCRETE CURB STOP

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL CONCRETE CURB STOPS AS PER PLAN.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, ADA SIGN, EA. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – FENCE ENCLOSURE & GATE

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO INSTALL FENCE ENCLOSURE & GATE AS PER PLAN AND DETAILS. ITEM INCLUDES STEEL POST, CONCRETE, FENCE BOARDS, GATE APPURTENANCES.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, FENCE ENCLOSURE & GATE, LS. OVERALL CONTRACT IS LUMP SUM.

ITEM SPECIAL – DEMOLITION OF EXISTING WALL

CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO PERFORM DEMOLITION OF EXISTING WALL AS PER PLAN. ITEM INCLUDES SAW CUT AND REMOVAL OF DEBRIS.

UNIT PRICE FOR ADDITIONS AND DELETIONS WILL BE BASED UPON THE ABOVE WORK DETAIL AND DRAWINGS FOR

ITEM SPECIAL, DEMOLITION OF EXISTING WALL, LS. OVERALL CONTRACT IS LUMP SUM.



ISSUED FOR BIDDING DATE _____ BY _____

ADDENDUM REVISIONS

ADDENDUM NO	ADDENDUM DATE	BY

ISSUED FOR CONSTRUCTION DATE _____ BY _____

CONSTRUCTION REVISIONS

NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS DATE _____ BY _____

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JOB NO 13816154

SCALE

GRAPHIC SCALE

GENERAL NOTES

COLLINWOOD ARTS DISTRICT AZURE GREEN PARKING LOT

0003

GENERAL NOTES:

THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

A) FURNISH, ERECT, PLACE AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES AND MAINTAIN TRAFFIC DURING THE HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES IN ACCORDANCE WITH THE METHODS INDICATED ON THESE DRAWINGS AND:

- 1) THE SPECIAL PROVISIONS OF THE CONTRACT
- 2) ODOT CMS 2012 SPECIFICATIONS
- 3) CITY OF CLEVELAND
- 4) U.S. DEPARTMENT OF TRANSPORTATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2003 EDITION AND ALL SUPPLEMENTS APPLICABLE TO THE WORK DATED TO THE DATE OF ADVERTISEMENT.

B) UNLESS OTHERWISE NOTED AND EXCEPT FOR REGULATORY SIGNS, (SERIES R), ALL SIGNS HAVE A NON-REFLECTORIZED BLACK LEGEND AND RETRO-REFLECTIVE ORANGE BACKGROUND.

C) MOUNTING OF ALL SIGNS AND BARRICADES SHALL BE IN ACCORDANCE WITH ODOT CMS 2010 AND AS PER CITY OF CLEVELAND CODES.

D) REMOVE ALL EXISTING SIGNS AS REQUIRED TO ACCOMMODATE CONSTRUCTION OPERATIONS. REINSTALL THESE SIGNS AT THE COMPLETION OF THE PROJECT AND/OR AS DIRECTED BY THE LANDSCAPE ARCHITECT.

E) THIS TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR TRAFFIC CONTROL AS PER ODOT CMS 2010 AND CITY OF CLEVELAND CODES.

F) NOTIFY NORTHEAST SHORES DEVELOPMENT CORP. TEN (10) DAYS IN ADVANCE OF DRIVEWAY RESTRICTIONS SO

NORTHEAST SHORES DEVELOPMENT CORP. STAFF CAN NOTIFY PROPERTY OWNERS AFFECTED BY WORK. COORDINATE LOCATION OF ANY TRAFFIC CONTROL DEVICES LOCATED WITHIN THEIR DRIVEWAYS WITH NORTHEAST SHORES DEVELOPMENT CORP.

G) PROVIDE SUFFICIENT NUMBER OF PROPERLY ATTIRED FLAGGERS (VEST, HARD HAT, ETC) TO ADEQUATELY CONTROL TRAFFIC FLOW THROUGH THE WORK ZONE AS REQUIRED BY THE CITY OF CLEVELAND, WHICH INCLUDES ANY INTERSECTING STREETS IN THE WORK ZONE AND AS DIRECTED.

H) LIMIT ANY LANE CLOSURE TO THE LENGTH NECESSARY TO SAFELY PERFORM THE REQUIRED WORK. AT NO TIME SHALL COMPLETE STREET CLOSURE BE INSTITUTED.

I) AT THE END OF EACH WORKDAY AND WHENEVER PRACTICAL DURING THE WORKDAY, EQUIPMENT, VEHICLES AND MATERIALS SHALL BE STORED A MINIMUM OF 10 FEET

FROM THE EDGE OF THE NEAREST OPEN TRAVEL LANE OR THEY SHALL BE ADEQUATELY STORED WITHIN THE CONSTRUCTION LIMITS. IF EQUIPMENT, VEHICLES AND MATERIALS CANNOT BE STORED AS DESCRIBED ABOVE, OR IF THESE ITEMS ARE PLACED FOR USE ON OR NEAR THE ROADWAY WITHIN THE WORK ZONE, BARRICADED, DRUMS OR OTHER PROTECTIVE DEVICES SHALL BE PLACED AROUND THE EQUIPMENT, VEHICLES AND STORAGE SITE TO WARN AND PROTECT THE TRAVELING PUBLIC.

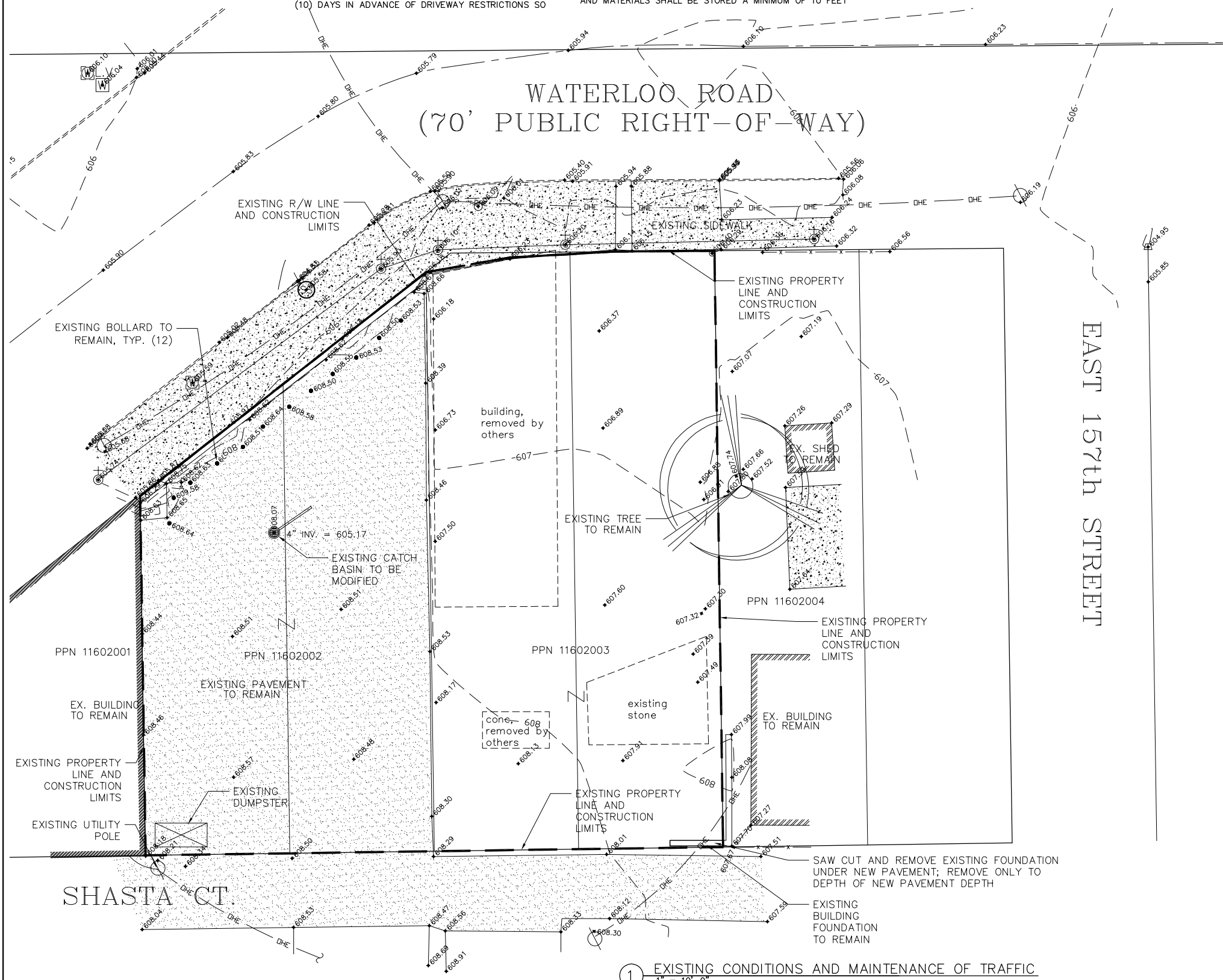
J) DO NOT ALLOW EMPLOYEES TO PARK THEIR PERSONAL VEHICLES ON ANY TRAVEL LANE, SHOULDER, OR SEEDED AREA ALONG THE ROADWAY.

K) IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE MAINTENANCE OF TRAFFIC DEVICES.

M) NOTIFY THE CITY OF CLEVELAND ENGINEERING DEPARTMENT AND OWNER TEN (10) DAYS IN ADVANCE OF ANY SIGNAGE INTENDED TO BE PLACED.

N) MAINTAIN A MINIMUM OF TWO 10-FOOT TRAVEL LANES ON ALL STREETS AT ALL TIMES, EXCEPT THAT TWO 8-FOOT LANES MAY BE MAINTAINED IF ONGOING CONSTRUCTION OPERATIONS REQUIRE IT. A SINGLE 11-FOOT LANE MAY BE MAINTAINED USING FLAGGERS IN ACCORDANCE WITH ODOT CMS 2012 AND CITY OF CLEVELAND CODE.

O) NOTIFY CITY OF CLEVELAND PRIOR TO CONSTRUCTION. CITY OF CLEVELAND TO PROVIDE CONSTRUCTION/PERMIT APPROVAL OF ALL WORK.



PARCEL 11602002
4060.0 SF ASPHALT

PARCEL 11602003
1265.0 SF ROOF
305.0 SF GRAVEL
73.0 SF CONCRETE
3511.7 SF GRASS

5703 SF TOTAL EXISTING IMPERVIOUS SURFACE

LEGEND

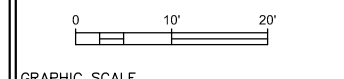
- MON. [M] IRON PIN MONUMENT BOX FOUND
- [T] TREES
- [B] BOLLARD
- [G] GAS VALVE
- [U] UTILITY POLE
- [L] LIGHT POLE
- [H] HYDRANT
- [W] WATER LINE VALVE
- [WH] WATERMANHOLE
- [CB] CATCH BASIN
- [M] MANHOLE
- [SM] STORM MANHOLE
- [X] FENCE
- [100] CONTOUR
- [P] PROPERTY LINE
- [CL] CONSTRUCTION LIMITS

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DATE	BY	
ADDENDUM REVISIONS		
ADDENDUM NO	ADDENDUM DATE	BY

ISSUED FOR CONSTRUCTION			
DATE	BY		
CONSTRUCTION REVISIONS			
NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS		
DATE	BY	

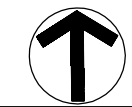
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JOB NO 13816154
SCALE 1" = 10'

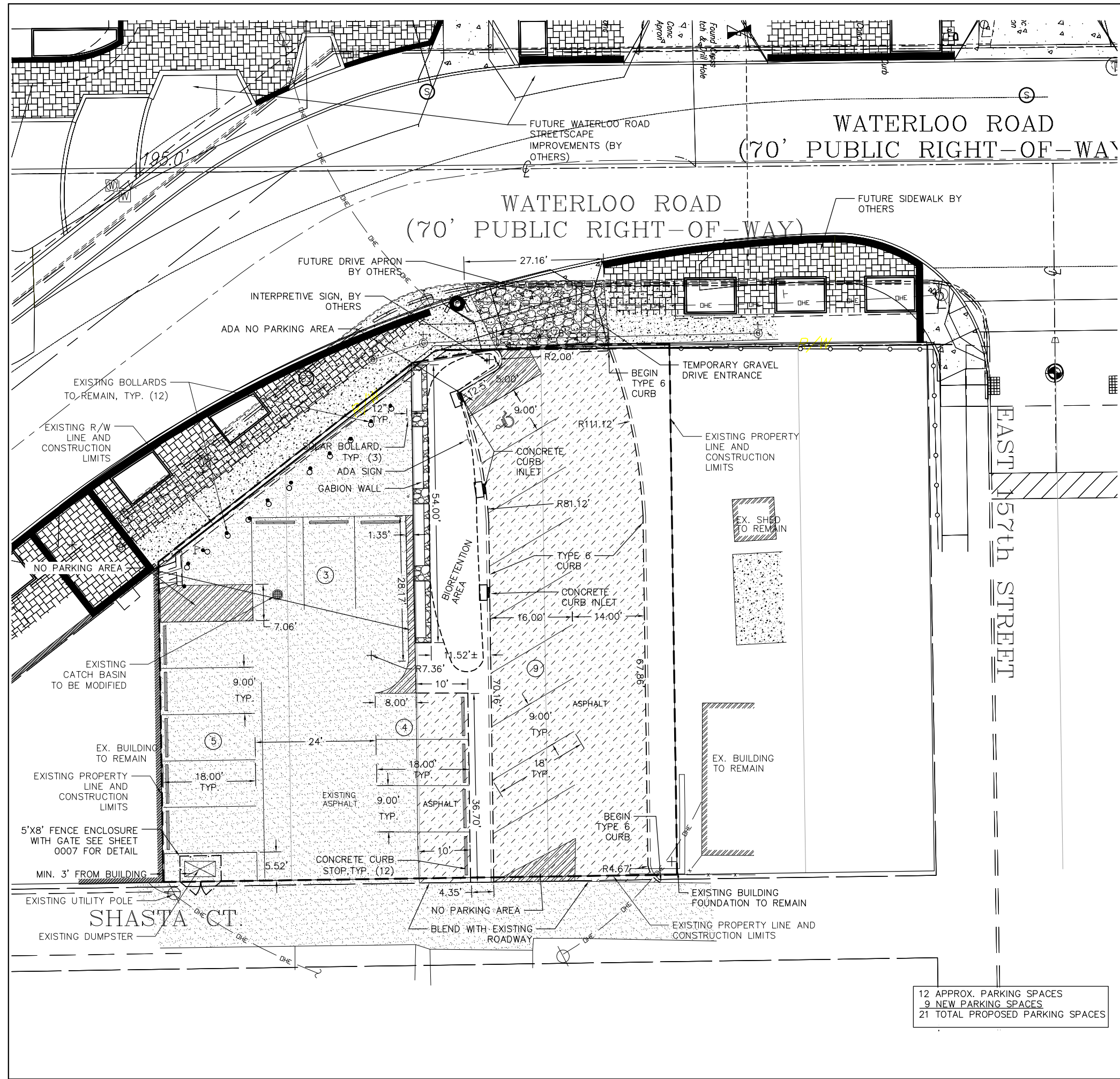


EXISTING CONDITIONS AND MAINTENANCE OF TRAFFIC

COLLINWOOD ARTS DISTRICT
AZURE GREEN PARKING LOT

0004





PROPOSED CONDITIONS
 PARCEL 11602002
 4060 SF ASPHALT
 PARCEL 11602003
 3442 SF ASPHALT
 1148 SF PLANTING BED
 565 SF BIORETENTION AREA
 7502 SF TOTAL PROPOSED IMPERVIOUS SURFACE
 5703 SF TOTAL EXISTING IMPERVIOUS SURFACE
 ±1799 SF INCREASE IN IMPERVIOUS SURFACE

