

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements



MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF HOUSING & COMMUNITY AFFAIRS

INVITATION FOR BIDS #1113990

MCDHCA PROJECT NO. 761100

**MONTGOMERY VILLAGE
AND SOUTH VILLAGE HOMES
LIGHTING AND SITE IMPROVEMENTS**

Issue Date: March 25, 2020

A Pre-Submission Conference is not schedule at this time.

**Due Date: May 27, 2020 at 1:00PM at the Office of
Procurement, 255 Rockville Pike, Suite 180, Rockville, MD.
20850.**

**This due date may be subject to change (earlier or later)
depending on changes to the County's operations. A change
would be communicated via a solicitation amendment.**

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

**THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE
HIGHWAY ADMINISTRATION'S
STANDARD SPECIFICATIONS FOR CONSTRUCTION AND
MATERIALS DATED *JULY 2018*
AND REVISIONS THEREOF OR ADDITIONS THERETO
GOVERNS THIS CONTRACT DEVELOPMENT**

MINORITY BUSINESS ENTERPRISES ARE
ENCOURAGED TO RESPOND TO THIS
SOLICITATION NOTICE

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

IFB No. 1113990



MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF HOUSING & COMMUNITY AFFAIRS

INVITATION FOR BIDS #1113990

MCDHCA PROJECT NO. 761100

**MONTGOMERY VILLAGE
AND SOUTH VILLAGE HOMES
LIGHTING AND SITE IMPROVEMENTS**

**THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE
HIGHWAY ADMINISTRATION'S
STANDARD SPECIFICATIONS FOR CONSTRUCTION AND
MATERIALS DATED *JULY 2018*
AND REVISIONS THEREOF OR ADDITIONS THERETO
GOVERNS THIS CONTRACT DEVELOPMENT**

**MINORITY BUSINESS ENTERPRISES ARE
ENCOURAGED TO RESPOND TO THIS
SOLICITATION NOTICE**

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

TABLE OF CONTENTS

	<u>Page Number</u>
INVITATION FOR BIDS FORM	Front Cover
TITLE SHEET	2
TABLE OF CONTENTS.....	5
BIDDERS INFORMATION	11
BID REQUIREMENTS.....	12
MANDATORY SUBMISSIONS	14
OPTIONAL SUBMISSIONS	16
NOTICE TO BIDDERS – MONTGOMERY COUNTY PROCUREMENT REGULATIONS / BID PROTESTS	17
NOTICE TO BIDDERS – NO DAMAGES FOR DELAYS / EXTENSION OF TIME....	18
NOTICE TO BIDDERS – COMMUNICATIONS AND INTERPRETATIONS PRIOR TO BID OPENING	19
NOTICE TO BIDDERS – REVISIONS TO CONTRACT PLAN SHEETS.....	20
NOTICE TO BIDDERS –PEDESTRIAN SAFETY	21
NOTICE TO BIDDERS – TREE PRESERVATION	22
NOTICE TO BIDDERS – MATERIAL SAMPLES / AWARD CONTINGENT ON FUNDING	23
NOTICE TO BIDDERS – PERMIT STREAM RESTRICTIONS / TRAFFIC BARRIER / MCDHCA PRE-CONSTRUCTION MEETING	24
NOTICE TO BIDDERS – PROCEDURE FOR REQUESTING PAYMENT	25
MCDHCA INFORMATION FOR BIDDERS	27
MANDATORY INSURANCE REQUIREMENTS.....	32

TABLE OF CONTENTS

	<u>Page Number</u>
MINORITY BUSINESS PROGRAM AND OFFEROR'S REPRESENTATION	34
MINORITY – OWNED BUSINESS ADDENDUM TO GENERAL CONDITIONS OF CONTRACT BETWEEN COUNTY AND CONTRACTOR	36
MINORITY, FEMALE, DISABLED PERSONS SUBCONTRACTOR PERFORMANCE PLAN.....	37
DELEGATION OF CONTRACT ADMINISTRATION.....	41
CONTRACT PROVISIONS	43
OCCUPYING WETLANDS	44
NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT – NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 IMPLEMENTATION SCHEDULE FOR DEVICES USED IN THE MAINTENANCE OF TRAFFIC	45
TRAFFIC CONTROL PLAN CERTIFICATION.....	47
NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT – HIGH VISIBILITY SAFETY APPAREL POLICY	48
FEDERAL LABOR STANDARD ATTACHMENTS for CDBG/ESG	51
FEDERAL WAGE RATES.....	63
SPECIAL CONTRACT PROVISIONS – PROJECT DESCRIPTION	85
SPECIAL CONTRACT PROVISIONS – SPECIFICATIONS	86
SPECIAL PROVISIONS – RIGHT-OF-WAY STATUS – APPROVAL OF MATERIALS	87
– REQUIRED PERMITS	88

TABLE OF CONTENTS

	<u>Page Number</u>
GENERAL PROVISIONS	90
SP-GP-SECTION 1 – DEFINITIONS AND TERMS MCDHCA Modification	91
SP-GP-SECTION 2 – BIDDING REQUIREMENTS AND CONDITIONS MCDHCA Modification	98
SP-GP-SECTION 3 – AWARD AND EXECUTION OF CONTRACT MCDHCA Modification	101
SP-GP-SECTION 4 – SCOPE OF WORK MCDHCA Modification	102
SP-GP-SECTION 5 – CONTROL OF WORK MCDHCA Modification	103
SP-GP-SECTION 7 – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC MCDHCA Modifications.....	104
SP -GP-SECTION 8 – PROSECUTION AND PROGRESS MCDHCA Modification	112
SP -GP-SECTION 9 – PAYMENT MCDHCA Modification	114
TERMS AND CONDITIONS	116
SP-TC SECTION 1 – REFERENCES AND DEFINITIONS; MCDHCA Modifications.....	117
SP-TC SECTION 2 – BIDDING REQUIREMENTS AND CONDITIONS; MSHA & MCDHCA Modification	119
SP-TC SECTION 3 – SCOPE OF WORK; MCDHCA Modification	120

TABLE OF CONTENTS

	<u>Page Number</u>
SP-TC SECTION 4 – CONTROL OF WORK; MSHA & MCDHCA Modification	121
SP-TC-SECTION 5 – LEGAL RELATIONS AND PROGRESS; MCDHCA Modification	123
SP-TC SECTION 6 – RESTRICTIONS AND PERMITS; MCDHCA Modification	124
SP-TC SECTION 7 – PAYMENT; MSHA & MCDHCA Modification	126
<u>TECHNICAL REQUIREMENTS</u>	128
TABLE OF CONTENTS SPECIAL PROVISIONS, TECHNICAL REQUIREMENTS	130
01100 MEASUREMENT AND PAYMENT; MCDHCA Requirements	132
02050 TEMPORARY FACILITIES; MCDHCA Requirements	144
02100 SITE PREPARATION; MCDHCA Requirements	146
02200 EARTHWORK; MCDHCA Requirements	149
02600 SITE UTILITIES; MCDHCA Requirements	152
02920 TURF AND GRASSES; MCDHCA Requirements	154
02930 EXTERIOR PLANTS; MCDHCA Requirements	160

T A B L E O F C O N T E N T S

	<u>Page Number</u>
03300 CONCRETE; MCDHCA Requirements	172
07900 JOINTS AND SEALANTS; MCDHCA Requirements	176
SHA, CATEGORY 100 – 101 CLEARING AND GRUBBING MSHA Requirements	180
SHA, CATEGORY 100 – 107 CONSTRUCTION STAKEOUT MSHA Requirements	183
SHA, CATEGORY 100 – 108 MOBILIZATION MSHA Requirements	187
SHA, CATEGORY 200 – 201 ROADWAY EXCAVATION, CLASS 1, 1-A AND 2 Special Provisions	188
SHA, CATEGORY 200 – 203 BORROW EXCAVATION Special Provisions	193
SHA, CATEGORY 200 – 204 EMBANKMENT AND SUBGRADE Special Provisions	198
SHA, CATEGORY 200 – 206 REMOVAL OF EXISTING PAVEMENT, SIDEWALK, PAVED DITCHES, CURBS OR COMBINATION CURB AND GUTTER Special Provisions	202
SHA, CATEGORY 300 – 305 MISCELLANEOUS STRUCTURES Special Provisions	203
SHA, CATEGORY 600 – 602 CURB, COMBINATION CURB & GUTTER AND MONOLITHIC MEDIANS Special Provisions	206
SHA, CATEGORY 600 – 603 SIDEWALKS Special Provisions	209
SHA, CATEGORY 600 – 607 CHAIN LINK FENCE Special Provisions	211

TABLE OF CONTENTS

	<u>Page Number</u>
SHA, CATEGORY 600 – 611 DETECTABLE WARNING SURFACE Special Provisions.....	214
SHA, CATEGORY 700 – 701 SUBSOIL AND TOPSOIL MSHA Requirements	215
SHA, CATEGORY 700 – 708 TURFGRASS SOD ESTABLISHMENT MSHA Requirements	220
SHA, CATEGORY 800, 806 & 808 – STREETLIGHT, LUMINAIRES AND LIGHTING STRUCTURES MDSA & MCDOT Special Provisions.....	225
SHA, CATEGORY 800 – 813 SIGNS MSHA Requirements.....	233
SHA, CATEGORY 900 - 902 PORTLAND CEMENT CONCRETE & RELATED PRODUCTS MSHA & MCDHCA Requirements	235
SHA, CATEGORY 900 – 914 CHAIN LINK FENCE MSHA & MCDHCA Requirements	254
SHA, CATEGORY 900 – 925 DETECTABLE WARNING SURFACES MSHA & MCDHCA Requirements	255
BID AND SCHEDULE OF PRICES	258
INVITATION FOR BIDS TO MONTGOMERY COUNTY	259
SCHEDULE OF PRICES – TOTAL BASE BID PRICE	261
SCHEDULE OF PRICES	262
MCDHCA EXPERIENCE AND EQUIPMENT CERTIFICATION.....	276
CONTRACT AND BONDS	283
STANDARD FORM OF AGREEMENT	284
PERFORMANCE BOND.....	288
LABOR AND MATERIAL PAYMENT BOND.....	290

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

BIDDERS

INFORMATION

**MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF HOUSING & COMMUNITY AFFAIRS
DIVISION OF COMMUNITY DEVELOPMENT
IFB NO. #1113990**

BID REQUIREMENTS

Your bid is to be returned in a sealed envelope that should be at least 9-1/2" x 12-1/2" in size, and is to be clearly marked with the IFB number, the Opening Date, and the Opening Time. The County will not be responsible for premature or late opening of a bid that is improperly addressed or identified. Bids must be received at the Office of Procurement, Rockville Center, 255 Rockville Pike, Suite 180, Rockville, MD 20850-4166 prior to the date and time specified in the attached solicitation.

The County will not accept bids it receives by fax or email. All faxed or emailed bids will be returned to the bidder.