BIORETENTION WATER QUANTITY VOLUME (WQv) CALCULATION

NEW ASPHALT:	$(0.98) \times (0.75) \times (1799 / 43560) = 0.03$ AC-IN
P:	0.75" RAINFALL
TOTAL WQv:	0.03 AC-IN = 0.0025 AC-FT = 108.98 CU FT
20% WQv PERMIT:	0.006 AC-IN = 21.80 CU FT
$A = (WQv)(ds) / [(k)(hs+ds)(ts)]$	
WQv PERMIT=	21.80 CU FT
ds=	1.5 FT (AMOUNT OF SOIL)
k=	0.5 FT/DAY (PERMEABILITY OF SOIL)
hs=	6 IN (AVG. ABOVE GROUND STORAGE)
ts=	1.66 DAYS OR 40 HRS (TIME OF STORAGE)
MIN. SIZE OF BIORETENTION REQUIRED FOR PERMIT (A)	$(21.80 \times 1.5) / (0.5 \times (0.5 + 1.5) \times 1.66) = 19.70$ SF
SIZE OF BIORETENTION FOR TREATMENT OF 100% WQv (A)	$(108.98 \times 1.5) / (0.5 \times (0.5 + 1.5) \times 1.66) = 98.48$ SF

- NOTES:
- REFER TO 0011 FOR GABION WALL DETAILS
 - REFER TO 0010 FOR BIORETENTION AREA DETAIL SECTIONS
 - THREE (3) NEW SOLAR BOLLARDS ARE TO BE CENTERED ON THE GABION BLUE GLASS WALL SECTIONS, REFER TO 0007 FOR BOLLARD INSTALLATION DETAIL
 - CONTRACTOR TO PLACE (12) BOLLARD SLEEVES OVER EXISTING SITE BOLLARDS AS PER DETAIL ON SHEET 0007

LEGEND

MON. [M]	IRON PIN MONUMENT BOX FOUND
[Tree Symbol]	TREES
[Bollard Symbol]	BOLLARD
[Gas Valve Symbol]	GAS VALVE
[Utility Pole Symbol]	UTILITY POLE
[Light Pole Symbol]	LIGHT POLE
[Hydrant Symbol]	HYDRANT
[W.V. Symbol]	WATER LINE VALVE
[W.M. Symbol]	WATERMANHOLE
[Catch Basin Symbol]	CATCH BASIN
[Manhole Symbol]	MANHOLE
[Storm Manhole Symbol]	STORM MANHOLE
[Fence Symbol]	FENCE
[Contour Symbol]	CONTOUR
[Property Line Symbol]	PROPERTY LINE
[Construction Limits Symbol]	CONSTRUCTION LIMITS
[No Parking Striping Symbol]	NO PARKING STRIPING
[New Asphalt Symbol]	NEW ASPHALT
[Gabion Wall Symbol]	GABION WALL



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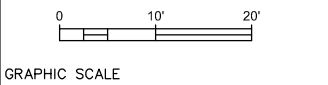
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CONSTRUCTION REVISIONS

NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS DATE BY

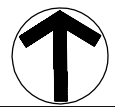
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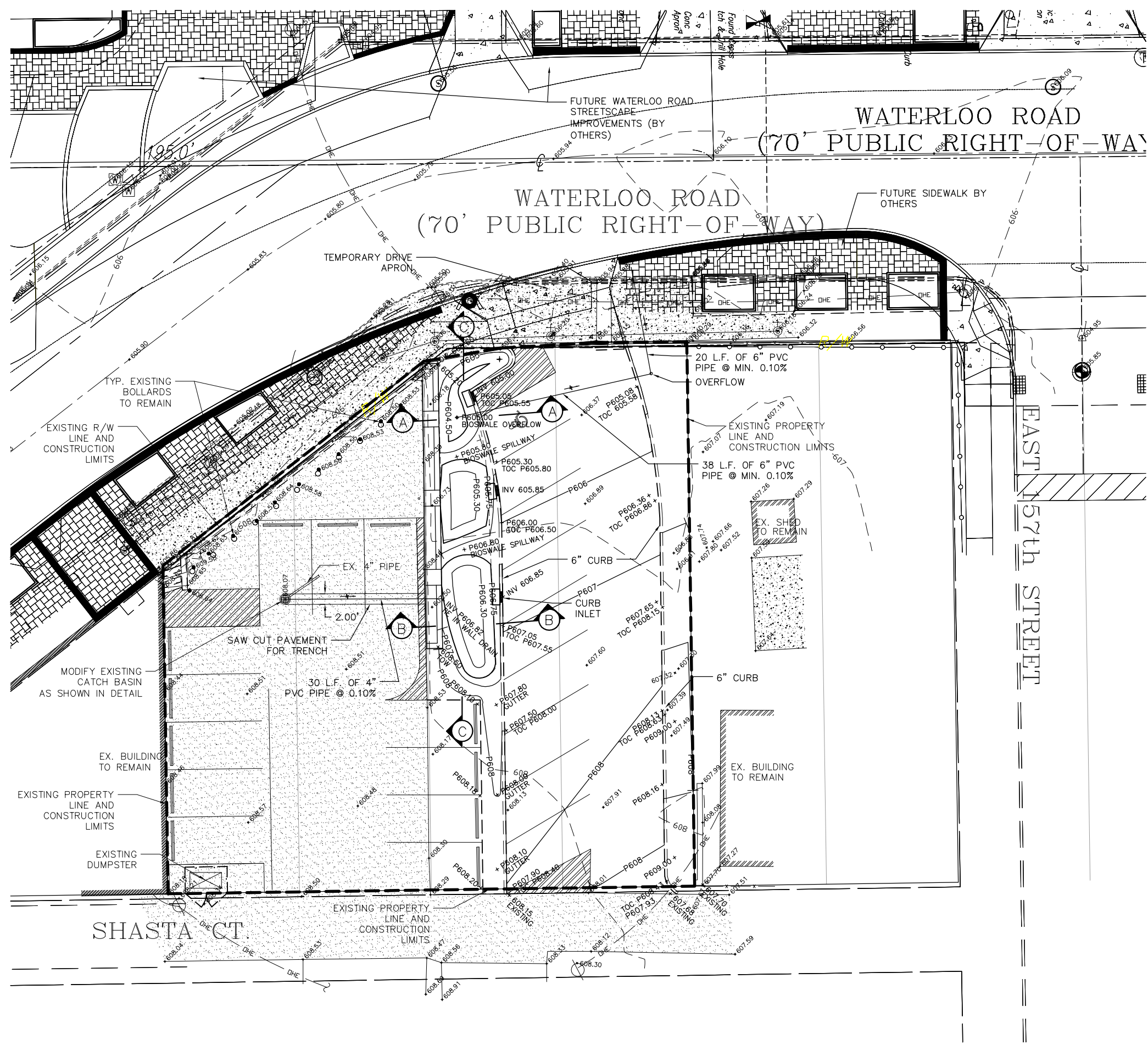


LAYOUT PLAN

COLLINWOOD ARTS DISTRICT
 AZURE GREEN PARKING LOT

0005





- NOTES:
1. REFER TO DETAILS FOR UNDERDRAIN PIPE INSTALLATION AND ASPHALT REPAIR OF EXISTING ASPHALT SURFACE.
 2. REFER TO DETAILS FOR BIORETENTION AREA SECTIONS A, B, C.
 3. SAWCUT PAVEMENT FOR TRENCH AND PERFORM ASPHALT REPAIR, REUSE EXISTING AGGREGATE BASE.



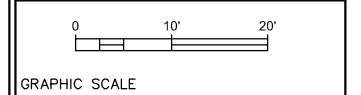
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RECORD DRAWINGS			
NO.	DESCRIPTION	DATE	BY

- LEGEND**
- MON. [M] IRON PIN MONUMENT BOX FOUND
 - [T] TREES
 - [B] BOLLARD
 - [G] GAS VALVE
 - [U] UTILITY POLE
 - [L] LIGHT POLE
 - [H] HYDRANT
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 - [CB] CATCH BASIN
 - [M] MANHOLE
 - [SM] STORM MANHOLE
 - [X-X] FENCE
 - [100] CONTOUR
 - [P] PROPERTY LINE
 - [---] CONSTRUCTION LIMITS
 - [P100] PROP. CONTOUR

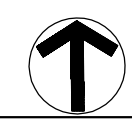
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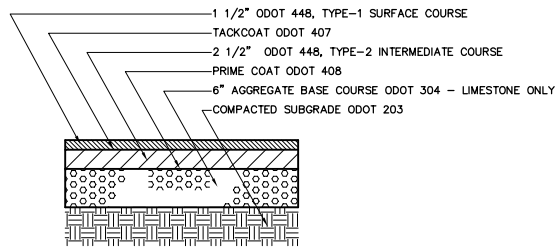


GRADING PLAN

COLLINWOOD ARTS DISTRICT
 AZURE GREEN PARKING LOT

0006

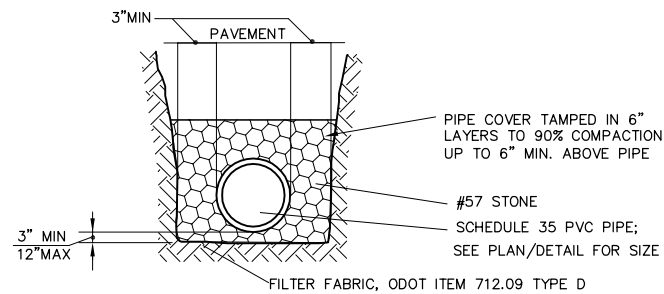




NOTE: FOR SAWCUT PAVEMENT FOR TRENCH, REUSE EXISTING AGGREGATE BASE

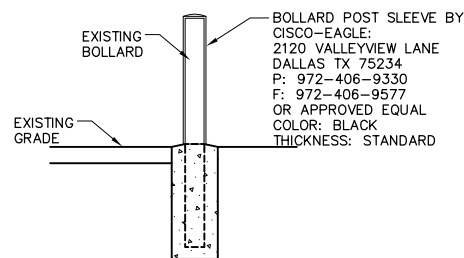
1 ASPHALT PAVEMENT DETAIL

NTS



2 UNDERDRAINAGE PIPE DETAIL

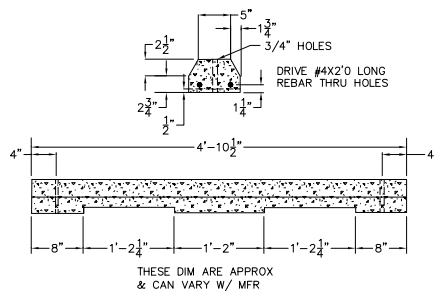
NTS



NOTES:
BOLLARD SLEEVES ARE TO FIT TIGHTLY TO EXISTING BOLLARD DIAMETER.
CONTRACTOR TO INSTALL AS PER MANUFACTURERS INSTALLATION SPECIFICATIONS

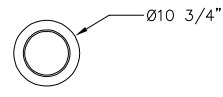
5 BOLLARD SLEEVE

NTS

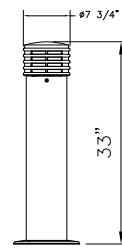


6 CONCRETE CURB STOP

NTS

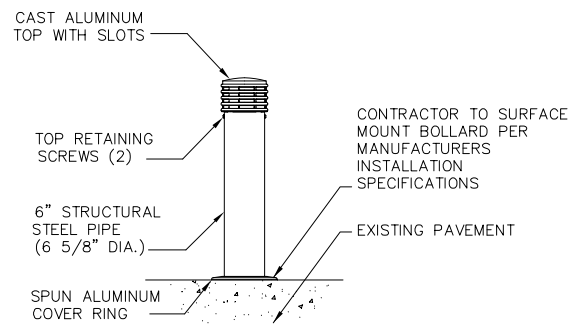


TOP VIEW
NOT TO SCALE



FRONT VIEW
NOT TO SCALE

INTERNAL COMPONENTS:
WHITE PVC DIFFUSER LISTED
OUTDOOR LOW-VOLTAGE LIGHT
FIXTURE WITH SOLAR LIGHTING
FEATURE



SIDE VIEW
NOT TO SCALE

NOTE: CONTRACTOR TO INSTALL IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

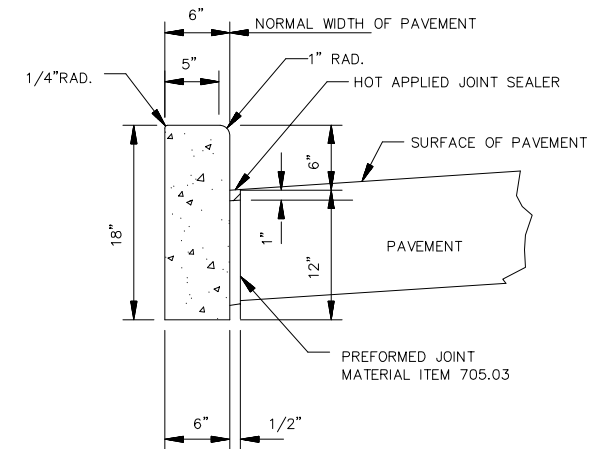
ANNAPOLIS SOLAR LIGHT BOLLARD, 6" DIA. SURFACE MOUNT, SLEEVE, BLACK, MANUFACTURED BY LANDSCAPE FORMS INC., 431 LAWDALE AVE., KALAMAZOO, MICHIGAN 49048; PHONE: (800) 521-2546. SHARRON SNOW, SALES REPRESENTATIVE.

3 SOLAR BOLLARD DETAIL

NTS

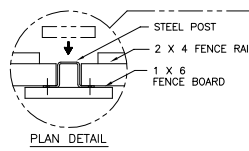
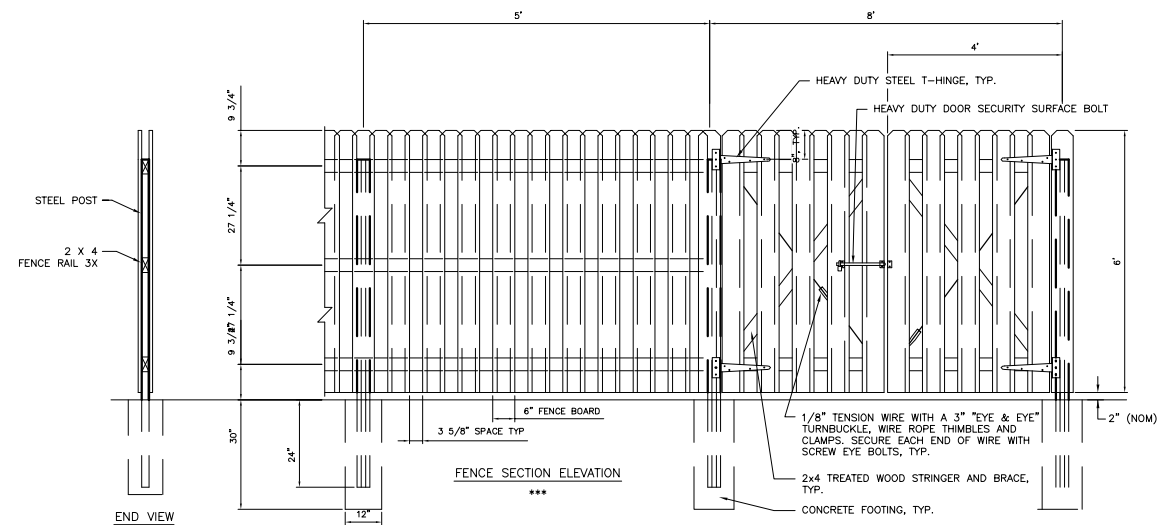
NOTES:

- 1" EXPANSION JOINTS SHALL EXTEND UP TO THE TOP OF THE CURB AND SHALL BE CONSTRUCTED IN THE CURB AND GUTTER SECTION IN SUCH A MANNER THAT THE JOINT SEAL WILL EXTEND THE FULL WIDTH OF THE GUTTER AND INTO THE CURB FACE A SUFFICIENT DISTANCE TO SEAL THE JOINT TO AN ELEVATION OF AT LEAST 2" ABOVE THE FLOW LINE OF THE GUTTER. DOWEL BARS SHALL BE USED IN THE SURFACE OF THE PAVEMENT. TRANSVERSE EXPANSION JOINT MATERIAL SHALL MEET THE REQUIREMENTS OF ITEM 705.03.
- EXPANSION JOINT MATERIAL AND JOINT SEALER ARE NOT REQUIRED FOR THE PORTION OF THE CURB THAT IS ADJACENT TO A FLEXIBLE PAVEMENT TYPE. BOTH MATERIALS ARE REQUIRED, AS DETAILED, FOR THE FULL HEIGHT OF RIGID PAVEMENT AND CONCRETE BASES.



4 TYPE 6 CONC. CURB

NTS



PLAN DETAIL
(NO SCALE)

NOTES:

- WOOD SHALL BE PRESSURE TREATED PINE.
- FACING BOARDS SHALL BE 5/4" IN THICKNESS MIN.
- FOOTING WIDTH TO BE 12", MINIMUM DEPTH 30".
- USE 3000 PSI CONCRETE FOR FOOTINGS.
- DIMENSIONS SHOWN ARE NOMINAL FOR WOOD.

7 BOARD ON BOARD FENCE & GATE DETAIL

NTS

ISSUED FOR BIDDING

ADDENDUM REVISIONS

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JOB NO 13816154

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DETAILS

COLLINWOOD ARTS
DISTRICT
AZURE
GREEN PARKING LOT

0007

ISSUED FOR BIDDING _____ DATE _____ BY _____

ADDENDUM REVISIONS

ADDENDUM NO	ADDENDUM DATE	BY

ISSUED FOR CONSTRUCTION _____ DATE _____ BY _____

CONSTRUCTION REVISIONS

NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS _____ DATE _____ BY _____

NO.	DESCRIPTION	DATE	BY

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JOB NO 13816154

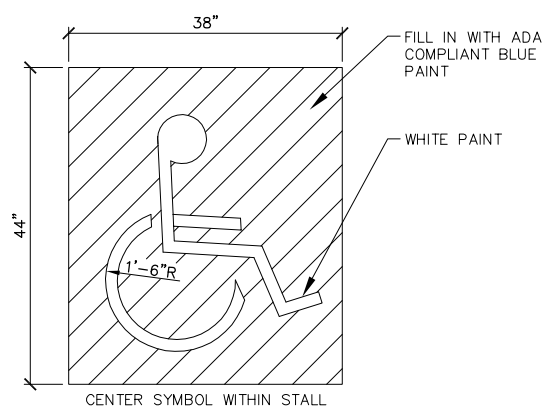
SCALE

GRAPHIC SCALE

DETAILS

COLLINWOOD ARTS
DISTRICT
AZURE
GREEN PARKING LOT

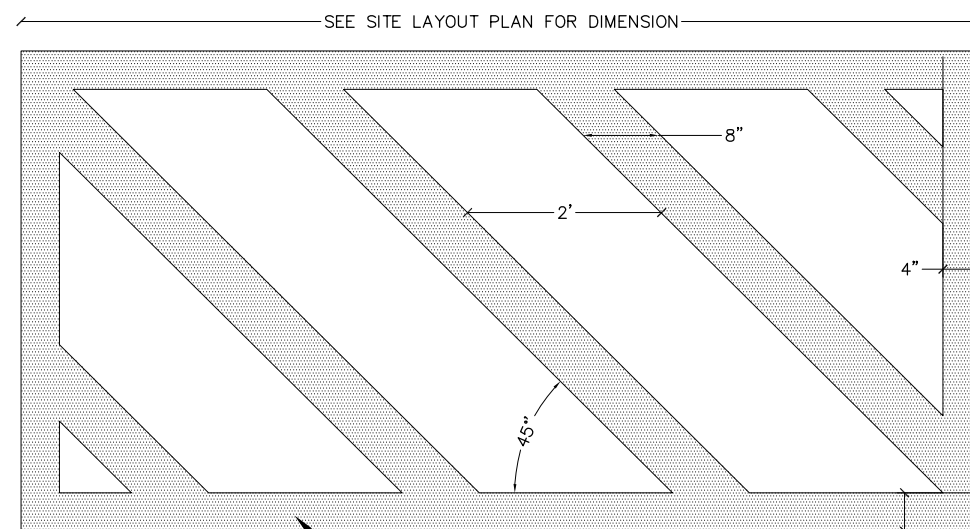
0009



NOTES:

1. SYMBOL TO MEET CURRENT ADA GUIDELINES.
2. PAINT AT ENTRANCE OF EACH ADA PARKING SPACE AS SHOWN ON THE PLAN SHEET 0005.
3. INSTALL AS PER ODOT ITEM 641

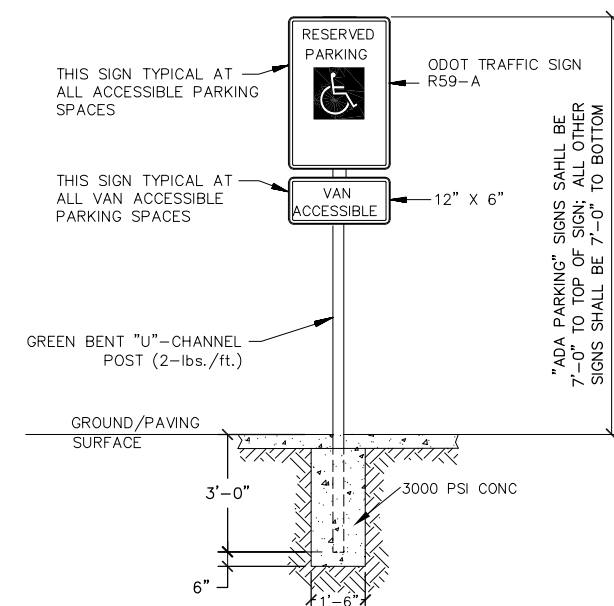
① ADA PARKING DETAIL
NTS



NOTES:
ODOT TYPE 642.04 TRAFFIC PAINT, COLOR SHALL BE ADA COMPLIANT BLUE
INSTALL AS PER ODOT ITEM 641

NOTE:
PAINT COLOR TO BE BLUE FOR ADA PARKING AREAS.
ALL OTHER NO-PARKING AREAS TO BE COLOR YELLOW.

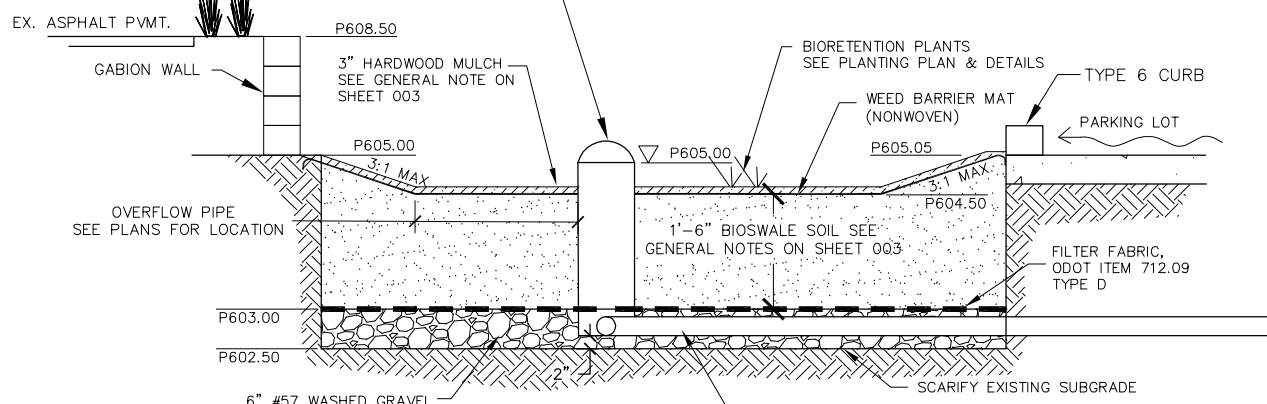
② NO PARKING AREA DETAIL
NTS



③ ADA SIGN DETAIL
NTS



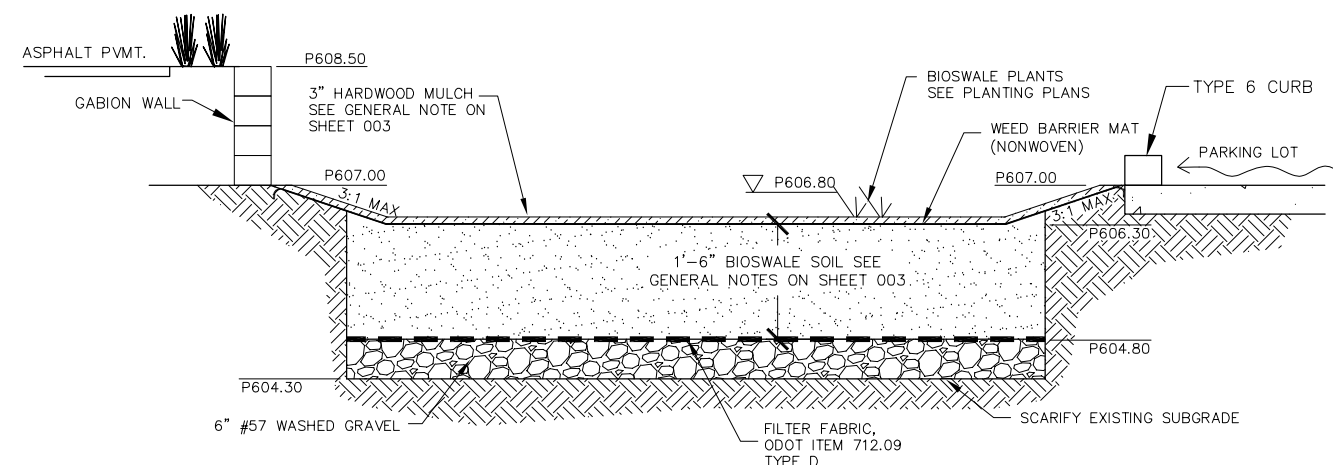
OVERFLOW CONSISTS OF A 10" ADS DRAIN BASIN WITH 10" DOME GRATE INSTALLED ON TOP, OR EQUAL. CONTRACTOR TO CONNECT OVERFLOW TO 4" PERFORATED UNDERDRAIN PIPE & EXISTING CATCH BASIN.



NOTE:
10" ADS DRAIN BASIN AND 10" DOME GRATE CAN BE PURCHASED FROM: ADS 4640 TRUEMAN BLVD. HILLIARD, OH 43026. P. 1-800-821-6710 F. 1-614-658-0204, OR APPROVED EQUAL
6" PVC UNDERDRAIN @ 0.01% MIN. PLACED WITH IN AREA OF BIORETENTION; POSITIVELY DRAINING TO EXISTING CATCH BASIN WITHIN WATERLOO RD.