All Bids must be made in ink upon the Schedule of Prices, must give the unit price and extension for each item of the proposed work, and must be signed in ink by the bidder with his/her name and address on pages (259), (260) and (261). Each Bid must be enclosed in a sealed envelope marked:

INVITATION FOR BIDS NO. #1113990

The IFB must be delivered, either by mail or otherwise by the time and date shown in the Notice to Vendors. Bids received after the time specified will not be considered and will be returned unopened to the Bidder.

INVITATION FOR BIDS MADE ON ANY OTHER THAN THE ATTACHED FORMS WILL NOT BE CONSIDERED. CHANGES IN THE PHRASEOLOGY OF THE INVITATION FOR BIDS, ADDITIONS OR LIMITING PROVISIONS, OMISSION OF REQUIRED SIGNATURES MAY RENDER THE BID NON-RESPONSIVE AND MAY CAUSE ITS REJECTION.

The County reserves the right to accept or reject any or all Bids and to waive minor irregularities; and to award the contract in the best interest of the County.

The successful bidder will be required to be bonded to the County for a sum of 95 percent of the total amount of his/her Bid, for performance bond and labor and material payment bond according to the form of bond(s) hereto attached.

1. BID GUARANTEE

A Bid Guarantee (Bid Bond, Certified Treasurer's Check, or Irrevocable Letter of Credit), **must be enclosed and accompany each Bid in the amount of five percent (5%) of the Total Base Bid**, and be duly executed by the Bidder as a principle, and made payable to Montgomery County. Bid Guarantees, other than Bid Bonds, will be returned to all except the three (3) lowest bidders within fifteen (15) days after the formal opening of Bids, and the remaining Guarantees will be returned to the three lowest bidders within five (5) days after the County and the accepted Bidder(s) have executed the contract(s). If no contract has been executed within the time specified herein, the Bidder may request the return of the Bid Guarantee. The County reserves the right of approval of any instrument offered as a Bid Guarantee.

PERFORMANCE BOND

The Contract is not valid until and unless the County receives a duly executed Performance Bond (or Certified Treasurer's Check or Irrevocable Letter of Credit) that is in an approved form, in the amount of ninety-five percent (95%) of the Total Base Bid, and is made payable to Montgomery County, as security for the faithful performance of the Contract and having as surety thereon such surety company or companies as are acceptable to the County and as are authorized to transact business in the State of Maryland. The Contractor must maintain the Performance Bond in full force and effect until the termination of the Contract. The County has the right to approve, disapprove, or require changes to any instrument offered as a Performance Bond. If the County does not approve the Performance Bond, the Contractor has until close of business ten (10) calendar days from the date of disapproval to furnish an acceptable Performance Bond. If not corrected, the County has the option to rescind the recommended award and to commence negotiations with the next highest rated offeror. The Performance Bond must provide assurance of the Contractor's faithful performance and discharge of all duties and responsibilities required by law and/or as provided by the Contract.

PAYMENT BOND

The Contract is not valid until and unless the County receives a duly executed Payment Bond for labor, materials, equipment and services (or Certified Treasurer's Check or Irrevocable Letter of Credit) that is in an approved form, in the amount of ninety-five percent (95%) of the Total Base Bid and is made payable to Montgomery County, as security that guarantees payment to suppliers and subcontractors of the prime contractor of the Contract and having as surety thereon such surety company or companies as are acceptable to the County and as are authorized to transact business in the State of Maryland. The Contractor must maintain the Payment Bond in full force and effect until the termination of the Contract. The County has the right to approve, disapprove, or require changes to any instrument offered as a Payment Bond. If the County does not approve the Payment Bond, the Contractor has until close of business ten (10) calendar days from the date of disapproval to furnish an acceptable Payment Bond. If not corrected, the County has the option to rescind the recommended award and to commence negotiations with the next highest rated offeror. The Payment Bond must provide assurance of the Contractors guaranteed payment to its suppliers and subcontractors of the prime contractor.

MANDATORY SUBMISSIONS

I. BID SUBMISSIONS:

The following checked items are required to be submitted with your bid reply:

One complete copy of this IFB, fully executed and complete in all details. Complete copy includes entire IFB beginning with the front cover sheet and includes pages through .

Installation Schedules

Descriptive Literature

Bid Guarantee 5% As described on page 13

Plans or Drawings

Bid Forms Page Nos. 259 through 260

Schedule of Prices Page Nos. 261 through 275

Failure to submit the mandatory Bid Submission may be cause for your Bid to be deemed non-responsible.

II. PRE-AWARD SUBMISSIONS

The following checked items are required to be submitted within ten (10) working days after the date of the County's written request:

Experience and Equipment Certification Pages 276 through 281

Failure to submit information in a timely manner as indicated may be cause to consider the Bidder non-responsive.

III. AWARD SUBMISSIONS

The following checked items are required to be submitted within ten (10) working days after the date of the County's written notification of Intent to Award a Contract.

Send the following to the Office of Procurement:

- Performance Bond (Required only for bids in excess of \$50,000), see Page No. 13 and Pages 288 through 289
- Labor & Material Payment Bond (Required only for bids in excess of \$50,000), see Page No. 13 and Pages 290 through 292
- Installation Schedules
- Certificate of Insurance, see Page No. 32
- Plans or Drawings
- MCDOT MFD Performance Plan, see pages 37 through 40 (if requested in the Intent to Award Memorandum).

Send the following to the Division of Community Development:

- TCP Certification, see Page No.

Failure to submit information in a timely manner as indicated may be cause to consider the Bidder non-responsible.

IV. FUNDING SOURCE(S)

The following checked items will be the source of funding to construct this project. The contractor must therefore comply with all requirements as per funding source and as noted in these documents.

SPECIFY:

- Federal – Community Development Block Grant (CDBG)
- State - _____
- Local- _____
- Other- _____

OPTIONAL SUBMISSIONS

The following checked items (each of which is described in detail in the Mandatory, General and Special terms and/or Specifications or Scope of Work Sections of the IFB), you are requested to submit with your bid reply.

- Minority Business Program & Offerors Representation, page **34**.
- Minority, Female, Disabled Persons Subcontractor Performance Plan, pages **37** through **40**.

****NOTICE TO BIDDERS****

MONTGOMERY COUNTY PROCUREMENT REGULATIONS

The Montgomery County Procurement Regulations are applicable to this solicitation and any contracts awarded pursuant to this solicitation. Of particular importance is the fact that the notice of a decision to make an award will be accomplished by a posting of the proposed contract awardee on a public list in the Department of General Services, Office of Procurement, Rockville Center, 255 Rockville Pike, Suite 180, Rockville, Maryland. The time period for appeal contained in Section 11B-36 of the Montgomery County Code commences THE DAY FOLLOWING the date of the posting.

It is the responsibility of the offerors to keep informed of the current status of any proposed awardees for contracts in which they are interested as per Section 3.2.2 of the Procurement Regulations.

For information regarding the proposed awardee posted under this bid or any bid issued by the Montgomery County Department of General Services, Office of Procurement, please call 240-777-9907 for a recorded message or send a self-addressed stamped envelope with the bid number if known or a description of the requirement being solicited to: Montgomery County Department of General Services, Office of Procurement, 255 Rockville Pike, Suite 180, Rockville, Maryland 20850-4166.

BID PROTESTS

All protests made pursuant to this solicitation must be in writing and delivered to the Director, Department of General Services: (a) within ten (10) days after the Director, Department of General Services, Office of Procurement, publicly posts the proposed contract award, if the bidder seeks as a remedy the award of the contract or costs under 11B-36(h) of the Montgomery County Code, or (b) before the submission date for bids, if the bidder seeks as a remedy the cancellation or amendment of the solicitation. **Each protest must contain a protest filing fee in the amount of \$500 (US currency); if the fee is paid by check, then the check must be made out to "Montgomery County Government". The Director, Department of General Services, may return the filing fee to the protesting bidder, if the protest is sustained.** The Director, Department of General Services, must dismiss any protest not timely received.

Only a bidder who is "aggrieved" may file a protest. Aggrieved means that the bidder who is filing the protest may be eligible for an award of the contract if the protest is sustained (e.g., a fourth ranked bidder is not aggrieved unless the grounds for a protest, if sustained, would disqualify the top three ranked bidders or would require that the solicitation be reissued).

Each protest must contain the following: identification of the solicitation; the name, address and telephone number of the protesting offeror; a statement supporting that the bidder is aggrieved; and specification of all grounds for the protest, including submission of detailed facts and all relevant documents, citation to relevant language in the solicitation, regulations, or law relied upon; and, all other matters which the bidder contends supports the protest. The burden of production of all relevant evidence, data, and documents, and the burden of persuasion, to support the protest is on the bidder making the protest.

****NOTICE TO BIDDERS****

NO DAMAGES FOR DELAYS

1. No charges or claims for damages may be made by the Contractor or paid to the Contractor for any delay, disruption, inefficiency, interference or hindrance from any cause whatsoever, whether foreseeable or not, including (i) acts or omissions by the County, its agents, employees or consultants, (ii) contract documents that are negligently prepared or contain inaccurate statements, or (iii) force majeure and circumstances beyond the Contractor's control. The sole remedy for delays, disruptions or hindrances will be non-compensable time extensions for completion of the work.

2. The provisions of Paragraph 1, above, do not apply to claims that meet all of the following conditions:
 - (i) The claim arises under a contract awarded under a competitive sealed bid;
 - (ii) The claim is for actual and direct damages incurred as a result of a delay in completing the construction project which is the subject of this contract;
 - (iii) The contract establishes a specific time limit for completing the construction project and the claim is for critical path delays that prevent achievement of substantial completion of the contract within that time limit;
 - (iv) The delay for which damages are claimed is caused by the County; and
 - (v) The delay is not caused by actions taken by the County to protect the public health or safety or to conform to law.

EXTENSION OF TIME

A time extension may be granted only for an excusable delay that is beyond the Contractor's control and occurs without the Contractor's fault or negligence. No time extension will be granted in the absence of a written claim for the time extension. The claim must be received by the Department within 15 days after the date of the alleged cause for extension of time occurred. All claims for a time extension must state specifically the amount of delay that the Contractor believes to have been incurred and must include an analysis of how the delay affects completion of the project. If a claim for a time extension, including the facts and analysis specified above, is not received by the Department within the prescribed time, the claim is waived. No compensation must be paid for any time extensions.

****NOTICE TO BIDDERS****

Prospective bidders shall note that Montgomery County will adhere to the Maryland State Highway Administration Specification GP-2.09 as modified herein:

**GP-2.09 COMMUNICATIONS AND INTERPRETATIONS
PRIOR TO BID OPENING**

Any information regarding the requirements or the interpretation of any provision of the General Provisions, Special Provisions, Special Provision Inserts, Specifications or any part of the bidding documents shall be requested, in writing, from the Construction Section and delivered no later than 10 days prior to the scheduled date of bid opening. Responses to questions or any inquiries having any material effect on the bids shall be made by written amendments, or by written notice sent to all prospective bidders. **DO NOT MAKE VERBAL INQUIRIES.**

All inquiries shall be sent only to:

Cynthia Butler
Montgomery County
Department of Housing and Community Affairs (MCDHCA)
1401 Rockville Pike, 4th Floor
Rockville, Maryland 20852

Fax number 240-777-3653

Email Cynthia.Butler@montgomerycountymd.gov

Inquiries shall include the date of the inquiry, IFB No.1113990, MCDHCA Project No. 761100 and all information pertinent to the inquiry.