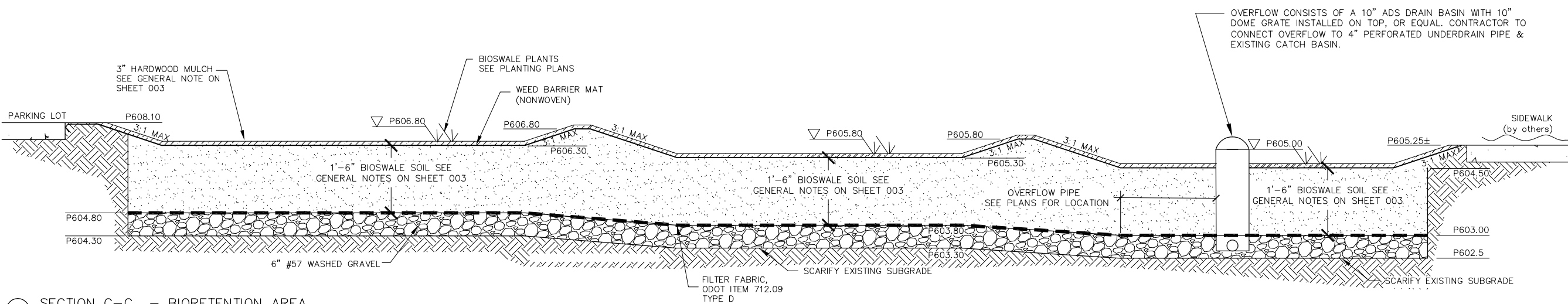
1 SECTION A-A - BIORETENTION AREA

NTS



2 SECTION B-B - BIORETENTION AREA

NTS



3 SECTION C-C - BIORETENTION AREA

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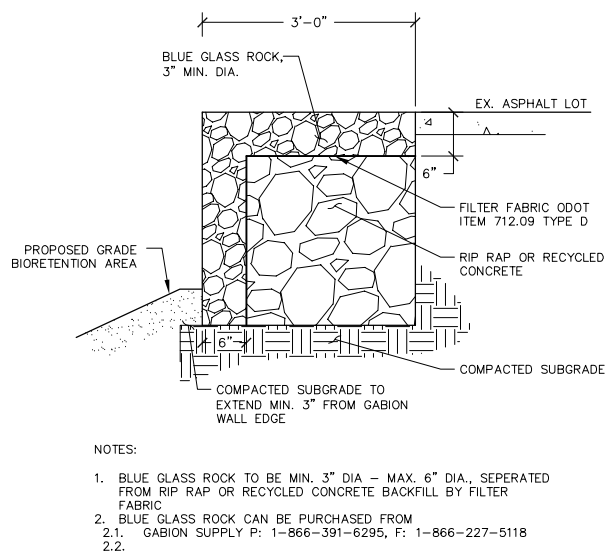
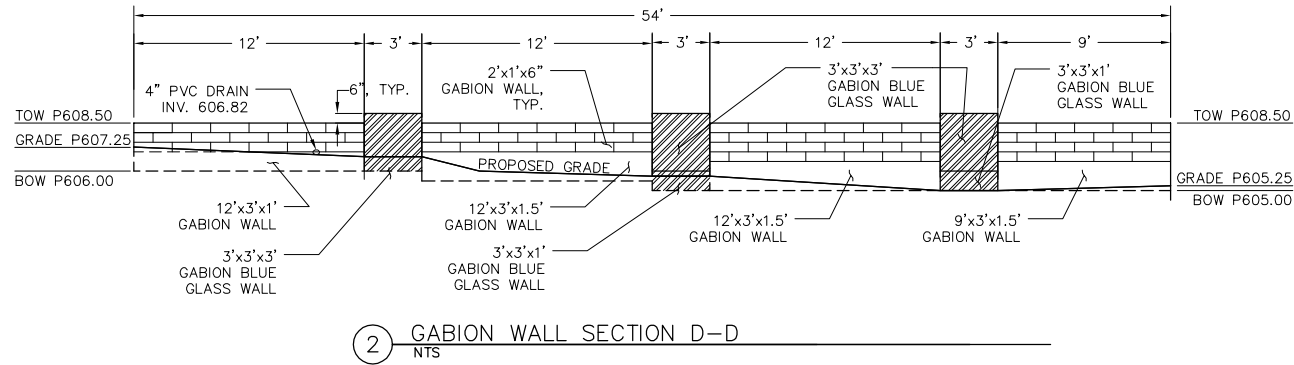
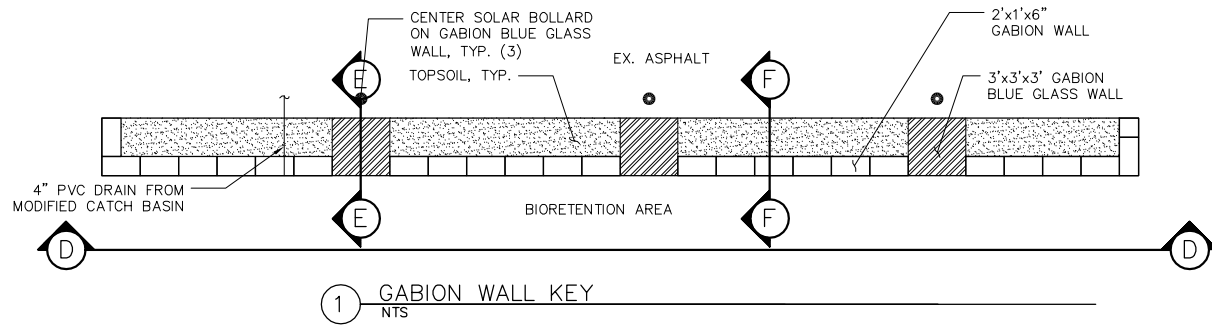
SCALE

GRAPHIC SCALE

DETAILS

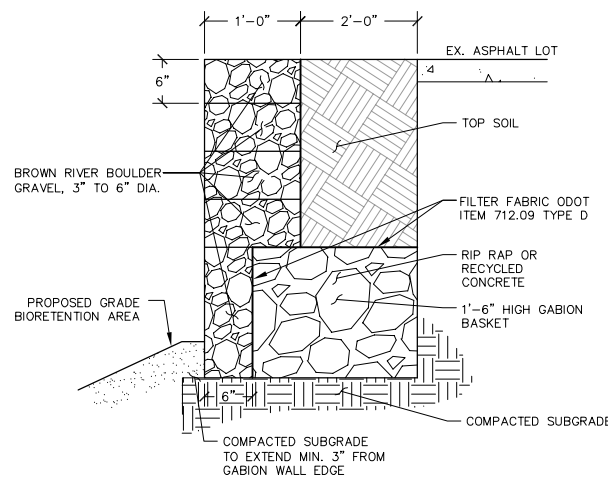
COLLINWOOD ARTS DISTRICT
AZURE GREEN PARKING LOT

0010

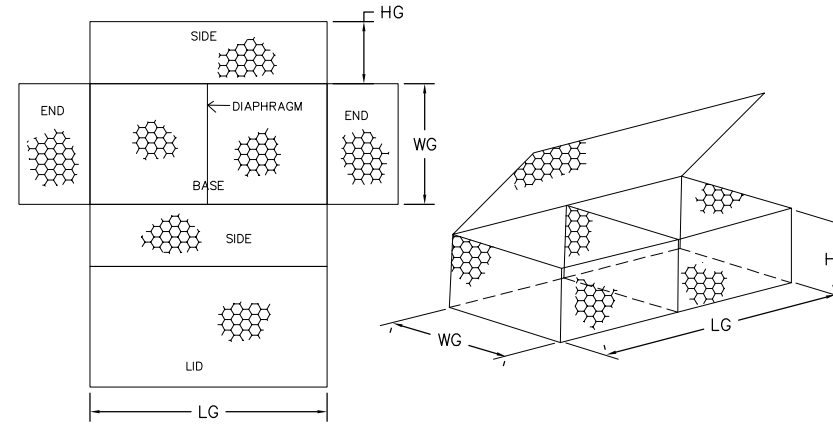


- NOTES:
1. BLUE GLASS ROCK TO BE MIN. 3" DIA - MAX. 6" DIA., SEPERATED FROM RIP RAP OR RECYCLED CONCRETE BACKFILL BY FILTER FABRIC
 2. BLUE GLASS ROCK CAN BE PURCHASED FROM
 - 2.1. GABION SUPPLY P: 1-866-391-6295, F: 1-866-227-5118
 - 2.2.

3 GABION WALL SECTION E-E
NTS



4 GABION WALL SECTION F-F
NTS



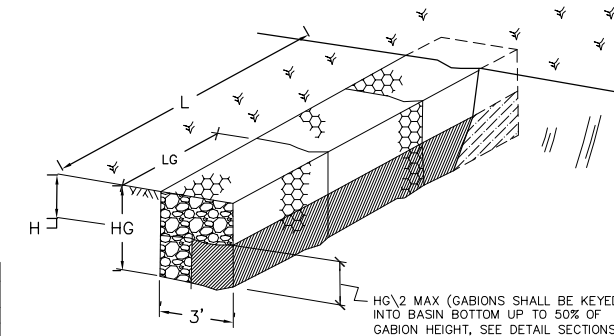
WIRE MESH BASKETS

GABIONS SIZES

STANDARD		
WG	LG	HG
3'-0"	3'-0"	1'-0"
3'-0"	3'-0"	3'-0"
3'-0"	9'-0"	1'-6"
3'-0"	12'-0"	1'-0"
3'-0"	12'-0"	1'-6"
1'-0"	2'-0"	0'-6"

ADDITIONAL SIZES MAY BE AVAILABLE ON A SPECIAL ORDER BASIS.

1. GABION WIRE MESH BASKETS CAN BE PURCHASED FROM
 - 1.1. GABION SUPPLY P: 1-866-391-6295, F: 1-866-227-5118
 - 1.2.



GABION BASKET WALL

NOTES:

1. PROVIDE MATERIALS AND CONSTRUCTION MEETING THE REQUIREMENTS OF ODOT SUPPLEMENTAL SPECIFICATION 838, EXCEPT AS MODIFIED HEREIN.
2. TYPE 'A' GABIONS SHALL CONSIST OF WIRE-MESH BASKETS FILLED BY HAND PLACEMENT OF COARSE AGGREGATE, AT LEAST ALONG THE EXPOSED FACES, FOR A UNIFORM APPEARANCE.
3. SPECIFY TYPE 'B' GABIONS OF WIRE-MESH BASKETS FILLED BY HAND PLACEMENT OR SMALL POWER EQUIPMENT PLACEMENT OF COARSE AGGREGATE.
4. MAKE CORROSION RESISTANT TYPE A & TYPE B GABIONS THE SAME AS TYPE A & TYPE B GABIONS ZINC COATING.
5. PROVIDE GEOTEXTILE MATERIAL MEETING THE REQUIREMENTS OF PUBLICATION 408, SECTION 212 AND SECTION 735.
6. INSTALL GEOTEXTILE MATERIAL ALONG ALL INTERFACE AREAS WITH GROUND CONTACT.
7. FILL GABION BASKETS AS PER SPECIFIED IN ODOT ITEM 703.19 AS SHOWN ON DETAILS AND AS PER ODOT 601.04A.

5 GABION BASKET WALL
NTS

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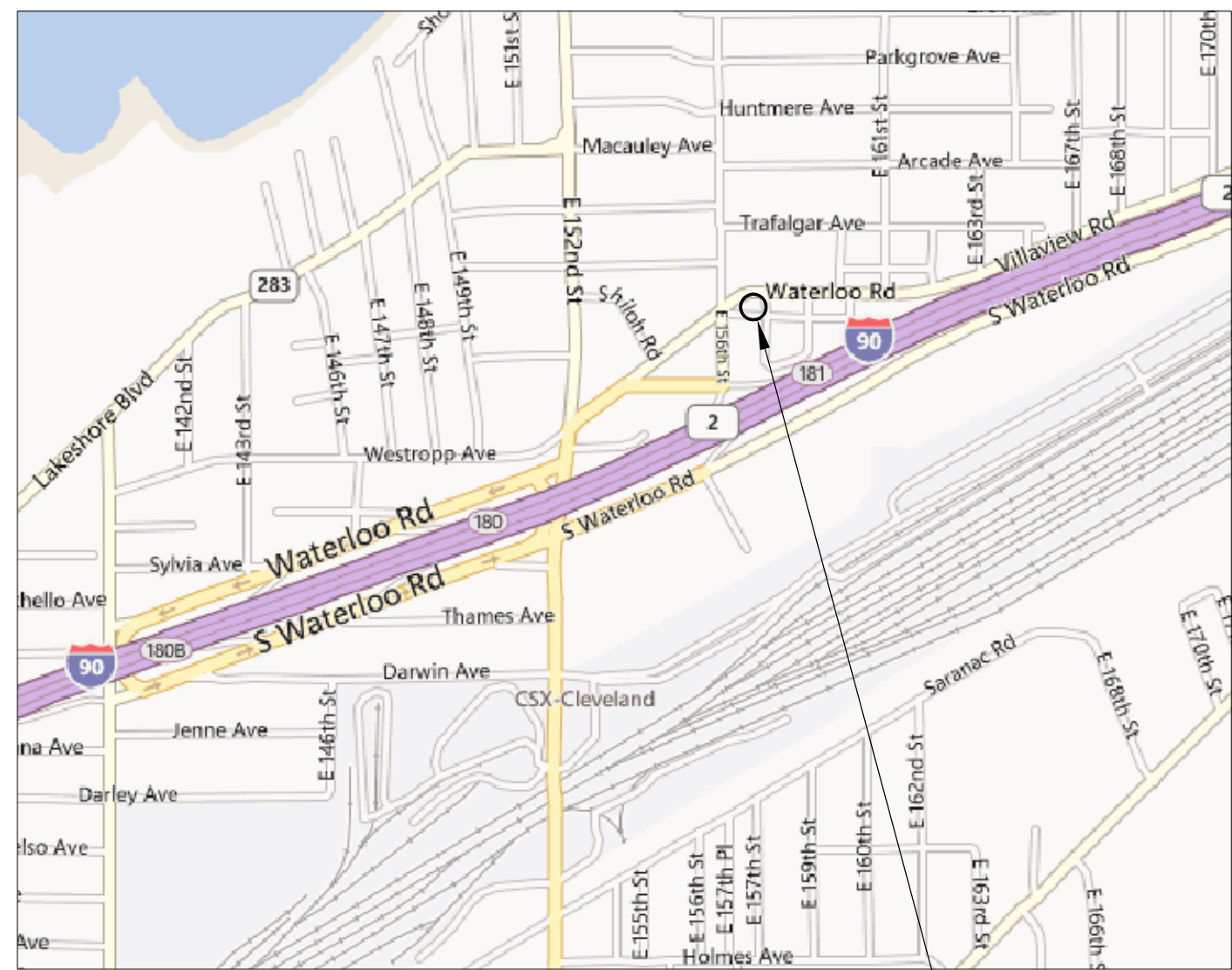
SCALE

GRAPHIC SCALE

DETAILS

COLLINWOOD ARTS
DISTRICT
AZURE
GREEN PARKING LOT

0011



VICINITY MAP
SCALE 1" = NTS

PROJECT LOCATION

PROJECT NAME AND LOCATION:

COLLINWOOD ARTS DISTRICT, AZURE PARKING LOT
15602 WATERLOO ROAD
CLEVELAND, OHIO 44110

OWNER NAME AND ADDRESS:

NORTHEAST SHORES
DEVELOPMENT CORPORATION
317 EAST 156th STREET,
CLEVELAND, OHIO 44110

PROFESSIONAL LANDSCAPE ARCHITECT/SURVEYOR

URS CORPORATION
KATHERINE HOLMOK, ASLA
DAN FERSON, PE/PS
1375 EUCLID AVENUE, SUITE 600
CLEVELAND, OH 44115-1808
216-622-2400

SITE DESCRIPTION:

THE INTENT OF THE PROJECT IS TO EXPAND A 12 CAR PARKING LOT WITH 9 NEW SPACES, 565 SQUARE FEET OF BIORETENTION, 54 LF RETAINING WALL AND LANDSCAPING. THIS WORK WILL BE INSTALLED ALONG WATERLOO ROAD IN THE COLLINWOOD ARTS DISTRICT.

A. THE SITE IS APPROXIMATELY 0.2115 ± ACRES OF WHICH 0.1178 ± ACRES WILL BE DISTURBED BY CONSTRUCTION ACTIVITIES.

B. SEE SHEET 0014 FOR THE IMPLEMENTATION OF EROSION, SEDIMENT AND STORM WATER MANAGEMENT PRACTICES.

C. NO IMMEDIATE RECEIVING STREAMS ARE WITHIN 200' OF THIS SITE. THE AREA IS WITHIN THE NEORSd's COMBINED SEWER AREA.

SOIL TYPE IS UeA Urban lands-Elnora complex, nearly flat

GENERAL NOTES FOR SWPPP:

- ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH CLEVELAND WATER POLLUTION CONTROL, CITY OF CLEVELAND ENGINEERING DEPARTMENT AND NEORSD REGULATIONS. SEE GENERAL NOTES FOR PAY ITEMS.
- ALL STORM INLETS/CATCH BASINS/MAN HOLES THAT ARE MADE OPERATIONAL DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER WILL NOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
- ALL EROSION AND SEDIMENT CONTROLS ON SITE MUST BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 0.5 INCHES OF PRECIPITATION WITHIN ANY 24 HOUR PERIOD. A RECORD SHALL BE KEPT AND MAINTAINED OF THESE INSPECTIONS FOR 2 YEARS FOLLOWING SUBMITTAL OF THE NOTICE OF TERMINATION (NOT) TO OHIO EPA.
- MINIMIZE TRACKING OF SEDIMENTS BY VEHICLES BY UTILIZING THE CONSTRUCTION ENTRANCE AS THE ONLY ENTRANCE FOR VEHICLES. MAINTAIN THIS ENTRANCE WITH STONE AS NEEDED TO PREVENT DIRT AND MUD FROM TRACKING ONTO THE ROADWAY. REGULAR SWEEPING OF THE ROADWAY MAY BE NECESSARY TO ENSURE ROADWAY DOES NOT BUILD UP WITH SEDIMENTS.
- OTHER EROSION AND SEDIMENT CONTROL ITEMS MAY BE NECESSARY DUE TO ENVIRONMENTAL CONDITIONS AND MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
- NO SOLID OR LIQUID WASTE SHALL BE DISCHARGED INTO STORM WATER RUNOFF. (THIS INCLUDES WASHING OUT OF CEMENT TRUCKS.) DESIGNATED WASH PIT AREAS ARE TO BE DETERMINED IN FIELD BY ENGINEER AND ARE PRESET FOR THIS PURPOSE AWAY FROM AREAS OF STORM WATER RUNOFF.
- SITE STABILIZATION EITHER PERMANENT OR TEMPORARY MUST FOLLOW THE REQUIREMENTS AS APPLICABLE ON THE CHARTS ON SWPPP PLAN SHEETS.

EROSION AND SEDIMENT CONTROLS:

STABILIZATION PRACTICES

STORMWATER MANAGEMENT – THE AREAS WHICH ARE NOT DEVELOPED WILL BE GRADED AT LESS THAN 4:1 AND HAVE PERMANENT SEEDING OR PLANTINGS.

WASTE DISPOSAL:

SOLID, SANITARY AND TOXIC WASTE MUST BE DISPOSED OF IN A PROPER MANNER IN ACCORDANCE WITH LOCAL, AND FEDERAL REGULATIONS. IT IS PROHIBITED TO BURN, BURY OR POUR OUT ONTO THE GROUND OR INTO THE STORM SEWERS ANY SOLVENTS, PAINTS, STAINS, GASOLINE, DIESEL FUEL, USED MOTOR OIL, HYDRAULIC FLUID, ANTIFREEZE, CEMENT CURING COMPOUNDS AND OTHER SUCH TOXIC OR HAZARDOUS WASTES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN A DIKED, DESIGNATED AREA WHERE THE WASHINGS CAN COLLECT AND BE DISPOSED OF PROPERLY WHEN THEY HARDEN (SEE CONCRETE WASHOUT AREA ON PLAN AND DETAIL ON SHEET 0014). FUEL STORAGE TANKS MUST BE SELF CONTAINED SPILL PROOF TANKS.

SOLID WASTE MATERIALS:

ALL SOLID WASTE MATERIALS IS BE COLLECTED AND STORED IN A SECURE METAL DUMPSTER WITH LID OR REMOVED FROM SITE EACH DAY BY CONTRACTOR. DUMPSTER IS TO BE RENTED FROM A LICENSED SOLID WASTE MANAGEMENT COMPANY. THE DUMPSTER SHALL MEET ALL LOCAL, STATE, AND FEDERAL REGULATIONS PERTAINING TO SOLID WASTE MANAGEMENT. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN THE DUMPSTER OR TRANSPORTED FROM SITE BY LICENSED WASTE MANAGEMENT COMPANY IN A LEGAL MANNER. THE DUMPSTER IS BE EMPTIED A MINIMUM OF TWICE PER WEEK OR AS NECESSARY, AND THE TRASH IS BE HAULED TO A PERMITTED LANDFILL. NO CONSTRUCTION WASTE MATERIALS ARE BE BURIED ONSITE. ALL PERSONNEL NEED BE INSTRUCTED ON PROPER PROCEDURE FOR WASTE DISPOSAL. NOTICES STATING PROPER PRACTICES SHALL BE POSTED IN THE FIELD OFFICE TRAILER. THE INDIVIDUAL MANAGING THE SITE CONSTRUCTION OPERATIONS WILL BE RESPONSIBLE FOR OVERSEEING THAT PROPER PROCEDURES ARE FOLLOWED.

HAZARDOUS WASTE:

ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN A MANNER AS SPECIFIED BY THE MANUFACTURER AND BY LOCAL, STATE, AND FEDERAL REGULATIONS. SITE CONSTRUCTION PERSONNEL ARE BE INSTRUCTED IN THESE PROCEDURES. THE INDIVIDUAL IN CHARGE OF MANAGING SITE CONSTRUCTION OPERATIONS SHALL BE RESPONSIBLE FOR OVERSEEING THAT ALL REQUIRED HAZARDOUS WASTE HANDLING PROCEDURES ARE FOLLOWED.

SANITARY WASTE:

ALL SANITARY WASTE IS BE COLLECTED FROM ALL PORTABLE UNITS (IF UNITS ARE INSTALLED ON SITE) A MINIMUM OF THREE TIMES PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR, OR AS REQUIRED BY THE LOCAL DEPARTMENT OF HEALTH.

TRENCH AND GROUNDWATER DEWATERING:

ALL SEDIMENT LADEN PUMPED WATER MUST PASS THROUGH A SEDIMENT BASIN, FILTER BAG, OR SUMP PIT PRIOR TO DISCHARGE. THERE IS NO EXPECTED PUMPING OF GROUNDWATER FOR THIS PROJECT.

OFFSITE VEHICLE / SEDIMENT TRACKING:

A STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED TO HELP REDUCE VEHICLE TRACKING OF SEDIMENTS. ALL PAVED STREETS ADJACENT TO THE SITE ARE BE SWEEP DAILY TO REMOVE ANY EXCESS MATERIAL TRACKED FROM THE SITE. A TIRE WASH IS TO BE INSTALLED AT NO ADDITIONAL COST TO THE PROJECT IF DEEMED NECESSARY BY LOCAL OFFICIALS. DUMP TRUCKS HAULING MATERIAL FROM THE CONSTRUCTION SITE NEED TO BE COVERED WITH A TARPAULIN.

AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH. AFTER THE ENTIRE SITE IS STABILIZED, THE ACCUMULATED SEDIMENT WILL BE REMOVED FROM THE BASIN.

SOIL PROTECTION CHART

STABILIZATION TYPE	J	F	M	A	M	J	J	A	S	O	N	D
PERMANENT SEEDING	●	●	●	●	●	●	●	●	●	●	●	●
DORMANT SEEDING	●	●	●	●	●	●	●	●	●	●	●	●
TEMPORARY SEEDING			●	●	●	●	●	●	●	●	●	●
SODDING			●	●	●	●	●	●	●	●	●	●
MULCHING	●	●	●	●	●	●	●	●	●	●	●	●

* – IRRIGATION NEEDED

** – IRRIGATION NEEDED FOR 2-3 WEEKS AFTER SOD IS APPLIED

CONTROLS

EROSION AND SEDIMENT CONTROLS:

STABILIZATION PRACTICES

TEMPORARY STABILIZATION – STOCKPILED TOPSOIL AND DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY IS TO CEASE FOR MORE THAN 21 DAYS SHALL BE STABILIZED WITH TEMPORARY SEED AND/OR MULCHING NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY IN THAT AREA. THE TEMPORARY SEEDING SHALL BE APPLIED PER THE TEMPORARY SEEDING SPECIFICATIONS AS SHOWN ON THE FOLLOWING STORMWATER POLLUTION PREVENTION PLANS. AREAS OF THE SITE TO BE PAVED WILL BE TEMPORARILY STABILIZED BY APPLYING GEOTEXTILE AND STONE SUBBASE UNTIL PAVEMENT IS APPLIED.

PERMANENT STABILIZATION – DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE BEEN PERMANENTLY CEASED SHALL BE STABILIZED WITH PERMANENT SEEDING NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. THE PERMANENT SEED MIX SHALL CONFORM WITH THE PERMANENT SEEDING SPECIFICATIONS, AS SHOWN ON THE SWPPP PLAN SHEETS.

EROSION AND SEDIMENT CONTROL INSPECTION AND MAINTENANCE PRACTICES:

THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM AND MAINTAIN A PERMANENT RECORD OF MAINTENANCE AND INSPECTIONS WHICH MUST BE KEPT THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL PROVIDE A COPY OF THE INSPECTION REPORTS WHEN REQUESTED BY THE OWNER OR ENGINEER DURING CONSTRUCTION AND SHALL PROVIDE ALL OF THE INSPECTION REPORTS TO THE OWNER AT THE COMPLETION OF THEIR WORK. INSPECTIONS MUST BE MADE A MINIMUM OF ONCE EVERY 7 DAYS AND IMMEDIATELY AFTER STORM EVENTS GREATER THAN 0.5 INCHES OF RAIN IN A 24 HOUR PERIOD. PROVIDED FOR THE RECORD SHALL BE A WRITTEN LOG WHICH SHALL CONTAIN THE FOLLOWING:

- NAME OF THE INSPECTOR
- DATE OF INSPECTION
- WEATHER CONDITIONS
- MAJOR OBSERVATIONS
- INSPECTION OF SILT FENCING TO DETERMINE SEDIMENT DEPTH (BUILT UP SEDIMENT SHALL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE–THIRD THE HEIGHT OF THE FENCE), TEARS, NOTING IF FABRIC SECURELY ATTACHED TO THE POSTS, AND POSTS ARE FIRMLY IN THE GROUND.
- TEMPORARY/PERMANENT SEEDING AND PLANTING ARE TO BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- CORRECTIVE MEASURES TO BE PERFORMED
- DATE THE CORRECTIVE MEASURES WERE PERFORMED

NON-STORMWATER DISCHARGES:

IT IS EXPECTED THAT THE FOLLOWING NON-STORM DISCHARGES ARE LIKELY TO OCCUR DURING CONSTRUCTION:

- PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
- UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION).

INVENTORY FOR POLLUTION PREVENTION PLAN

THE MATERIALS OR SUBSTANCES LISTED BELOW ARE EXPECTED TO BE PRESENT ONSITE DURING CONSTRUCTION:

- | | |
|-----------------------------|-------------------------------|
| 1. CONCRETE | 7. LUMBER AND TIMBER |
| 2. FERTILIZERS | 8. ASPHALT |
| 3. DETERGENTS | 9. MASONRY BLOCK |
| 4. PETROLEUM BASED PRODUCTS | 10. TAR |
| 5. PAINTS AND VARNISHES | 11. OTHER POTENTIAL MATERIALS |
| 6. CLEANING SOLVENTS | NOT LISTED |

SPILL PREVENTION

MATERIAL MANAGEMENT PRACTICES: THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT WILL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF.

GOOD HOUSEKEEPING:

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES WILL BE FOLLOWED ONSITE DURING THE CONSTRUCTION PROJECT. AN EFFORT WILL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB. ALL MATERIALS STORED ONSITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER SECURE ENCLOSURE. PRODUCTS SHALL ALSO BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL. SUBSTANCES ARE NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER. WHENEVER POSSIBLE, ALL OF A PRODUCT WILL BE USED UP BEFORE DISPOSING OF THE CONTAINER. MANUFACTURERS' RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED. THE SITE SUPERINTENDENT WILL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS ONSITE.

HAZARDOUS PRODUCTS:

THE FOLLOWING PRACTICES ARE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS. ALL PRODUCTS ARE TO BE KEPT IN ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE. ORIGINAL LABELS AND MATERIAL SAFETY DATA MUST BE RETAINED AS THEY CONTAIN IMPORTANT PRODUCT INFORMATION. IF SURPLUS PRODUCT MUST BE DISPOSED OF, MANUFACTURERS' OR LOCAL, STATE, AND FEDERAL RECOMMENDED PROCEDURES FOR PROPER DISPOSAL SHALL BE FOLLOWED.

PRODUCT SPECIFIC PRACTICES

THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED WHILE ONSITE:

PETROLEUM PRODUCTS – ALL ONSITE VEHICLES WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS MUST BE STORED IN APPROVED SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ONSITE ARE TO BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.

FERTILIZERS – FERTILIZERS USED SHALL BE APPLIED IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER WILL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORM WATER. STORAGE OF ALL MATERIAL SHALL BE IN A COVERED SHED. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER MUST BE TRANSFERRED TO A SEALABLE CONTAINER, MADE OF A SUITABLE MATERIAL TO PREVENT SPILLS.

PAINTS – ALL CONTAINERS SHALL BE TIGHTLY SEALED AND PROPERLY STORED WHEN NOT IN USE. EXCESS PAINT IS NOT BE DISCHARGED TO THE STORM SEWER SYSTEM, BUT PROPERLY DISPOSED OF ACCORDING TO MANUFACTURERS' INSTRUCTIONS OR STATE, LOCAL, OR FEDERAL REGULATIONS.

CONCRETE TRUCKS – CONCRETE TRUCKS MAY WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE SITE AT DESIGNATED CONCRETE WASHOUT AS ON SHEET 0014.

SPILL CONTROL PRACTICES:

IN ADDITION TO THE GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN PREVIOUS SECTIONS OF THIS PLAN, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP.