Verbal explanations or instructions given by a Montgomery County Employee to an offeror in regard to this solicitation will not be binding on the County. Any information given to an offeror in response to a request will be furnished to all offerors as an amendment to this solicitation, if such information is deemed necessary for the preparation of bids, or if the lack of such information would be detrimental to the uniformed offerors. Such amendments only, when issued by THE DIRECTOR, DEPARTMENT OF GENERAL SERVICES, will be considered as being binding on the County.

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

****NOTICE TO BIDDERS****

REVISIONS TO CONTRACT PLANS

There have been no revisions to the contract plans to date.

**** NOTICE TO BIDDERS ****

PEDESTRIAN SAFETY

Maintaining safe pedestrian traffic around the Limits of Construction and outside of any active work zones is of paramount importance. At no time shall pedestrian traffic be denied travel through areas that are designated as pedestrian access around the project work zone. The Contractor shall provide:

- Alternative pedestrian access around active work zones.
- Barriers of sufficient strength and durability to keep all pedestrian traffic out of harms way.
- This work shall be as specified in the Contract Documents or as directed by the Engineer.

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

****NOTICE TO BIDDERS****

TREE PRESERVATION

Tree Preservation shall be as specified in Section 120 of the Maryland Department of Transportation, State Highway Administration's *Standard Specifications for Construction and Materials* as modified by this Contract Document and as directed by the Engineer.

*****NOTICE TO BIDDERS*****

MATERIAL SAMPLES

On this project, material samples, which are to be tested and approved for use on the project, are to be submitted and delivered to:

Montgomery County
Department of Housing and Community Affairs
1401 Rockville Pike, 4th Floor
Rockville, Maryland 20852

Attn: Ms. Cynthia Butler
Telephone Number: 240-777-3652

between the hours of 8:00 AM and 3:30 PM, Monday through Friday. Each sample must be accompanied by the appropriate form with all necessary information provided. The sample must be handled and delivered in accordance with appropriate specifications. No material shall be introduced into the work until approval of has been obtained. The Montgomery County Department of Transportation and the State Highway Administration reserve the right to completely or partially test any materials for specification compliance.

Sampling shall conform to the MSHA Sample Testing and Frequency Guide unless otherwise directed by the Engineer. All source approvals are made subject to the continuing production of materials conforming to these Specifications. Material sources may be rejected where it is evident that the material tends to be of marginal quality when compared to the Specification limits in any of its specified properties.

THERE SHALL BE NO PAYMENT FOR ANY ITEM THAT HAS UNAPPROVED MATERIAL(S) INCORPORATED INTO THE CONSTRUCTION OF THAT ITEM.

AWARD CONTINGENT ON FUNDING

The award of this contract is contingent on the availability of funds for construction. The project may be delayed or cancelled if construction funding is not available.

*****NOTICE TO BIDDERS*****

PERMIT STREAM RESTRICTIONS

Not Applicable at this time.

MCDHCA PRE-CONSTRUCTION MEETING

Forty-eight (48) hours prior to the commencement of any construction or any land disturbing activity, the Contractor shall conduct a pre-construction meeting with the following member(s):

<u>NAME</u>	<u>TITLE</u>	<u>PHONE NO.</u>	<u>EMAIL</u>
Cynthia Butler	Project Manager	240-777-3652	Cynthia.Butler@montgomerycountymd.gov

****NOTICE TO BIDDERS****

PROCEDURE FOR REQUESTING PAYMENT

The Contractor shall be required to adhere to the following procedure for requesting payments from the Montgomery County Department of Transportation.

- (1) The following sample format or one similar to it shall be used.
- (2) The estimate shall be typed on company letterhead.
- (3) The original and four copies shall be submitted directly Cynthia Butler, DHCA, Division of Community Development, 1401 Rockville Pike, 4th Floor, Rockville, Maryland 20852.
- (4) The Contractors name, MCDHCA CIP Project number, project name, and estimate number shall appear on the top of each page of the estimate; including the signature page.
- (5) Signature page shall include total amount due on the estimate.
- (6) Estimates shall list all items as they appear in the contract documents including change orders.
- (7) Field orders shall appear on the estimates separate from contract items and change orders, and shall have no retention withheld.
- (8) Should you have any questions, call Roselyn Mordecai at (240)777-3640 of the Community Development Division.

SAMPLE OF FORMAT TO BE USED:

CONSTRUCTION COMPANY NAME
STREET ADDRESS
CITY - STATE - ZIP CODE
PHONE NO.

Date _____

Montgomery County, Maryland
Department of Housing and Community Affairs
Community Development Division
1401 Rockville Pike, 4th Floor
Rockville, Maryland 20852

Attn: Ms. Cynthia Butler

Re: MCDOT Project No. _____
Project Name _____

Final Estimate (Use when applicable)
Final Payment (Use when applicable)

Estimate No. _____

ITEM NO.	ITEM DESCRIPTION	CONTRACT QUANTITY	UNIT PRICE	COMPLETED QUANTITY	TOTAL AMOUNT
101	Clearing and Grubbing	Lump Sum	\$00.00	_____ %	\$00.00
201	Class 1 Excavation	XXX CY	\$00.00	XXX	\$00.00

*Refer with Contract Document for
Amount retained.

Total _____
Less (*) Retainage _____
Balance _____
Less Previous Estimates _____
AMOUNT DUE _____

(Use this certification on all estimates but Final Payment)

I hereby certify this invoice is correct for all work performed and all materials furnished and that payment as indicated is due

I hereby certify that payment is due the Contractor for the above items and the quantities in accordance with the Specifications and Contract.

(And the following sentence on Final Payment).

(Use this certification on the Final Payment only).

I further certify that all sub-contractors and suppliers have been paid or will be paid with the proceeds from this Final Payment.

I hereby certify the quantities as shown herein are correct and that construction has been completed in accordance with the Plans and Specifications. I recommend Final Payment as indicated and acceptance of the work performed under this contract.

Construction Company Name

Area Engineer Date

Representative's Name - Title

Date

Construction Engineer Date

MCDHCA INFORMATION FOR BIDDERS

If the bidder whose name is placed on the public award list, fails to execute the contract and/or fails to submit any of the mandatory award submissions hereafter attached, and as herein provided within ten (10) calendar days after the date of the County's written notification of intent to award a contract, the bidder may be ruled non-responsible. The name of the second lowest responsible bidder who submitted a responsible bid, may be placed on the public list and such bidder shall fulfill every stipulation embraced herein as if he/she were the original party whose name was placed on the public list, or the Director of the Department of General Services, may reject all the bids whichever is in the best interest of the County.

Bidders must be prepared to complete the work within the time fixed in the Bid.

Bidders must examine the drawings and specifications carefully and must make a personal examination as to the location and nature of the proposed work. If there is doubt about the meaning or intent of anything shown on the plans or proposed in the specifications, inquiry should be made to Cynthia Butler at cynthia.butler@montgomerycountymd.gov before the bid is submitted. The submission of a bid shall indicate that the bidder thoroughly understands the drawings and the terms of the specifications.

Bidders are especially instructed to fill out the "Extended Price" column and total their bid so that the results to the bidding, barring possible arithmetical errors, will be at once known. Any errors in computations will be corrected by the Department of General Services, Office of Procurement when the bids are received.

The quantities given under the various items of the bid are approximate only and subject to increase or decrease, as provided in the contract, without the changing of the unit prices to be paid for the work, except as provided in GP-4.04 (Variations in Estimated Quantities).

PROOF OF QUALIFICATIONS FOR CONTRACTORS AND SUBCONTRACTORS

(Required for amounts of \$20,000 or more only.)

Bidders and subcontractors who have not previously successfully qualified with Montgomery County Division of Transportation Engineering for work comparable to that contemplated in this bid or who have not performed comparable work for the County within the last two years shall furnish under oath on forms furnished by the County the following proof of qualifications to perform the work specified:

1. Legal Title, Address and Phone Number of Organization.
2. Maryland Representatives Name, Title and Address.
3. Experience of organization and members.
4. Principal comparable projects completed by your organization within the last five years.
5. Answers to questions relating to government work and work performance.
6. Equipment owned, rented or intended to be bought for this project.
7. Answers to questions relative to subletting any portion of the contemplated work.
8. Work presently under contract.
9. Certification of bonding capacity from a reputable bonding agency.

Such proof shall be submitted at the request of the County in the event your organization is low bidder or subcontractor for the low bidder on this solicitation. Failure to submit such proof shall be sufficient cause to reject said bid to perform work as a subcontractor. Bidders and their subcontractors may be required to furnish additional information from that specified above to substantiate proof of qualifications.

The Owner may make such investigation as Owner deems necessary to determine the ability of the Bidder to perform the Work and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner may visit any of the prospective Contractor's places of business to determine the Contractor's ability, capacity, reliability, financial stability, or other factors necessary to perform the Work. The Owner reserves the right to reject the Bid of a Bidder who has previously failed in contracts of a similar nature to perform properly or to complete work in a timely manner; whose proposed subcontractors, suppliers, or sureties have similarly failed to perform properly or timely; or, if investigations show that the Bidder is unable to perform the requirements of the Contract.

LAWS TO BE OBSERVED

The Contractor shall at all times observe and comply with all Federal, State and local laws, ordinances and regulations in any manner affecting the conduct of the work, and shall indemnify and save harmless the County and all of its officers, agents and servants against any claim or liability arising from or based on the violation of any such law, by-law, ordinance, regulation, order or decree whether by the Contractor or his/her subcontractors.

The Contractor shall be cognizant of safety procedures required for working in "Confined Spaces." A "Confined Space" has any or all of the following characteristics: Limited openings for entry and exit, unfavorable natural ventilation, subject to accumulation of toxic or combustible agents and to oxygen deficiency, not designed for continuous worker occupancy. Examples of commonly encountered confined spaces are inlets, manholes, dam risers, pipes and culverts.

The Contractor shall at all times observe and comply with the Safety Code under the provisions of the MARYLAND OCCUPATIONAL SAFETY AND HEALTH ACT, §5-101, *et seq.*, Labor and Employment Article of the Annotated Code of Maryland (2011) and amendments thereto.

ENVIRONMENTAL PROTECTION

The Contractor will be required to comply with all regulations of the County pertaining to environmental control such as Dust Control and Open Fire restrictions adopted under the Air Quality Control Law, Chapter 3 of the Montgomery County Code (2004) as amended, the Erosion and Sediment Control Provisions, both outlined in the General Provisions of this Solicitation; and, the Noise Control Law, Chapter 31B of the Montgomery County Code (2004) as amended. It shall be the responsibility of the Contractor to be knowledgeable and comply with all environmental regulations affecting the conduct of the work.