- THE MANUFACTURERS' RECOMMENDED METHODS FOR SPILL CLEANUP MUST BE POSTED AT ALL TIMES AND SITE PERSONNEL SHALL BE AWARE OF THE PROCEDURES AND LOCATION OF INFORMATION AND CLEANUP SUPPLIES.
- THE MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ONSITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUST PANS, MOPS, RAGS, GLOVES, GOGGLES, INDUSTRIAL SPILL ABSORPTION MATERIAL, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- ALL SPILLS ARE TO BE CLEANED UP IMMEDIATELY AFTER DISCOVERY. THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING AND EQUIPMENT TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- TOXIC OR HAZARDOUS MATERIAL SPILLS OR EXPOSURES MUST BE REPORTED TO THE APPROPRIATE AUTHORITIES IMMEDIATELY, REGARDLESS OF SIZE. THE SPILL PREVENTION PLAN SHALL BE UPDATED TO INCLUDE PROCEDURES FOR PREVENTING ANY REOCCURRENCE ALONG WITH PROVEN SUCCESSFUL CLEAN-UP PROCEDURES.
- THE NAMES OF ALL PERSONNEL GIVEN THE RESPONSIBILITY OF HAZARDOUS MATERIAL CLEANUPS SHALL BE POSTED IN THE MATERIAL STORAGE AREA AND IN THE CONSTRUCTION OFFICE.

NOTES ABOUT FINAL STABILIZATION

A SITE IS CONSIDERED STABILIZED WHEN ALL OF THE FOLLOWING CRITERIA ARE MET:

- A PERENNIAL, VEGETATED COVER (OR OTHER PERMANENT STABILIZATION PRACTICE) HAS GROWN TO A 75% DENSITY THROUGHOUT THE ENTIRE DISTURBED AREA.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROLS HAVE BEEN REMOVED AND DISPOSED OF PROPERLY.
- ALL TRAPPED SEDIMENT HAS BEEN PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION OR RE-SUSPENSION.
- ALL CONSTRUCTION ACTIVITIES HAVE CEASED.

SEEDING AND MULCHING OF ALL DISTURBED AREAS WHETHER PERMANENT OR TEMPORARY MUST FOLLOW THE FOLLOWING SCHEDULE AS APPLICABLE:

TABLE 1: PERMANENT SEEDING

Area requiring permanent stabilization	Time frame to apply erosion controls
Any area that will lie dormant for one year or more.	Within 7 days of the most recent disturbance.
Any area within 50 feet of a stream and at final grade.	Within 2 days of reaching final grade.
Any area at final grade.	Within 7 days of reaching final grade within that area.

TABLE 2: TEMPORARY SEEDING

Area requiring permanent stabilization	Time frame to apply erosion controls
Any disturbed area within 50 feet of a stream and not at final grade.	Within 2 days of the most recent disturbance, if that area will remain idle for more than 21 days.
For all construction activities, any disturbed area, including stockpiles, that will be dormant for more than 21 days but less than one year, and not within 50 feet of a stream.	Within 7 days of the most recent disturbance within the area.
Disturbed areas that will be idle over the winter.	Prior to November 1.

NOTE: WHERE VEGETATIVE STABILIZATION TECHNIQUES MAY CAUSE STRUCTURAL INSTABILITY OR ARE OTHERWISE UNOBTAINABLE, ALTERNATIVE STABILIZATION TECHNIQUES MUST BE EMPLOYED. THESE TECHNIQUES MAY INCLUDE MULCHING, EROSION MATTING, OR PLACEMENT OF STONE.

PERMANENT SEEDING

DESCRIPTION

PERMANENT SEEDING INCLUDES THE SEEDBED PREPARATION, SEEDING, AND THE ESTABLISHMENT OF PERENNIAL VEGETATION USED TO PERMANENTLY STABILIZE SOIL, PREVENT SEDIMENT POLLUTION, REDUCE RUNOFF BY PROMOTING INFILTRATION, AND PROVIDE STORMWATER QUALITY BENEFITS OFFERED BY DENSE VEGETATION.

PERMANENT SEED MIX SHALL CONFORM TO AEP SPECIFICATIONS. COPIES OF THE SEED MIX SHALL BE SUBMITTED TO THE OWNER FOR APPROVAL.

SPECIFICATIONS FOR PERMANENT SEEDING

SITE PREPARATION

- A SUBSOILER, PLOW OR OTHER IMPLEMENT SHALL BE USED TO REDUCE SOIL COMPACTION AND ALLOW MAXIMUM INFILTRATION. (MAXIMIZING INFILTRATION WILL HELP CONTROL BOTH RUNOFF RATE AND WATER QUALITY.) SUBSOILING SHOULD BE DONE WHEN THE SOIL MOISTURE IS LOW ENOUGH TO ALLOW THE SOIL TO CRACK OR FRACTURE. SUBSOILING SHALL NOT BE DONE ON SLIP-PRONE AREAS WHERE SOIL PREPARATION SHOULD BE LIMITED TO WHAT IS NECESSARY FOR ESTABLISHING VEGETATION.
- THE SITE SHALL BE GRADED AS NEEDED TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION AND SEEDING.
- RESOIL SHALL BE APPLIED WHERE NEEDED TO ESTABLISH VEGETATION.

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ADDENDUM REVISIONS

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JOB NO 13816154

SCALE

GRAPHIC SCALE

STORMWATER POLLUTION PREVENTION PLAN NOTES

COLLINWOOD ARTS DISTRICT AZURE GREEN PARKING LOT

0012

SEEDBED PREPARATION

- LIME--AGRICULTURAL GROUND LIMESTONE SHALL BE APPLIED TO ACID SOIL AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, LIME SHALL BE APPLIED AT THE RATE OF 100 LB. PER 1,000 SQUARE FEET OR 2 TONS PER ACRE.
- FERTILIZER--FERTILIZER SHALL BE APPLIED AS RECOMMENDED BY A SOIL TEST. IN LIEU OF A SOIL TEST, FERTILIZER SHALL BE APPLIED AT A RATE OF 12 LB. PER 1,000 SQUARE FEET OR 500 LB. PER ACRE OF 10-10-10 OR 12-12-12 ANALYSIS.
- THE LIME AND FERTILIZER SHALL BE WORKED INTO THE SOIL WITH A DISK HARROW, SPRING-TOOTH HARROW, OR OTHER SUITABLE FIELD IMPLEMENT TO A DEPTH OF 3 INCHES. ON SLOPING LAND, THE SOIL SHALL BE WORKED ON THE CONTOUR.

SEEDING DATES AND SOIL CONDITIONS

SEEDING SHOULD BE DONE MARCH 1 TO MAY 31 OR AUGUST 1 TO SEPTEMBER 30. THESE SEEDING DATES ARE IDEAL BUT, WITH THE USE OF ADDITIONAL MULCH AND IRRIGATION, SEEDINGS MAY BE MADE ANY TIME THROUGHOUT THE GROWING SEASON. TILLAGE/SEEDBED PREPARATION SHOULD BE DONE WHEN THE SOIL IS DRY ENOUGH TO CRUMBLE AND NOT FORM RIBBONS WHEN COMPRESSED BY HAND. FOR WINTER SEEDING, SEE THE FOLLOWING SECTION ON DORMANT SEEDING.

DORMANT SEEDINGS

- SEEDINGS SHALL NOT BE PLANTED FROM OCTOBER 1 THROUGH NOVEMBER 20 DURING THIS PERIOD. THE SEEDS ARE LIKELY TO GERMINATE BUT PROBABLY WILL NOT BE ABLE TO SURVIVE THE WINTER.
- THE FOLLOWING METHODS MAY BE USED FOR "DORMANT SEEDING":
 - FROM OCTOBER 1 THROUGH NOVEMBER 20, PREPARE THE SEEDBED, ADD THE REQUIRED AMOUNTS OF LIME AND FERTILIZER, THEN MULCH AND ANCHOR. AFTER NOVEMBER 20, AND BEFORE MARCH 15, BROADCAST THE SELECTED SEED MIXTURE. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
 - FROM NOVEMBER 20 THROUGH MARCH 15, WHEN SOIL CONDITIONS PERMIT, PREPARE THE SEEDBED, LIME AND FERTILIZER, APPLY THE SELECTED SEED MIXTURE, MULCH AND ANCHOR. INCREASE THE SEEDING RATES BY 50% FOR THIS TYPE OF SEEDING.
 - APPLY SEED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDRO-SEEDED (SLURRY MAY INCLUDE SEED AND FERTILIZER) ON A FIRM, MOIST SEEDBED.
 - WHERE FEASIBLE, EXCEPT WHEN A CULTIPACKER TYPE SEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A CULTIPACKER ROLLER OR LIGHT DRAG. ON SLOPING LAND, SEEDING OPERATIONS SHOULD BE ON THE CONTOUR WHERE FEASIBLE.

MULCHING

- MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOIL CONDITIONS AND ON VERY FLAT AREAS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION. DORMANT SEEDING SHALL BE MULCHED.
- MATERIALS
 - STRAW--IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 LB. PER 1,000 SQUARE FEET (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND SPREAD TWO 45 LB. BALES OF STRAW IN EACH SECTION.
 - HYDROSEEDERS--IF WOOD-CELLULOSE FIBER IS USED, IT SHALL BE USED AT 2,000 LB. PER ACRE OR 46 LB. PER 1,000 SQUARE FEET.
 - OTHER--OTHER ACCEPTABLE MULCHES INCLUDE MULCH MATTINGS APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS OR WOOD CHIPS APPLIED AT 6 TONS PER ACRE.
- STRAW MULCH ANCHORING METHODS
 - STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.
 - MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.
 - MULCH NETTINGS--NETTINGS SHALL BE USED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. NETTING MAY BE NECESSARY TO HOLD MULCH IN PLACE IN AREAS OF CONCENTRATED RUNOFF AND ON CRITICAL SLOPES.
 - ASPHALT EMULSION--ASPHALT SHALL BE APPLIED AS RECOMMENDED BY THE MANUFACTURER OR AT THE RATE OF 160 GALLONS PER ACRE.
 - SYNTHETIC BINDERS--SYNTHETIC BINDERS SUCH AS ACRYLIC DLR (AGRI-TAC), DCA-70, PETROSET, TERRA TACK OR EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER.
 - WOOD-CELLULOSE FIBER--WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB. PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB. PER 100 GALLONS OF WOOD CELLULOSE FIBER.

WATERING

- PERMANENT SEEDING SHALL INCLUDE WATERING TO ESTABLISH VEGETATION DURING DRY OR HOT WEATHER OR ON ADVERSE SITE CONDITIONS AS NEEDED FOR ADEQUATE MOISTURE FOR SEED GERMINATION AND PLANT GROWTH.
- EXCESSIVE WATERING RATES SHALL BE AVOIDED AND WATERING MONITORED TO PREVENT EROSION AND DAMAGE FROM RUNOFF.

SPECIFICATIONS FOR MAINTENANCE OF PERMANENT SEEDING

- PERMANENT SEEDING SHALL NOT BE CONSIDERED ESTABLISHED FOR AT LEAST 1 FULL YEAR FROM THE TIME OF PLANTING. SEEDING AREAS SHALL BE INSPECTED FOR FAILURE AND VEGETATION REESTABLISHED AS NEEDED. DEPENDING ON SITE CONDITIONS, IT MAY BE NECESSARY TO IRRIGATE, FERTILIZE, OVERSEED, OR REESTABLISH PLANTINGS IN ORDER TO PROVIDE PERMANENT VEGETATION FOR ADEQUATE EROSION CONTROL.
- MAINTENANCE FERTILIZATION RATES SHALL BE ESTABLISHED BY SOIL TEST RECOMMENDATIONS OR BY USING THE RATES SHOWN IN THE FOLLOWING TABLE.

DESCRIPTION

TEMPORARY SEEDING PROVIDES EROSION CONTROL ON AREAS IN BETWEEN CONSTRUCTION OPERATIONS. GRASSES WHICH ARE QUICK GROWING ARE SEEDING AND USUALLY MULCHED TO PROVIDE PROMPT, TEMPORARY SOIL STABILIZATION. IT EFFECTIVELY MINIMIZES THE AREA OF A CONSTRUCTION SITE PRONE TO EROSION AND SHOULD BE USED EVERYWHERE THE SEQUENCE OF CONSTRUCTION OPERATIONS ALLOWS VEGETATION TO BE ESTABLISHED.

Temporary Seeding Species Selection	
Seeding Dates	Species
March 1 to August 15	Oats Tall Fescue Annual Ryegrass
	Perennial Ryegrass Tall Fescue Annual Ryegrass
August 16 to November 1	Rye Tall Fescue Annual Ryegrass
	Wheat Tall Fescue Annual Ryegrass
	Perennial Ryegrass Tall Fescue Annual Ryegrass
November 1 to Spring Seeding	Use mulch only, sodding practices or dormant seeding.

Note: Other approved seed species may be substituted.

SPECIFICATIONS FOR TEMPORARY SEEDING

- STRUCTURAL EROSION AND SEDIMENT--CONTROL PRACTICES SUCH AS DIVERSIONS AND SEDIMENT TRAPS SHALL BE INSTALLED AND STABILIZED WITH TEMPORARY SEEDING PRIOR TO GRADING THE REST OF THE CONSTRUCTION SITE.
- TEMPORARY SEED SHALL BE APPLIED BETWEEN CONSTRUCTION OPERATIONS ON SOIL THAT WILL NOT BE GRADED OR REWORKED FOR 21 DAYS OR MORE. THESE IDLE AREAS SHOULD BE SEEDING AS SOON AS POSSIBLE AFTER GRADING OR SHALL BE SEEDING WITHIN 7 DAYS. SEVERAL APPLICATIONS OF TEMPORARY SEEDING ARE NECESSARY ON TYPICAL CONSTRUCTION PROJECTS.
- THE SEEDBED SHOULD BE PULVERIZED AND LOOSE TO ENSURE THE SUCCESS OF ESTABLISHING VEGETATION. HOWEVER, TEMPORARY SEEDING SHALL NOT BE POSTPONED IF IDEAL SEEDBED PREPARATION IS NOT POSSIBLE.
- SOIL AMENDMENTS--APPLICATIONS OF TEMPORARY VEGETATION SHALL ESTABLISH ADEQUATE STANDS OF VEGETATION WHICH MAY REQUIRE THE USE OF SOIL AMENDMENTS. SOIL TESTS SHOULD BE TAKEN ON THE SITE TO PREDICT THE NEED FOR LIME AND FERTILIZER.
- SEEDING METHOD--SEED SHALL BE APPLIED UNIFORMLY WITH A CYCLONE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. WHEN FEASIBLE, SEED THAT HAS BEEN BROADCAST SHALL BE COVERED BY RAKING OR DRAGGING AND THEN LIGHTLY TAMPED INTO PLACE USING A ROLLER OR CULTIPACKER. IF HYDROSEEDING IS USED, THE SEED AND FERTILIZER WILL BE MIXED ON SITE, AND THE SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

MULCHING TEMPORARY SEEDING

- APPLICATIONS OF TEMPORARY SEEDING SHALL INCLUDE MULCH WHICH SHALL BE APPLIED DURING OR IMMEDIATELY AFTER SEEDING. SEEDINGS MADE DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOIL CONDITIONS AND ON VERY FLAT AREAS MAY NOT NEED MULCH TO ACHIEVE ADEQUATE STABILIZATION.
- MATERIALS:
 - STRAW--IF STRAW IS USED, IT SHALL BE UNROTTED SMALL-GRAIN STRAW APPLIED AT THE RATE OF 2 TONS PER ACRE OR 90 LB. PER 1,000 SQUARE FEET (TWO TO THREE BALES). THE MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FOOT SECTIONS AND SPREAD TWO 45 LB. BALES OF STRAW IN EACH SECTION.
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- STRAW MULCH SHALL BE ANCHORED IMMEDIATELY TO MINIMIZE LOSS BY WIND OR WATER.

ANCHORING METHODS:

- MECHANICAL--A DISK, CRIMPER, OR SIMILAR TYPE TOOL SHALL BE SET STRAIGHT TO PUNCH OR ANCHOR THE MULCH MATERIAL INTO THE SOIL. STRAW MECHANICALLY ANCHORED SHALL NOT BE FINELY CHOPPED BUT, GENERALLY, BE LEFT LONGER THAN 6 INCHES.
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- WOOD-CELLULOSE FIBER--WOOD-CELLULOSE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 LB. PER ACRE. THE WOOD-CELLULOSE FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LB. PER 100 GALLONS.

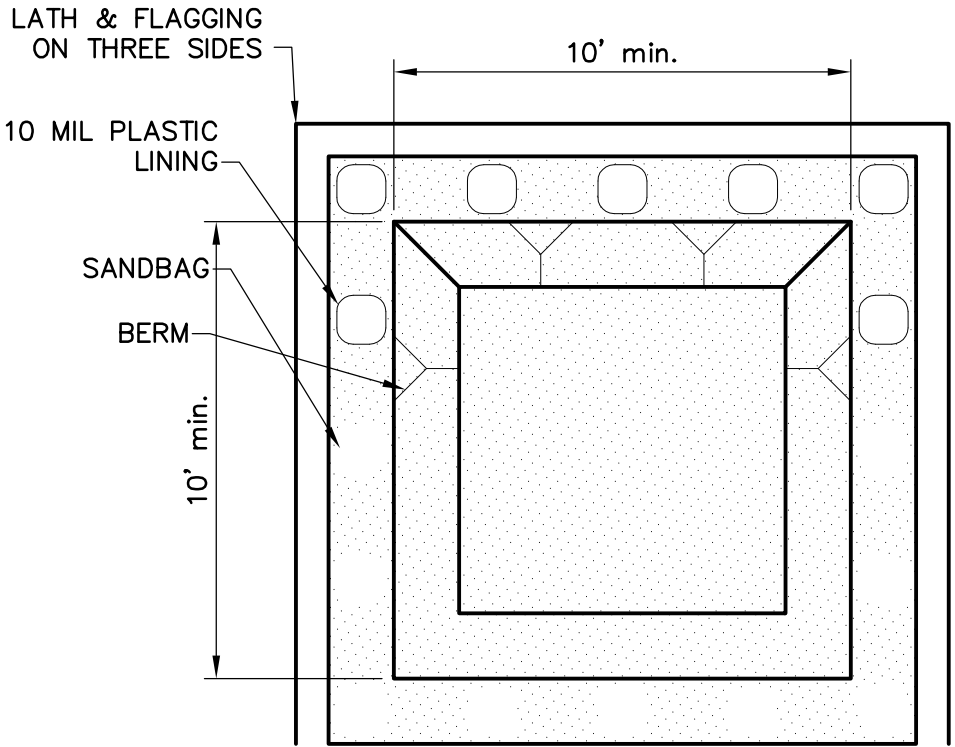
CONCRETE WASHOUT AREA

DESCRIPTION

A CONCRETE WASH OUT AREA IS A STABILIZED LINED COLLECTION AREA WHERE TRUCKS, PANS AND TOOLS CAN BE WASHED OFF AFTER WORKING WITH CONCRETE.

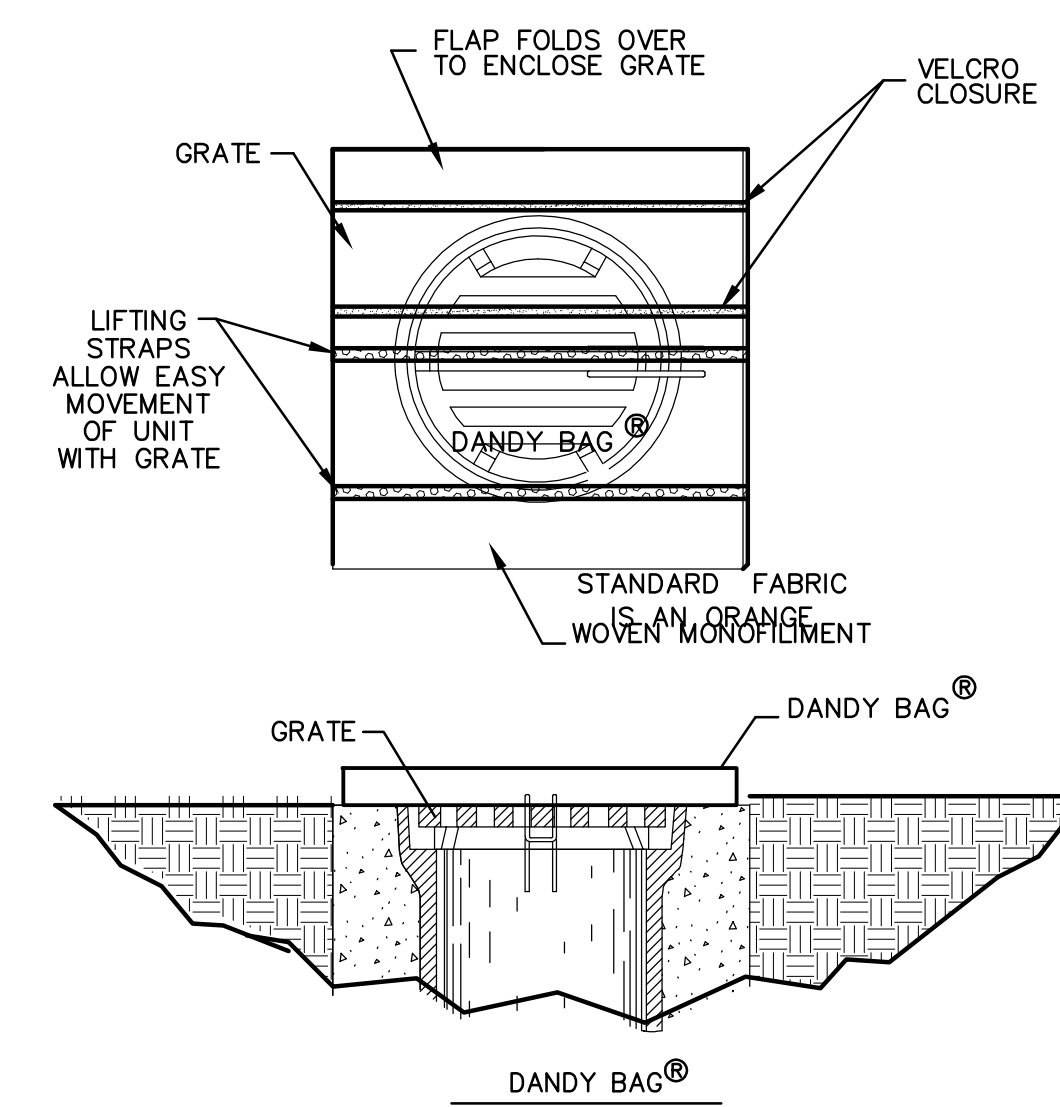
SPECIFICATIONS FOR CONCRETE WASHOUT AREA

- FINAL LOCATION AND SIZE TO BE DETERMINED IN THE FIELD.
- A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE TEMPORARY CONCRETE WASHOUT FACILITY. THE SIGN SHALL BE A MIN. OF 24"x24" WITH 4" MIN. LETTER HEIGHT MOUNTED 72" MIN. ABOVE GRADE.
- THE CONCRETE SHALL BE REPAIRED OR REPLACED AS NECESSARY TO MAINTAIN IT'S FUNCTIONALITY.



INLET PROTECTION

SPECIFICATIONS FOR DANDY BAG®



INSTALLATION AND MAINTENANCE GUIDELINES

LOCATION: TO BE USED ON ALL INLETS OR CATCH BASINS WITHIN KLUSNER AVENUE ROW FROM LYLE AVENUE TO WEST PARKVIEW AVENUE INCLUDING THE CATCH BASINS ALONG PARKVIEW AVENUE AT THE INTERSECTION WITH KLUSNER AVENUE.

INSTALLATION: THE EMPTY DANDY BAG® SHOULD BE PLACED OVER THE GRATE AS THE GRATE STANDS ON END. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN POUCH, ON THE BOTTOM (BELOW-GRADE SIDE) OF THE UNIT. ATTACH ABSORBENT PILLOW TO TETHER LOOP. TUCK THE ENCLOSURE FLAP INSIDE TO COMPLETELY ENCLOSE THE GRATE. HOLDING THE LIFTING DEVICES (DO NOT RELY ON LIFTING DEVICES TO SUPPORT THE ENTIRE WEIGHT OF THE GRATE), PLACE THE GRATE INTO ITS FRAME.

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM SURFACE AND VICINITY OF UNIT AFTER EACH STORM EVENT. REMOVE SEDIMENT THAT HAS ACCUMULATED WITHIN THE CONTAINMENT AREA OF THE DANDY BAG AS NEEDED. IF USING OPTIONAL OIL ABSORBENTS; REMOVE AND REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

SCHEDULE OF CONSTRUCTION ACTIVITY AS (IT RELATES TO SOIL PROTECTION)

THE FOLLOWING IS A GENERAL CONSTRUCTION SCHEDULE AS ESTIMATED BY THE ENGINEER AND BY NO MEANS DICTATES THE CONTRACTOR'S MEANS AND METHODS FOR CONSTRUCTION.

- INSTALL PERIMETER CONTROLS, TDA
- WALK THROUGH WITH CITY
- SITE CLEARING AND GRUBBING START: TDA
- INSTALL EROSION CONTROL BARRIERS WITHIN 7 DAYS TDA
- OF THE START OF CLEARING AND GRUBBING
- MASS SITE GRADING TDA
- TEMPORARY AND PERMANENT SEEDING TDA
- COMPLETION OF SITE CONSTRUCTION TDA
- SITE STABILIZED TDA
- EROSION PROTECTION REMOVED FROM SITE TDA
- SITE OCCUPANCY TDA

TIMING OF CONTROLS / MEASURES

AS INDICATED IN THE SCHEDULE OF CONSTRUCTION ACTIVITIES, STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE, AND INLET PROTECTION WILL BE CONSTRUCTED PRIOR TO CLEARING OR GRADING OF ANY OTHER PORTIONS OF THE SITE. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN 21 DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 7 DAYS OF THE LAST DISTURBANCE. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN AREA, THAT AREA WILL BE STABILIZED WITH PERMANENT SEED AND MULCH.



ISSUED FOR BIDDING _____ DATE _____ BY _____

ADDENDUM REVISIONS

ADDENDUM NO	ADDENDUM DATE	BY

ISSUED FOR CONSTRUCTION _____ DATE _____ BY _____

CONSTRUCTION REVISIONS

NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS _____ DATE _____ BY _____

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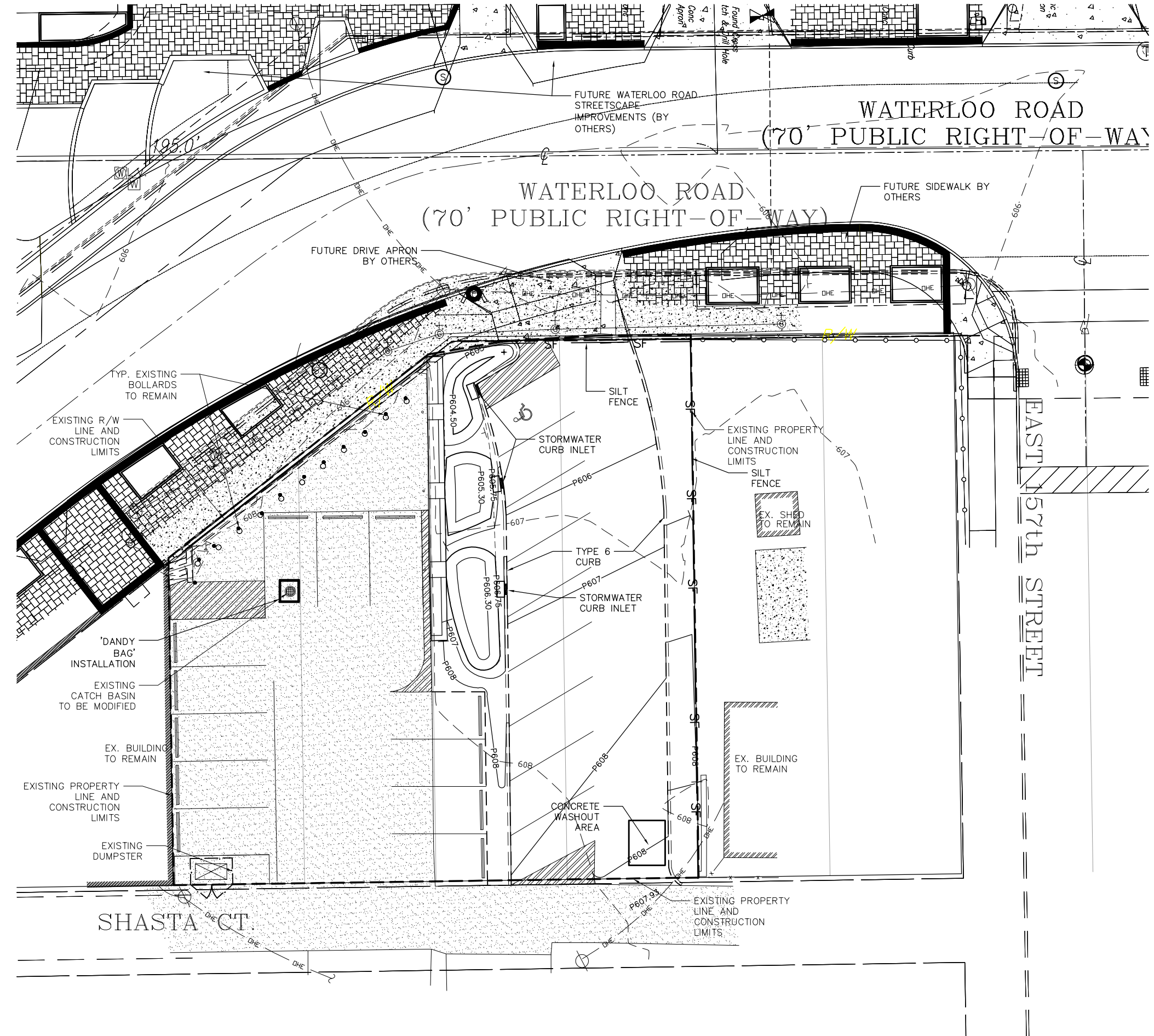
SCALE