SPECIFICATION AND STANDARD PLANS

Although this proposed project will be a totally financed and regulated County Project, the specifications governing construction, unless otherwise indicated will be the "Standard Specifications For Construction and Materials", Maryland Department of Transportation State Highway Administration dated July, 2008 and revisions thereof or additions thereto.

All applicable Standard drawings will be those of the Maryland State Highway Administration as amended by Montgomery County, or on occasion, the Federal Government, whichever is specified in the Special Provisions.

INDEMNIFICATION

The Contractor is responsible for any loss, personal injury, death and any other damage (including incidental and consequential) that may be done or suffered by reason of the Contractor's negligence or failure to perform any contractual obligations. The Contractor must indemnify and save the County harmless from any loss, cost, damage, and other expenses, including attorney's fees and litigation expenses, suffered or incurred due to the Contractor's negligence or failure to perform any of its contractual obligations. If requested by the County, the Contractor must pay to defend the County in any action or suit brought against the County arising out of the Contractor's negligence, errors, acts or omissions under this Contract. The negligence of any agent, subcontractor or employee of the Contractor is deemed to be negligence of the Contractor. For purposes of this paragraph, the County requires that the Contractor's indemnification extend to the Contractor's boards, agencies, agents, officials, and employees.

SALES TAX REQUIREMENT

Bidders are reminded to include sales tax as required under §11-220 of the Tax-General Article of the Annotated Code of Maryland (2011):

§11-220. State or political subdivision

(a) Exemption. -- The sales and use tax does not apply to a sale to the State or a political subdivision of the State.

(b) Limitation. -- The exemption under subsection (a) of this section may not be construed to exempt any sale of tangible personal property, otherwise taxable under this title, to a contractor to be used under a contract with the State or a political subdivision of the State for construction, repair, or alteration of real property.

CONTINGENT ITEMS

The Contractor's attention is directed to the items in the Schedule of Prices marked with an asterisk (*). The items so marked are to be considered contingent items, and the quantity may be increased or decreased, or any or all may be deleted in their entirety from the Contract, at the discretion of the Engineer.

Any increase or decrease in the quantity of these items, or their deletion will not be considered justifiable claim for compensation in addition to the Contract unit prices bid in the Bid.

AWARD OF CONTRACT & BID WITHDRAWAL

By submission of an offer under this solicitation, the offeror agrees that the County has 150 days from bid opening in which to determine whether the County will award a contract for the Work. The County reserves the right to reject as non-responsive any offer that specifies less than 150 days of acceptance time.

PERFORMANCE BOND

The low responsive, responsible bidder shall submit Performance Bond and Labor and Material Payment Bond within ten (10) calendar days after receipt of Notice to Award.

STARTING OF PROJECT

The Contractor may not start work under this contract until a Notice to Proceed has been issued by the Montgomery County Department of Housing and Community Affairs (MCDHCA) and a Purchase Order has been executed by the Department of General Services, Office of Procurement. Also the Contractor must give the MCDHCA forty eight (48) hours advance notice before starting work so that inspection may be accomplished prior to and during the completion of the Work.

CERTIFICATION OF PAYMENT TO SUBCONTRACTORS AND SUPPLIERS

The contractor at the time of request for final payment under a contract covered hereunder shall certify in writing that he/she has made payment from proceeds of prior payments, and that he/she will make timely payment from the proceeds of the final payment then due him/her, to his/her subcontractors and suppliers in accordance

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South Village Homes
Lighting and Site Improvements

with his/her contractual arrangements with them and will obtain lien releases from them in conformance with § 9-114 of the Real Property Article of the Annotated Code of Maryland (2011).

TIME IS OF THE ESSENCE

Time is of the essence with respect to the Contractor's performance hereunder.

LIQUIDATED DAMAGES

The contractor hereby acknowledges and agrees that liquidated damages are Six Hundred Dollars (\$600) per Calendar Day for unauthorized extensions of time needed by the Contractor to complete the Work beyond the contracted time of completion for the Work.

MANDATORY INSURANCE REQUIREMENTS

MANDATORY MINIMUM INSURANCE REQUIREMENTS

Montgomery Village and South Village Homes Lighting and Site Improvements – Silver Spring, Maryland

Light poles and luminaires, fencing and site improvements – General Construction

Prior to the execution of the contract by the County, the proposed awardee/contractor and their contractors (sub-contractors) must obtain, at their own cost and expense, the following *minimum* (not maximum) insurance coverage with an insurance company/companies licensed to conduct business in the State of Maryland and acceptable to the Division of Risk Management. This insurance must be kept in full force and effect during the term of this contract, including all extensions. The insurance must be evidenced by a certificate of insurance, and if requested by the County, the proposed awardee/contractor shall provide a copy of the insurance policies and additional insured endorsements. The minimum limits of coverage listed below shall not be construed as the maximum as required by contract or as a limitation of any potential liability on the part of the proposed awardee/contractor to the County nor shall failure to request evidence of this insurance in any way be construed as a waiver of proposed awardee / contractor's obligation to provide the insurance coverage specified. The Contractor's insurance shall be primary.

Commercial General Liability

A minimum limit of liability of **one million dollars (\$ 1,000,000) per occurrence, and two million dollars aggregate**, for bodily injury and property damage coverage including the following coverages:

- Contractual Liability
- Premises and Operations
- Independent Contractors
- Products and Completed Operations

Professional Liability (Errors and Omissions Liability)

The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this contract in an amount of not less than:

Each Claim	\$1,000,000
Annual Aggregate	\$2,000,000

In the event that the professional liability insurance required by this Contract is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Contract; and that either continuous coverage will be maintained or an extended discovery period will be exercised for a period of three (3) years beginning at the time work under this Contract is completed.

Automobile Liability Coverage

A minimum limit of liability of **one million dollars (\$ 1,000,000)**, combined single limit, for bodily injury and property damage coverage per occurrence including the following:

- owned automobiles
- hired automobiles
- non-owned automobiles

Worker's Compensation/Employer's Liability

Meeting all statutory requirements of the State of Maryland Law and with the following minimum Employers' Liability limits:

- Bodily Injury by Accident - \$100,000 each accident**
- Bodily Injury by Disease - \$500,000 policy limits**
- Bodily Injury by Disease - \$100,000 each employee**

Additional Insured

Montgomery County, Maryland, its elected and appointed officials, officers, consultants, agents and employees, must be included as an additional insured on Contractor's commercial general, automobile insurance, and contractor's excess/umbrella insurance if used to satisfy the Contractor's minimum insurance requirements under this contract, for liability arising out of contractor's products, goods and services provided under this contract. The stipulated limits of coverage above shall not be construed as a limitation of any potential liability to Customer and failure to request evidence of this insurance shall in no way be construed as a waiver of Contractor's obligation to provide the minimum insurance coverage specified.

Policy Cancellation

Should any of the above policies be cancelled before the expiration date thereof, written notice must be delivered to the County in accordance with the policy provisions.

Certificate Holder

Montgomery County, Maryland
Department of Housing and Community Affairs / Cynthia Butler
1401 Rockville Pike, 4th Floor
Rockville, Maryland 20852

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

MINORITY BUSINESS PROGRAM & OFFEROR’S REPRESENTATION

It is the policy of the County to recruit actively, minority-owned businesses to provide goods and services to perform governmental functions pursuant to Section 11B-57 of the County Code. Minority-owned businesses are described in County law as Minority/Female/Disabled Person owned businesses (MFD). MFD businesses include certain non-profit entities organized to promote the interests of persons with a disability demonstrating (on a contract by contract basis) that at least 51% of the persons used by the non-profit entity to perform the services or manufacture the goods contracted for by the County, are persons with a disability. MFD firms also include those firms that are 51% owned, controlled and managed by one or more members of a socially or economically disadvantaged minority group, which include African Americans who are not of Hispanic origin, Hispanic Americans, Native Americans, Asian Americans, Women and Mentally or Physically Disabled Persons.

Section 7 - “Minority Contracting”, Montgomery County Procurement Regulations specifies the procedure to be followed and will govern the evaluation of offers received pursuant to this solicitation. A copy of Section 7 of the Procurement Regulations is available upon request.

Prior to awarding contracts with a value of \$50,000 or more, a prospective Contractor must demonstrate that a minimum percentage of the overall contract value as set by the County, will be subcontracted to certified MFD businesses. A decision as to whether the prospective Contractor has demonstrated a good faith effort to meet this subcontracting requirement will be made by the Director, Office of Procurement, or his/her designee, who may waive this requirement.

A sample of the MFD Report of payment Received is attached. This form is mailed to the MFD Subcontractor to complete for documentation of payment by the Prime Contractor. It is not to be completed by the Prime Contractor nor submitted with the MFD Subcontractor Performance Plan.

The Director, Office of Procurement, or his /her designee determines whether a waiver of MFD subcontracting would be appropriate, under Section 7.3.3.5 of the Procurement Regulations.

For further information regarding the MFD Business Program, please contact the MFD Program Manager, Division of Business Relations and Compliance at (240) 777-9912.

Offerors are encouraged (but not required) to complete the following:

I hereby represent that this is a Minority Business firm as indicated below (CIRCLE ONE):

AFRICAN AMERICAN	ASIAN AMERICAN	DISABLED PERSON
FEMALE	HISPANIC AMERICAN	NATIVE AMERICAN

Attach one of the following certification documents from: Maryland Department of Transportation (MDOT); Federal SBA 8(a); MD/DC Minority Supplier Development Council, Women’s Business Enterprise National Council; or City of Baltimore.

PMMD-90 08/17



**Montgomery County MFD Report Of Payments Received For Office Use
Office of Business Relations and Compliance**

SAMPLE ONLY! NOT TO BE USED BY PRIME

MFD Subcontractor Company Name: _____

Prime Contractor Company Name: _____

Contract Number/Title: _____

Project Location: _____

MFD Subcontract Amount: \$: _____

PLEASE READ CAREFULLY BEFORE SIGNING

This certifies that for the month of _____, my company received \$ _____ for work performed, services rendered and/or materials supplied on the above contract.

TOTAL AMOUNT OF SUBMITTED INVOICES TO DATE: \$ _____

TOTAL PAYMENTS RECEIVED TO DATE: \$ _____

Are you experiencing any contract problems with the prime contractor and/or the project? Yes ___ No ___

Comments:

I certify that the above information is true and accurate to the best of my record documentation and knowledge.

(TYPED/PRINTED COMPANY NAME)

(TYPED/PRINTED NAME OF COMPANY OFFICIAL)

(TITLE)

(SIGNATURE OF COMPANY OFFICIAL)

(DATE)

TELEPHONE FAX E-MAIL

Return by: Email – MFD@montgomerycountymd.gov or FAX – 240-777-9952. For assistance, contact the MFD Office at 240-777-9912

Minority-Owned Business Addendum to General Conditions of Contract Between County and Contractor

- A. This contract is subject to the Montgomery County Code and the Montgomery County Procurement Regulations regarding participation in the Minority-Female-Disabled Person (MFD) procurement program.
- B. Contractor must subcontract a percentage goals listed below of the total dollar value of the contract, including all modifications and renewals, to certified minority owned businesses. The MFD subcontracting goal may be waived under appropriate circumstances by submission of a letter to the Minority Business Program Manager. The letter must explain why a waiver is appropriate. The Director of the Office of Procurement or designee may waive, in whole or in part, the MFD subcontracting goal if the Director determines that a waiver is appropriate under Section 7.3.3.5 of the Montgomery County Procurement Regulations. In determining if a waiver should be granted, the Director may require the Contractor to submit additional information; the Director may require the Contractor to submit some or all of this information on forms approved by the Director.

For Goals by each purchasing category, please refer to www.montgomerycountymd.gov/mfd

- C. The attached MFD Subcontractor Performance Plan, which must be approved by the Director, is an integral part of the contract between County and Contractor. In a multi-term contract, Contractor must submit a MFD Subcontract Performance Plan to be in effect for the life of the contract, including any renewal or modification.
- D. Contractor must include in each subcontract with a minority owned business a provision that requires the use of binding arbitration with a neutral arbitrator to resolve disputes between the Contractor and the minority owned business subcontractor. This arbitration provision must describe how the cost of dispute resolution will be apportioned; the apportionment must not, in the judgment of the Director, attempt to penalize a minority owned business subcontractor for filing an arbitration claim.
- E. County approval of the MFD Subcontractor Performance Plan does not create a contractual relationship between the County and the minority owned business subcontractor.
- F. Contractor must notify and obtain prior written approval from the Director regarding any change in the MFD Subcontractor Performance Plan.
- G. Before receiving final payment under this contract, Contractor must submit documentation showing compliance with the MFD Subcontracting Performance Plan. Documentation may include, at the direction of the Director, invoices, copies of subcontracts with minority owned businesses, cancelled checks, affidavits executed by minority owned business subcontractors, waivers, and arbitration decisions. The Director may require Contractor to submit periodic reports on a form approved by the Director. The Director may conduct an on-site inspection for the purpose of determining compliance with the MFD Subcontractor Performance Plan. If this is a multi-term contract, final payment means the final payment due for performance rendered for each term of the contract.

If the Contractor fails to submit documentation demonstrating compliance with the MFD Subcontractor Performance Plan, to the satisfaction of the Director, after considering relevant waivers and arbitration decisions, the Contractor is in breach of this contract. In the event of a breach of contract under this addendum, the Contractor must pay to the County liquidated damages equal to the difference between all amounts the Contractor has agreed under its Plan to pay minority owned business subcontractors and all amounts actually paid minority owned business subcontractors with appropriate credit given for any relevant waiver or arbitration decision. Contractor and County acknowledge that damages which would result to the County as a result of a breach under this addendum are difficult to ascertain, and that the liquidated damages provided for in this addendum are fair and reasonable in estimating the damage to the County of a breach of this addendum by Contractor. In addition, the County may terminate the contract. As the result of a breach under this addendum, The Director of the Office of Procurement must find the Contractor non-responsible for purposes of future procurement with the County for the ensuing three years.

MONTGOMERY COUNTY, MARYLAND
MINORITY, FEMALE, DISABLED PERSON SUBCONTRACTOR
PERFORMANCE PLAN

Contractor's
Name: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Fax Number: _____ Email: _____

CONTRACT NUMBER/PROJECT DESCRIPTION: _____

A. Individual assigned by Contractor to ensure Contractor's compliance with MFD Subcontractor Performance Plan:

Name: _____
Title: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Fax Number: _____ Email: _____

B. This Plan covers the life of the contract from contract execution through the final contract expiration date.

C. The percentage of total contract dollars, including modifications and renewals, to be paid to all certified minority owned business subcontractors, is _____% of the total dollars awarded to Contractor.

D. Each of the following certified minority owned businesses will be paid the percentage of total contract dollars indicated below as a subcontractor under the contract.

I hereby certify that the business(s) listed below are certified by one of the following: Maryland Department of Transportation (MDOT); Federal SBA (8A); MD/DC Minority Supplier Development Council (MSDC); Women's Business Enterprise National Council (WBENC); or City of Baltimore.

A Certification Letter must be attached.

For assistance, call 240-777-9912.

1. Certified by: _____
Subcontractor Name: _____
Title: _____
Address: _____
City: _____ State: _____ Zip: _____
Phone Number: _____ Fax Number: _____ Email: _____

CONTACT PERSON: _____

Circle MFD Type:

- | | | |
|------------------|-------------------|-----------------|
| AFRICAN AMERICAN | ASIAN AMERICAN | DISABLED PERSON |
| FEMALE | HISPANIC AMERICAN | NATIVE AMERICAN |

The percentage of total contract dollars to be paid to this subcontractor :

This subcontractor will provide the following goods and/or services: _____

2. Certified by: _____

Subcontractor Name: _____

Title: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone Number: _____

Fax Number: _____

Email: _____

CONTACT PERSON: _____

Circle MFD Type:

AFRICAN AMERICAN

ASIAN AMERICAN

DISABLED PERSON

FEMALE

HISPANIC AMERICAN

NATIVE AMERICAN

The percentage of total contract dollars to be paid to this subcontractor: _____

This subcontractor will provide the following goods and/or services: _____

3. Certified by: _____

Subcontractor Name: _____

Title: _____

Address: _____

City: _____

State: _____

Zip: _____

Phone Number: _____

Fax Number: _____

Email: _____

CONTACT PERSON: _____

Circle MFD Type:

AFRICAN AMERICAN

ASIAN AMERICAN

DISABLED PERSON

FEMALE

HISPANIC AMERICAN

NATIVE AMERICAN

The percentage of total contract dollars to be paid to this subcontractor: _____

This subcontractor will provide the following goods and/or services: _____

4. Certified By: _____

Subcontractor Name: _____

Title: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone Number: _____ Fax Number: _____ Email: _____

CONTACT PERSON: _____

Circle MFD Type:

- AFRICAN AMERICAN ASIAN AMERICAN DISABLED PERSON
FEMALE HISPANIC AMERICAN NATIVE AMERICAN

The percentage of total contract dollars to be paid to this subcontractor: _____

This subcontractor will provide the following goods and/or services: _____

E. The following language will be inserted in each subcontract with a certified minority owned business listed in D above, regarding the use of binding arbitration with a neutral arbitrator to resolve disputes with the minority owned business subcontractor; the language must describe how the costs of dispute resolution will be apportioned:

F. Provide a statement below, or on a separate sheet, that summarizes maximum good faith efforts achieved, and/or the intent to increase minority participation throughout the life of the contract or the basis for a full waiver request.

G. A full waiver request must be justified and attached.

Full Waiver Approved:

Partial Waiver Approved:

MFD Program Officer Date: _____

MFD Program Officer Date: _____

Full Waiver Approved:

Partial Waiver Approved:

Date: _____

Date: _____

Director
Avinash G. Shetty
Office of Procurement

Director
Avinash G. Shetty
Office of Procurement

The Contractor submits this MFD Subcontractor Performance Plan (Plan Modification No. _____) in accordance with the Minority Owned Business Addendum to General Conditions of Contract between County and Contractor.

CONTRACTOR SIGNATURE

USE ONE:

1. TYPE CONTRACTOR'S NAME: _____

Signature

Typed Name

Date

2. TYPE CORPORATE CONTRACTOR'S NAME: _____

Signature

Typed Name

Date

I hereby affirm that the above named person is a corporate officer or a designee empowered to sign contractual agreements for the corporation.

Signature

Typed Name

Title

Date

APPROVED:

Avinash G. Shetty, Director, Office of Procurement

Date

Section 7.3.3.4(a) of the Procurement Regulations requires:
The Contractor to notify the Director, Department of General Services of any proposed change to the Subcontractor Performance Plan.

DELEGATION OF CONTRACT ADMINISTRATION

Delegation of Contract Administrator Responsibility and Authority. The Director of the Montgomery County Department of General Services hereby delegates to the person identified below the responsibility and authority to perform the functions of the Contract Administrator for this particular agreement

Name: Rogers Stanley, Chief

Telephone Number: 240-777-3633

Organizational Element: Division of Community Development, MCDHCA

This delegation authorizes the Contract Administrator to perform the following functions, in accordance with applicable regulations and procedures commencing on the date that the contract is signed by the Contracting Officer and terminating on the date contractor performance is completed (including final payment) or terminated:

- serve as liaison between the County and Contractor;
- give direction to the Contractor to ensure satisfactory and complete performance, including issuance of field orders;
- monitor and inspect the Contractor's performance to ensure acceptable timeliness and quality;
- serve as records custodian for this contract, including wage requirements;
- accept or reject the Contractor's performance;
- furnish timely written notice of the Contractor's performance failures to the Director, Department of General Services, and to the County Attorney, as appropriate;
- prepare required reports;
- approve or reject invoices for payment;
- recommend contract modifications or terminations to the Director, Department of General Services;
- issue notices to proceed; and
- monitor and verify compliance with any MFD Performance Plan.

The contract administrator is NOT authorized to make determinations (as opposed to recommendations) that alter, modify, terminate or cancel the contract, interpret ambiguities in contract language, or waive the County's contractual rights.

Unless the Director, Department of General Services changes this delegation of authority in writing, no other person is authorized to perform the functions of the Contract Administrator for this particular AGREEMENT.

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

CONTRACT

PROVISIONS



*Maryland Department of Transportation
State Highway Administration*

**CONTRACT PROVISIONS
OCCUPYING WETLANDS**

1 of 1

OCCUPYING WETLANDS

The Contractor is hereby alerted to the importance of preserving wetland areas. The Administration, in conjunction with the various environmental agencies, has developed these Contract Documents so as to minimize or eliminate disturbance and damage to existing wetland areas. In order to accomplish this, the following must be rigidly adhered to:

- (a) Prior to performing any work on the project, the areas of wetland will be identified and marked as directed by the Administration. All personnel of the Contractor or sub-contractors shall be alerted to these designated areas.
- (b) The Contractor or sub-contractors shall not impact any wetland or waterway, whether it be permanently or temporarily unless otherwise stipulated in the permit application and approved as an authorized action by the appropriate regulatory agency. No fill shall be placed in these areas without a permit.
- (c) If a Contractor or sub-contractor has to impact a wetland or waterway that is not covered by an existing wetland permit, they shall immediately notify the Engineer. The Engineer will notify the Environmental Programs Division of the State to determine the extent of any permit modification. At that time the Environmental Programs Division will request a permit modification or submit a permit application.
- (d) If the Contractor impacts any wetland or waterway for which they do not have a wetland permit, they shall be responsible for restoring the wetland areas and possibly mitigating the wetland impacts to the full satisfaction of the environmental agencies, which could include monetary compensation.
- (e) The cost of restoration and mitigation of the impacted areas shall be at no additional cost to the County.