GRAPHIC SCALE

STORMWATER POLLUTION PREVENTION PLAN NOTES

COLLINWOOD ARTS DISTRICT AZURE GREEN PARKING LOT

0013



- LEGEND**
- MON. [M] IRON PIN MONUMENT BOX FOUND
 - [T] TREES
 - [B] BOLLARD
 - [G] GAS VALVE
 - [U] UTILITY POLE
 - [L] LIGHT POLE
 - [H] HYDRANT
 - [WV] WATER LINE VALVE
 - [WM] WATERMANHOLE
 - [CB] CATCH BASIN
 - [M] MANHOLE
 - [SM] STORM MANHOLE
 - [X-X] FENCE
 - [100] CONTOUR
 - [---] PROPERTY LINE
 - [---] CONSTRUCTION LIMITS
 - [SF] SILT FENCE
 - [P100] PROP. CONTOUR

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ADDENDUM REVISIONS

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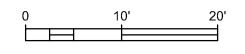
CONSTRUCTION REVISIONS

NO.	DESCRIPTION	DATE	BY

RECORD DRAWINGS DATE BY

NO.	DESCRIPTION	DATE	BY

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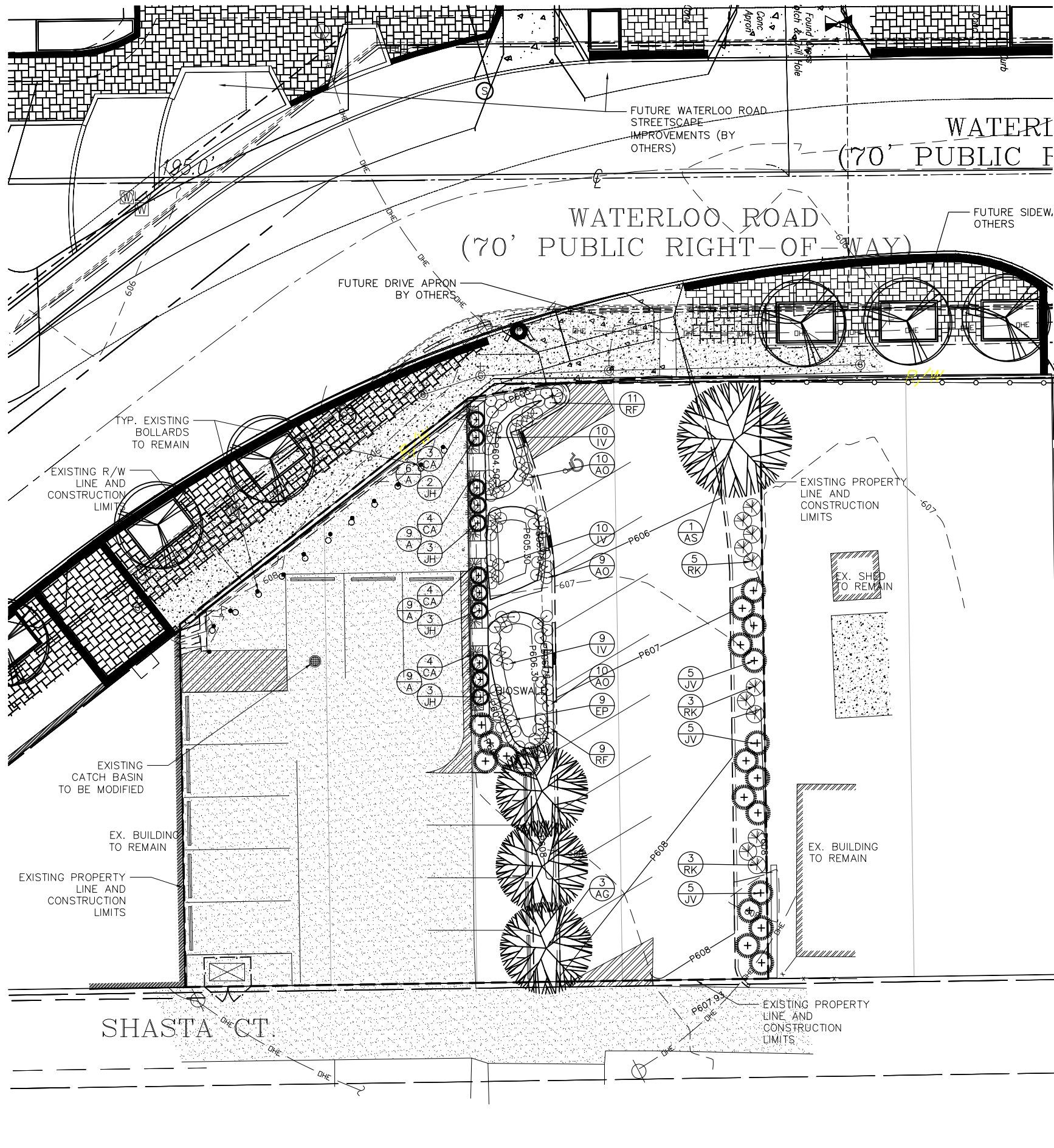


STORMWATER POLLUTION PREVENTION PLAN

COLLINWOOD ARTS DISTRICT
 AZURE GREEN PARKING LOT

0014





PLANT LIST					
QTY	SYM	SCIENTIFIC NAME	COMMON NAME	SIZE/ROOT	COND
3	AG	AMELANCHIER X GRANDIFLORA 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY (TREE FORM)	1.5" CAL.	B&B
1	AS	ACER SACCHARUM 'GREEN MOUNTAIN'	GREEN MOUNTAIN SUGAR MAPLE	2" CAL.	B&B
11	JH	JUNIPERUS HORIZONTALIS 'BLUE CHIP'	BLUE CHIP JUNIPER	NO. 3	CONT.
15	JV	JUNIPERUS VIRGINIANA 'GREY OWL'	GREY OWL JUNIPER	24" HT.	B&B
17	RK	ROSA 'KNOCK OUT'	KNOCK OUT SHRUB ROSE	NO. 3	CONT.
29	AO	ASTER OOLENTANGENSIS	SKY BLUE ASTER	NO. 1	CONT.
15	CA	CALAMAGROSTIS ACUTIFLORA KARL FOERSTER	FEATHER REED GRASS	NO. 2	CONT.
9	EP	ECHINACEA PURPUREA	PURPLE CONE FLOWER	NO. 2	CONT.
29	IV	IRIS VERSICOLOR	BLUE FLAG IRIS	NO. 1	CONT.
20	RF	RUDBECKIA FULGIDA 'GOLDSTRUM'	BLACKED EYED SUSAN	NO. 2	CONT.
27	A	ALLIUM SPP.	ALLIUM	BULB	--



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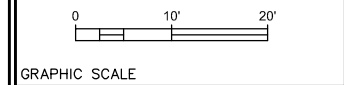
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LEGEND

- MON. [M] IRON PIN MONUMENT BOX FOUND
- TREES
- BOLLARD
- GAS VALVE
- UTILITY POLE
- LIGHT POLE
- HYDRANT
- WATER LINE VALVE
- WATERMANHOLE
- CATCH BASIN
- MANHOLE
- STORM MANHOLE

- FENCE
- CONTOUR
- PROPERTY LINE
- CONSTRUCTION LIMITS
- PROP. CONTOUR
- WATERLOO STREETSCAPE (BY OTHERS)
- PROPOSED TREES

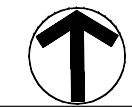
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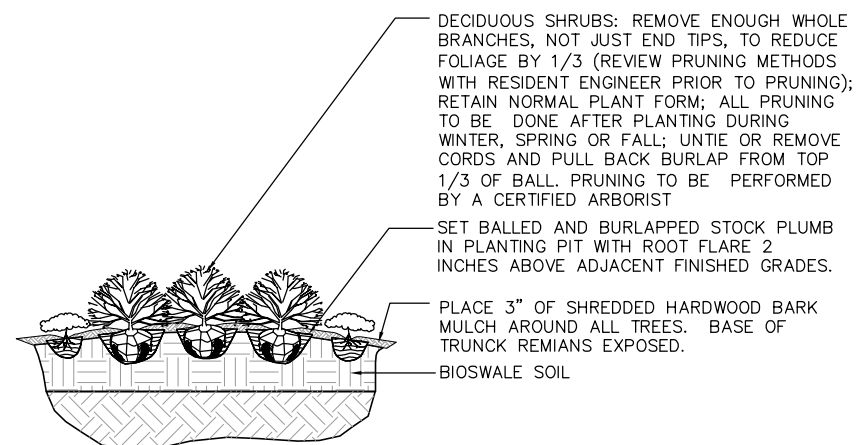


LANDSCAPING PLAN

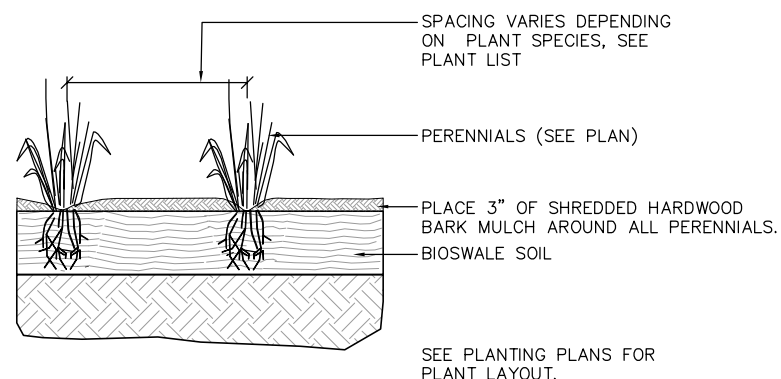
COLLINWOOD ARTS DISTRICT
 AZURE GREEN PARKING LOT

0015

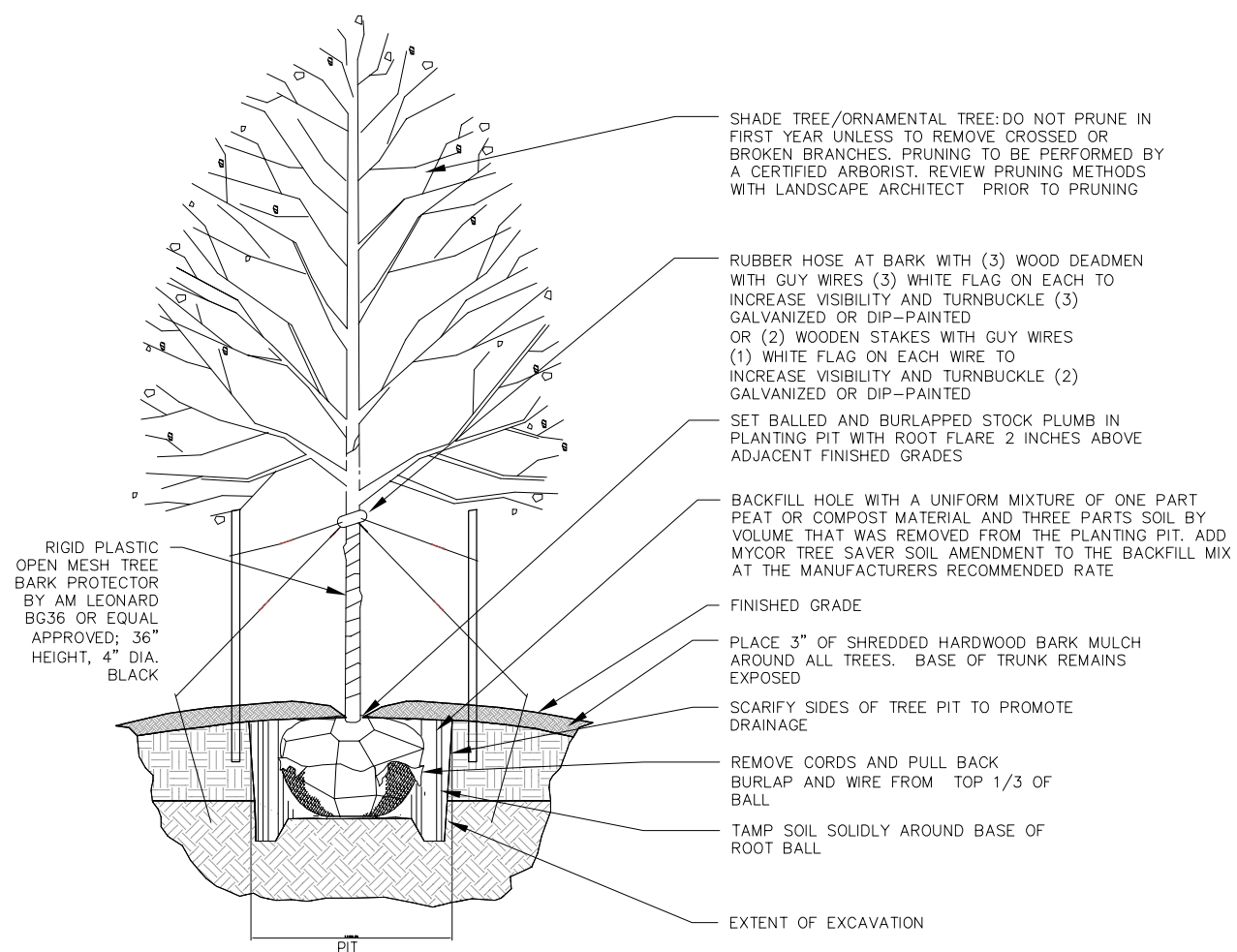




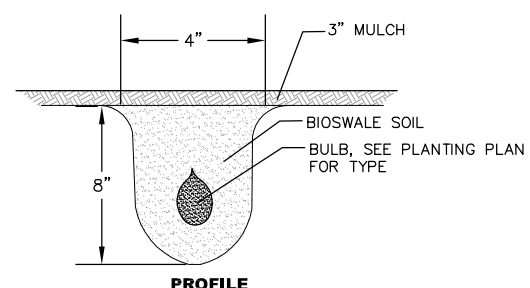
1 DECIDUOUS SHRUBS, TYP.
NTS



2 PERENNIALS, TYP.
NTS



3 DECIDUOUS TREE, TYP.
NTS



4 BULBS, TYP.
NTS

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SCALE

GRAPHIC SCALE

LANDSCAPE DETAILS

COLLINWOOD ARTS
DISTRICT
AZURE
GREEN PARKING LOT

0016