The importance of not abusing the wetland areas cannot be overemphasized. Abuse of wetland areas could jeopardize the operation of the total Contract and could be cause for a shut-down. If a shut-down occurs because of the Contractor's failure to secure the required permits (i.e. the Contractor's method of work includes impacts not approved by previously acquired permits), the Contractor's negligence or operations, all costs and damages to the Contractor and to the County will be at no additional cost to the County. Noncompliance with these requirements will not be considered for an extension of Contract time.



Maryland Department of Transportation
State Highway Administration

CONTRACT PROVISIONS

(NCHRP) REPORT 350 IMPLEMENTATION SCHEDULE

1 of 2

NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT

NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM (NCHRP) REPORT 350 IMPLEMENTATION SCHEDULE FOR DEVICES USED IN THE MAINTENANCE OF TRAFFIC

Except as otherwise specified in this Section, all items for the maintenance of traffic, including those listed under the following categories, shall be crashworthy in conformance with Level 3 or other Level as specified by the Engineer in conformance with the safety crash testing and performance criteria published in the National Cooperative Highway Research Program (NCHRP) Report 350, "Recommended Procedures for the Safety Performance Evaluation of Highway Features." When conformance with NCHRP Report 350 is required, the Contractor shall provide the Engineer with the manufacturers' certifications that the devices comply with the specified criteria.

Unless specifically waived by an attachment to these Contract Provisions, devices must be approved by the Office of Traffic and Safety.

Category 1 Devices

These devices are cones, tubular markers, flexible delineator posts, and drums, all without any accessories or attachments, which are used for channelization and delineation.

Category 2 Devices

These devices are Type I, II, and III barricades; portable sign supports with signs; intrusion alarms; and drums, vertical panels, and cones, all with accessories or attachments.

Category 3 Devices

- (a) Truck Mounted Attenuators (TMAs).
- (b) Temporary Barrier.
 - (1) Concrete Barrier.
 - (2) Traffic Barrier W Beam and Water Filled Barrier.
- (c) Temporary End Treatments.

Category 4 Devices

These devices are area lighting supports, arrow panels, and portable variable message signs that are usually portable or trailer-mounted.



CONTRACT PROVISIONS
(NCHRP) REPORT 350 IMPLEMENTATION SCHEDULE

WORK ZONE DEVICES	IMPLEMENTATION SCHEDULE TO CONFORM TO NCHRP REPORT 350 CRITERIA
<p>CATEGORY 1 Cones, tubular markers, flexible delineator posts, and drums (all without any accessories or attachments)</p>	<p>All devices shall conform to NCHRP Report 350 criteria.</p>
<p>CATEGORY 2 Type I, II, and III barricades; portable signs supports with signs; intrusion alarms; and drums, vertical panels, and cones (all with accessories or attachments)</p>	<p>All devices shall conform to NCHRP Report 350 criteria.</p>
<p>CATEGORY 3 (a) Truck Mounted Attenuators (TMA) (b) Temporary Barriers (1) Concrete Barrier (2) Traffic Barrier W Beam and Water Filled Barrier (c) Temporary End Treatments</p>	<p>All devices shall conform to NCHRP Report 350 criteria.</p>
<p>CATEGORY 4 Portable trailer mounted devices including area lighting supports, arrow panels, and changeable message signs</p>	<p>The Contractor may use devices that do not conform to NCHRP Report 350 criteria, until compliance dates are established. Use of these devices shall comply with the provisions of Part 6 of the MUTCD.</p>



Maryland Department of Transportation
State Highway Administration

CONTRACT PROVISIONS
TRAFFIC CONTROL PLAN CERTIFICATION

1 of 1

TRAFFIC CONTROL PLAN CERTIFICATION

PRIOR TO THE COMMENCEMENT OF WORK ON THIS PROJECT, THE SUCCESSFUL BIDDER WILL BE REQUIRED TO COMPLETE A TRAFFIC CONTROL PLAN CERTIFICATION, CONTAINING THE INFORMATION SHOWN BELOW. THE CERTIFICATION FORM WILL BE PROVIDED TO THE SUCCESSFUL BIDDER UPON AWARD OF THE CONTRACT.

The County's Traffic Control Plan (TCP) has been reviewed and the following course of action shall be followed (check one):

_____ **Option 1**
The TCP is accepted and shall be used on this project.

_____ **Option 2**
The TCP is accepted; however, revisions and/or additions shall be submitted for approval in conformance with the Contract Document's Specifications 104.01.

_____ **Option 3**
The TCP is not accepted and revision shall be submitted for approval in accordance with the Contract Document's Specifications 104.01.

It is understood that the effective implementation of the approved TCP is the responsibility of the Contractor. Minor modifications may be made by the Traffic Manager if field conditions warrant and prior concurrence is obtained from the Engineer. Significant changes to the TCP will be submitted to the Engineer in writing, for approval, in conformance with the Contract Document's Specifications 104.01.

(DATE)

(SIGNATURE)

(PRINTED SIGNATURE)

(TITLE)

CONTRACT PROVISIONS
HIGH VISIBILITY SAFETY APPAREL POLICY

1 of 2

NOTICE TO ALL HOLDERS OF THIS CONTRACT DOCUMENT
HIGH VISIBILITY SAFETY APPAREL POLICY

BACKGROUND. Research indicates that high visibility garments have a significant impact on the safety of employees who work on highways and rights-of-way. In addition, high visibility garments may help to prevent injuries and accidents and to make highway workers more visible to the motoring public, which ultimately improves traffic safety.

STATEMENT OF POLICY.

- (a) The High Visibility Safety Apparel Policy provides a standardized apparel program.
- (b) The program seeks to improve the visibility of all persons who work on County roadways and rights-of-way.
- (c) All apparel shall contain the appropriate class identification label.
- (d) Compliance with this policy is retroactive and becomes effective immediately. All affected employees shall receive high visibility apparel awareness training.

APPLICABILITY. This policy applies to all County employees and all other persons who work on County roadways and rights-of-way. All workers shall wear, at a minimum, Class 2 ANSI/ISEA 107/2004 apparel.

- (a) For County employees, this apparel shall have a fluorescent yellow-green background material color and be the outermost garment worn.
- (b) Retro-reflective material color for County employee apparel shall be silver or white and be visible at a minimum distance of 1,000 feet. The retro-reflective safety apparel shall be designed to clearly recognize and differentiate the wearer from the surrounding work environment. The retro-reflective material may be contrasted by fluorescent orange background material not exceeding one and one half inches on either side of the retro-reflective material.
- (c) For non-County employees, this apparel shall be either fluorescent orange-red or fluorescent yellow-green background material color and be the outermost garment worn.

CONTRACT PROVISIONS
HIGH VISIBILITY SAFETY APPAREL POLICY

2 of 2

- (d) Retro-reflective material color for non-County employee apparel shall either be orange, yellow, white, silver, yellow-green, or a fluorescent version of these colors, and be visible at a minimum distance of 1,000 feet. The retro-reflective safety apparel shall be designed to clearly recognize and differentiate the wearer from the surrounding work environment.

REFERENCES.

- (a) ANSI/ISEA 107/2004 standard – American National Safety Institute/International Safety Equipment Association
- (b) MUTCD 2003 – Manual for Uniform Traffic Control Devices - Sections 6D.03B and 6E.02
- (c) Visibility Research – The VCTR 1989 report concludes that fluorescent colors, when compared with non-fluorescent colors, enhance the daytime conspicuity of worker clothing.

DEFINITIONS.

- (a) Apparel – The outermost high-visibility garment worn by employees who work on Administration highways and rights-of-way.
- (b) Highways – All roads owned by the Maryland Department of Transportation and maintained by the Administration.
- (c) High Visibility – The ability for workers to be distinguishable as human forms to be seen, day and night, at distances that allow equipment operators and motorists to see, recognize, and respond.

THIS POLICY HAS BEEN ADOPTED BY THE MONTGOMERY COUNTY DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS (MCDHCA) FOR THIS PROJECT AND WILL BE STRICTLY ENFORCED ON ALL PERSONS WHO WORK ON AND WITHIN THE LIMITS OF MONTGOMERY COUNTY ROADWAYS, RIGHTS-OF-WAY

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

FEDERAL REQUIREMENTS

(SECTION IV)

(TO BE INCLUDED IN ALL TIERS OF SUBCONTRACTS)

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

FEDERAL LABOR STANDARDS PROVISIONS ATTACHMENTS (DAVIS BACON)
(5/2018)

This packet of Attachments must be included with, applies to, and must be complied with for every federally funded construction related contract and subcontract (with the exceptions noted below). There are a number of requirements for all federally funded construction-based contracts which are listed or synopsized in this document. The full text of these documents is available via the internet from HUD at www.hud.gov. or through your Contract Monitor.

This packet is not intended to replace any of these applicable statutes, regulations or documents. Neither is it intended to provide a “legal interpretation” of them, some of which are fairly complex. It is, instead, designed to assist in identifying, and placing parties on notice of, these requirements in a “plain language” context.

If you are new to, and unfamiliar with, any of these requirements, there are additional step-by-step guides available. These include several Power Point presentations, an illustrated “Davis-Bacon How-To Guide” and other resources. Please contact your Contract Monitor or call 240-777-3685 to get or view these guides. You can also ask any specific questions or get individual training on these requirements by calling the same phone number.

A very brief overview of some of these requirements follows:

“DAVIS BACON WAGE REQUIREMENTS”

This is a term that broadly covers a number of federal requirements that apply to all federally funded construction related projects whose total cost exceeds \$2,000. More detail is included below (please see HUD-4010), but basically you must:

- Submit a weekly certified payroll form (see **FORM A**: Form WH-347 and Form WH-347 Instructions);
- Pay workers on a weekly (not bi-weekly) schedule;
- Pay workers a minimum hourly rate based on their activities that may or not include benefits based on a job-specific Wage Determination included below;
- Pay workers time-and-a-half for all hours over 40 worked in a week;
- Post the Wage Determination and a poster describing workers rights on all job sites;
- Ensure compliance with, and include these requirements in agreements with all, subcontractors;
- Provide weekly signed certified payrolls for all workers on covered jobs; and
- Provide additional reporting information (see **FORM B**: Form 4710 and Form 4710 instructions).

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

MINORITY BUSINESS ENTERPRISE (MBE) REQUIREMENTS

This data is reported on Form HUD-2516 (attached). You must gather and report data for the general contractor and all subcontractors on the project. This data includes:

- The dollar amount and date of the contract or subcontract;
- The type of trade for the contract or subcontract (based on one of ten specific category codes),
- The racial/ethnic data for the contractor or subcontractor (based on one of six specific category codes);
- Whether the contractor or subcontractor is a woman-owned business;
- Whether the listed contractor is a prime contractor or a subcontractor;
- The subcontractor ID number for each prime and subcontractor (usually the federal tax ID number of the business);
- The address of each contractor and subcontractor; and
- Whether the contractor or subcontractor is a Section 3 Business Entity (see immediately following section).

SECTION 3 REQUIREMENTS

“Section 3” (of the Housing and Urban Development Act of 1968) mandates that federally funded construction and related activities take affirmative action to provide employment, training and business opportunities for low-income project area residents and businesses. This data is also reported on Form HUD-2516 (attached). There are specific dollar thresholds that trigger Section 3 but you should assume your project is covered if it is federally funded unless your Contract Monitor advises you otherwise. You are required to report specific information for all covered contracts, and to take specific additional affirmative actions if the dollar value of your contract exceeds \$100,000. If the federal funding is a portion of the overall project cost, the ENTIRE project, regardless of funding sources, is covered.

Generally, the government entity awarding the covered funds, and you as the contractor if the contract value exceeds \$100,000, must:

COMPLIANCE THRESHOLDS:

- Award a minimum of 10% of the total dollar amount of construction contracts or subcontracts to Section 3 Businesses (defined below);
- Award a minimum of 3% of the total dollar amount of non-construction contracts or subcontracts to Section 3 Businesses (defined below); and
- Hire a minimum of 30% of NEW hires on the contract or subcontract that are Section 3 residents (defined below):

OTHER REQUIREMENTS:

- Notify Section 3 Businesses and Residents about business and training opportunities;
- Notify Section 3 Businesses about available contracting opportunities;

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

- Notify all contractors and subcontractors on covered project of their Section 3 responsibilities;
- Include the Section 3 clause and requirements in all contracts and subcontracts;
- Facilitate training of Section 3 Residents and awarding of contracts to Section 3 Businesses;
- Cooperate with local government and HUD to achieve compliance by contractors and subcontractors;
- Ensure all contractors and subcontractors you use are not in violation of Section 3 requirements
[Make sure the contractors you are considering using are eligible – check on <https://www.epls.gov/>];
- Document compliance activities; and
- Provide data and documentation for reports.

DEFINITIONS:

- **Section 3 Business** (certified to have)
 - At least 51% owned by Sec 3 resident, or
 - At least 30% full time employees Sec 3 residents (or were within 3 years of date of first employment), or
 - Evidence of a commitment to subcontract at least 25% of the dollar award to Sec 3 Business Concerns.
- **Section 3 Resident** (certified to be)
 - Sec 3 Resident – a public housing resident or low or very-low income person within the covered assistance area
- **New Hire**
 - A full time employee for a new permanent, temporary or seasonal position created during the expenditure of Sec 3 covered assistance.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

Many of the applicable regulations are referenced or described in a particular section of the Code of Federal Regulations (CFR) at 24 CFR 570: Community Development Block Grants. The following list is directly from the Table of Contents of that regulation. Items that appear in bold type are directly relevant to ALL federally funded construction contracts, unless otherwise noted.

§ Part 35 Lead-based paint. **[Do not disturb surfaces without following appropriate specific safety protocols. Test where required.]**

see [24 CFR 570 Subpart K Table of Contents] Subpart K — Other Program Requirements

§ 570.600 General

§ 570.601 Public Law 88-352 [Title VI of the Civil Rights Act of 1964]; Public Law 90-284 [the Fair Housing Act]; Executive Order 11063 [Equal Opportunity in Housing] **[there is an affirmative mandate to further the Fair Housing Act as amended]**

§ 570.602 Section 109 of the Act **["requiring that no person in the United States shall on the ground of race, color, religion, national origin, sex, age, or handicap be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity funded in whole or in part with community development funds made available pursuant to the Act."]**

§ 570.603 Labor standards. **[all workers on construction projects must be paid at least the hourly Wage Rate specified for the specific project, must be paid at least weekly, and must be paid overtime for hours worked above 40 per week -**

§ 570.604 Environmental standards.

§ 570.605 National Flood Insurance Program.

§ 570.606 Displacement, relocation, acquisition, and replacement of housing.

§ 570.607 Employment and contracting opportunities. **[contractors and subcontractors on federally funded construction contracts must take AFFIRMATIVE ACTION and avoid discrimination in "employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rate of pay, or other forms of compensation and selection for training and apprenticeship." You MUST ensure minority participation in the bidding process and actual contract AWARD phases; mere gestures are NOT ADEQUATE]**

[Section 3] For projects whose total cost exceeds \$100,000 - You are required to make opportunities available for jobs and small local businesses owned by low- moderate-income area residents to participate in the project. This can include such things as hiring and/or providing training to local residents or contractors to work on the project and purchasing materials from local merchants. If your project is located in an area in which this is infeasible, you can also fulfill this requirement by providing these opportunities to such individuals and businesses located elsewhere within Montgomery County. Please

contact your contract manager for additional details. Included with this packet is a summary sheet on 24 CFR 135, Section 3 Clause which describes this general requirement.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

- § 570.608 **LEAD BASE PAINT (For Construction or Rehabilitation)** The use of all lead-base paint is prohibited, and the disturbance of certain existing surfaces which may potentially contain lead paint is subject to HUD Lead-Base Paint Regulations described at 24 C.F.R. §570.608. DHCA and HUD consider reduction of exposure to lead paint hazards a priority. Appropriate certification of all contractors is required. Grantees that disturb, or cause to be disturbed, surfaces potentially containing lead paint products must follow the specific protocols mandated by the state of Maryland and by HUD. Testing, notification and/or abatement may be required. Additional information may be obtained by calling 1-800-424-LEAD.
- § 570.609 Use of debarred, suspended or ineligible contractors or subrecipients.
- § 570.610 Uniform administrative requirements and cost principles.
- § 570.611 Conflict of interest.
- § 570.612 Executive Order 12372. [Intergovernmental Review of Federal Programs]
- § 570.613 Eligibility restrictions for certain resident aliens.
- § 570.614 Architectural Barriers Act and the Americans with Disabilities Act.

Attached please also find:

“**FEDERAL LABOR STANDARDS PROVISIONS**” – [HUD-4010] - document prepared by HUD: overview of the contracting and employment requirements.

“**SECTION 3 CLAUSE**” - from [24 CFR 135] - Employment Opportunities for Businesses and Lower Income Persons In Connection With Assisted Projects.

The **SPECIFIC WAGE RATE** That Applies to **THIS** Project.

FORM A: WH-347

FORM B: HUD 4710

FORM C: HUD 2516

FORM D: HUD-60002

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

Federal Labor Standards Provisions U.S. Department of Housing and Urban Development
Office of Labor Relations (HUD-4010)

(Note: Highlights added for emphasis)

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and **not less often than once a week**, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part Previous editions are obsolete Page 2 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1 of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. **Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid.** Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor **shall submit weekly for each week in which any contract work is performed a copy of all payrolls** to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i) except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this subparagraph for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to HUD or its designee. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

(1) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5(a)(3)(i), and that such information is correct and complete; Previous editions are obsolete Page 3 of 5 form **HUD-4010** (06/2009) ref. Handbook 1344.1 (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) **Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by Previous editions are obsolete Page 4 of 5 form HUD-4010 (06/2009) ref. Handbook 1344.1 the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor **will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 in this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require**, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which the individual is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a **rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.**

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph. Previous editions are obsolete Page 5 of 5 form **HUD-4010** (06/2009) ref. Handbook 1344.1

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, (Public Law 91-54, 83 Stat 96). 40 USC 3701 et seq.

(3) The contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The contractor shall take such action with respect to any subcontractor as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

SECTION 3 CLAUSE
(24 CFR Part 135-38)

All Section 3 covered contracts shall include the following clause (referred to as the Section 3 clause):

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701 u (Section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall to the greatest ex-ten-t feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implements section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers's representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriated action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
- E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of the contract for default, and debarment or suspension from future HUD assisted contracts.
- G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contract and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

GENERAL WAGE DECISION

(for **THIS** project) :

This is the specific listing of minimum wage rates applicable to **THIS** project. (It is not applicable to, and may not be used for, any other project). All pages of this Wage Decision must be prominently displayed in a location readily accessible to all workers on covered projects at all times, and accompanied by the posters previously referenced. **Please carefully review the work classifications listed to ensure there is a category for all persons who will be performing work at the site.** Contact the Contract Monitor administering this grant with any questions or to obtain missing classifications. **If additional classifications are required, it is important to notify the Contract Monitor IMMEDIATELY so that construction is not delayed.**

**THERE SHOULD BE A DATED PROJECT-SPECIFIC
WAGE RATE DETERMINATION FOR THIS PROJECT
ATTACHED IMMEDIATELY FOLLOWING THIS PAGE
- IF NOT, CONTACT THE CONTRACT MONITOR
IMMEDIATELY**

"General Decision Number: MD20200073 01/03/2020

Superseded General Decision Number: MD20190073

State: Maryland

Construction Type: Highway

County: Montgomery County in Maryland.

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.80 for calendar year 2020 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.80 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2020. If this contract is covered by the EO and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must pay workers in that classification at least the wage rate determined through the conformance process set forth in 29 CFR 5.5(a)(1)(ii) (or the EO minimum wage rate, if it is higher than the conformed wage rate). The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/03/2020

SUMD2018-015 07/20/2018

	Rates	Fringes
CARPENTER		
Carpenter.....	\$ 28.36	11.59
Shoring Scaffold Builder....	\$ 26.66	14.70
CEMENT MASON.....	\$ 22.00	2.69
ELECTRICIAN.....	\$ 36.10	16.98
IRONWORKER (Fence Erector).....	\$ 26.38	16.44
IRONWORKER, REINFORCING.....	\$ 31.00	14.96
IRONWORKER, STRUCTURAL.....	\$ 31.50	3.45
LABORER		
Air Tool Operator.....	\$ 20.00	7.26

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South Village
Homes Lighting and Site Improvements

Page 2 of 5

Asphalt Paver.....	\$ 20.00	7.26
Asphalt Raker.....	\$ 21.45	5.05
Blaster-Dynamite.....	\$ 20.00	7.26
Burner.....	\$ 20.00	7.26
Common.....	\$ 21.45	5.05
Concrete Puddler.....	\$ 21.45	5.05
Concrete Surfacers.....	\$ 20.00	7.26
Concrete Tender.....	\$ 21.45	5.05
Concrete Vibrator.....	\$ 21.45	5.05
Density Gauge.....	\$ 21.45	5.05
Fireproofers-Mixer.....	\$ 21.45	5.05
Flagger.....	\$ 21.45	5.05
Grade Checker.....	\$ 21.45	5.05
Hand Roller.....	\$ 21.45	5.05
Hazardous Material Handler..	\$ 20.00	7.26
Jackhammer.....	\$ 21.45	5.05
Landscaping.....	\$ 21.45	5.05
Layout.....	\$ 21.45	5.05
Luteman.....	\$ 21.45	5.05
Mason Tender.....	\$ 20.00	7.26
Mortar Mixer.....	\$ 21.45	5.05
Pipelayer.....	\$ 20.00	7.26
Plasterer-Handler.....	\$ 21.45	5.05
Scaffold Builder.....	\$ 20.00	7.26
Tamper.....	\$ 21.45	5.05
MILLWRIGHT.....	\$ 30.06	15.30
PAINTER: Bridge.....	\$ 36.13	11.49
PILEDRIVERMAN.....	\$ 29.94	10.98
POWER EQUIPMENT OPERATOR		
Asphalt Distributor.....	\$ 21.35	2.37
Backhoe.....	\$ 30.65	7.60
Boom Truck.....	\$ 26.55	7.60
Broom/Sweeper.....	\$ 22.84	7.90
Bulldozer.....	\$ 24.00	0.46
Concrete Curb and Gutter		
Pan.....	\$ 28.71	a
Concrete Pump.....	\$ 42.55	3.05
Crane.....	\$ 36.92	7.60+a
Drill-Rig.....	\$ 33.19	20.13
Excavator.....	\$ 19.50	3.51+a
Forklift.....	\$ 30.69	20.13
Gradall.....	\$ 32.11	7.60
Guard Rail Post Driver.....	\$ 24.85	5.58
Loader.....	\$ 29.00	7.77
Mechanic.....	\$ 27.40	7.40
Milling Machine.....	\$ 26.55	7.60
Paver.....	\$ 27.00	7.60
Roller-Asphalt.....	\$ 22.84	7.60
Roller-Earth.....	\$ 20.00	3.94
Screed.....	\$ 20.20	6.53
Skid Steer (Bobcat).....	\$ 27.00	4.77
Trencher.....	\$ 30.00	4.02
Vacuum Truck.....	\$ 26.27	
TRUCK DRIVER		
Concrete Pump.....	\$ 26.75	6.15
Dump.....	\$ 19.60	4.36
Dump-Articulating.....	\$ 17.50	3.51
Flatbed.....	\$ 22.36	6.27
Lowboy.....	\$ 23.70	2.52
Tack/Tar Truck.....	\$ 19.81	6.53
Tandem.....	\$ 21.70	2.52
Tractor Trailer.....	\$ 20.14	6.53
Water.....	\$ 19.67	6.53

a. PAID HOLIDAYS: New Year's Day, Memorial Day, July 4th,

Labor Day, Thanksgiving Day and Christmas Day.
b. PAID VACATIONS: Employees with 1 year service-1 week paid vacation; 2 years service-2 weeks paid vacation; 10 years service-3 weeks paid vacation.

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request

review and reconsideration from the Wage and Hour Administrator
(See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the
interested party's position and by any information (wage
payment data, project description, area practice material,
etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an
interested party may appeal directly to the Administrative
Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

- Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

EXCEPTION (CRAFT)	EXPLANATION
REMARKS	
NAME AND TITLE	
SIGNATURE	
THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBCONTRACTOR TO CIVIL OR CRIMINAL PROSECUTION. SEE SECTION 1007 OF TITLE 18 AND SECTION 231 OF TITLE 31 OF THE UNITED STATES CODE.	

Date _____
 I, _____ (Name of Signatory Party) _____ (Title)
 do hereby state:

(1) That I pay or supervise the payment of the persons employed by _____ (Contractor or Subcontractor) on the _____ (Building or Work); that during the payroll period commencing on the _____ day of _____ and ending the _____ day of _____ all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made either directly or indirectly to or on behalf of said _____ (Contractor or Subcontractor) from the full weekly wages earned by any person and that no deductions have been made either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 C.F.R., Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 848, 63 Stat. 108, 72 Stat. 967, 76 Stat. 357, 40 U.S.C. § 3145), and described below:

(2) That any payrolls otherwise under this contract, required to be submitted for the above period are correct and complete, that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:
 (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS
 --- in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in section 4(c) below.

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

FORM A – FORM WH-347 INSTRUCTIONS

Instructions For Completing Payroll Form, WH-347

General: Form WH-347 has been made available for the convenience of contractors and subcontractors required by their Federal or Federally-aided construction-type contracts and subcontracts to submit weekly payrolls. Properly filled out, this form will satisfy the requirements of Regulations, Parts 3 and 5 (29 C.F.R., Subtitle A), as to payrolls submitted in connection with contracts subject to the Davis-Bacon and related Acts.

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction contracts to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction contracts to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) Regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Under the Davis-Bacon and related Acts, the contractor is required to pay not less than prevailing wage, including fringe benefits, as predetermined by the Department of Labor. The contractor's obligation to pay fringe benefits may be met either by payment of the fringe benefits to bona fide benefit plans, funds or programs or by making payments to the covered workers (laborers and mechanics) as cash in lieu of fringe benefits.

This payroll provides for the contractor to show on the face of the payroll all monies to each worker, whether as basic rates or as cash in lieu of fringe benefits, and provides for the contractor's representation in the statement of compliance on the payroll (as shown on page 2) that he/she is paying for fringe benefits required by the contract and not paid as cash in lieu of fringe benefits. Detailed instructions concerning the preparation of the payroll follow:

Contractor or Subcontractor: Fill in your firm's name and check appropriate box.

Address: Fill in your firm's address.

Payroll No.: Beginning with the number "1", list the payroll number for the submission.

For Week Ending: List the workweek ending date.

Project and Location: Self-explanatory.

Project or Contract No.: Self-explanatory.

Column 1 - Name and Individual Identifying Number of Worker: Enter each worker's full name and an individual identifying number (e.g., last four digits of worker's social security number) on each weekly payroll submitted.

Column 2 - No. of Withholding Exemptions: This column is merely inserted for the employer's convenience and is not a requirement of Regulations, Part 3 and 5.

Column 3 - Work Classifications: List classification descriptive of work actually performed by each laborer or mechanic. Consult classification and minimum wage schedule set forth in contract specifications. If additional classifications are deemed necessary, see Contracting Officer or Agency representative. An individual may be shown as having worked in more than one classification provided an accurate breakdown or hours worked in each classification is maintained and shown on the submitted payroll by use of separate entries.

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvments
PROJECT NUMBER: 1113990

Column 4 - Hours worked: List the day and date and straight time and overtime hours worked in the applicable boxes. On all contracts subject to the Contract Work Hours Standard Act, enter hours worked in excess of 40 hours a week as "overtime".

Column 5 - Total: Self-explanatory

Column 6 - Rate of Pay (Including Fringe Benefits): In the "straight time" box for each worker, list the actual hourly rate paid for straight time worked, plus cash paid in lieu of fringe benefits paid. When recording the straight time hourly rate, any cash paid in lieu of fringe benefits may be shown separately from the basic rate. For example, "\$12.25/.40" would reflect a \$12.25 base hourly rate plus \$0.40 for fringe benefits. This is of assistance in correctly computing overtime. See "Fringe Benefits" below. When overtime is worked, show the overtime hourly rate paid plus any cash in lieu of fringe benefits paid in the "overtime" box for each worker; otherwise, you may skip this box. See "Fringe Benefits" below. Payment of not less than time and one-half the basic or regular rate paid is required for overtime under the Contract Work Hours Standard Act of 1962 if the prime contract exceeds \$100,000. In addition to paying no less than the predetermined rate for the classification which an individual works, the contractor must pay amounts predetermined as fringe benefits in the wage decision made part of the contract to approved fringe benefit plans, funds or programs or shall pay as cash in lieu of fringe benefits. See "FRINGE BENEFITS" below.

Column 7 - Gross Amount Earned: Enter gross amount earned on this project. If part of a worker's weekly wage was earned on projects other than the project described on this payroll, enter in column 7 first the amount earned on the Federal or Federally assisted project and then the gross amount earned during the week on all projects, thus "\$163.00/\$420.00" would reflect the earnings of a worker who earned \$163.00 on a Federally assisted construction project during a week in which \$420.00 was earned on all work.

Column 8 - Deductions: Five columns are provided for showing deductions made. If more than five deduction are involved, use the first four columns and show the balance deductions under "Other" column; show actual total under "Total Deductions" column; and in the attachment to the payroll describe the deduction(s) contained in the "Other" column. All deductions must be in accordance with the provisions of the Copeland Act Regulations, 29 C.F.R., Part 3. If an individual worked on other jobs in addition to this project, show actual deductions from his/her weekly gross wage, and indicate that deductions are based on his gross wages.

Column 9 - Net Wages Paid for Week: Self-explanatory.

Totals - Space has been left at the bottom of the columns so that totals may be shown if the contractor so desires.

Statement Required by Regulations, Parts 3 and 5: While the "statement of compliance" need not be notarized, the statement (on page 2 of the payroll form) is subject to the penalties provided by 18 U.S.C. § 1001, namely, a fine, possible imprisonment of not more than 5 years, or both. Accordingly, the party signing this statement should have knowledge of the facts represented as true.

Items 1and 2: Space has been provided between items (1) and (2) of the statement for describing any deductions made. If all deductions made are adequately described in the "Deductions" column above, state "See Deductions column in this payroll." See "FRINGE BENEFITS" below for instructions concerning filling out paragraph 4 of the statement.

Item 4 FRINGE BENEFITS - Contractors who pay all required fringe benefits: If paying all fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor, show the basic cash hourly rate and overtime rate paid to each worker on the face of the payroll and check paragraph 4(a) of the statement on page 2 of the WH-347 payroll form to indicate the payment. Note any exceptions in section 4(c).

Contractors who pay no fringe benefits: If not paying all fringe benefits to approved plans, funds, or programs in amounts of at least those that were determined in the applicable wage decision of the Secretary of Labor, pay any remaining fringe benefit amount to each laborer and mechanic and insert in the "straight time" of the "Rate of Pay" column of the payroll an amount not less than the predetermined rate for each classification plus the amount of fringe

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

benefits determined for each classification in the application wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringe benefits, the overtime rate shall be not less than the sum of the basic predetermined rate, plus the half time premium on basic or regular rate, plus the required cash in lieu of fringe benefits at the straight time rate. In addition, check paragraph 4(b) of the statement on page 2 the payroll form to indicate the payment of fringe benefits in cash directly to the workers. Note any exceptions in section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the covered worker as cash in lieu of fringe benefits. Enter any exceptions to section 4(a) or 4(b) in section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid each worker as cash in lieu of fringe benefits and the hourly amount paid to plans, funds, or programs as fringe benefits. The contractor must pay an amount not less than the predetermined rate plus cash in lieu of fringe benefits as shown in section 4(c) to each such individual for all hours worked (unless otherwise provided by applicable wage determination) on the Federal or Federally assisted project. Enter the rate paid and amount of cash paid in lieu of fringe benefits per hour in column 6 on the payroll. See paragraph on "Contractors who pay no fringe benefits" for computation of overtime rate.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvments**
PROJECT NUMBER: 1113990

FORM B – FORM - 4710

Agency Name:	Agency Type: [e.g., CDBG, PHA, TDHE/IHA]	State:	LR2000 Agency ID #: (HUD Use Only)
Period Covered: Check One and Enter Year(s)			
<input type="checkbox"/> Period 1: October 1, ____ to March 31, ____		<input type="checkbox"/> Period 2: April 1, ____ to September 30, ____	
Agency Contact Person:		Agency Contact Phone/E-mail:	

PART I - CONTRACTING ACTIVITY*

Pertains ONLY to projects awarded during the reporting period.

1. Number of prime contracts subject to the Davis-Bacon and Related Acts (DBRA) and/or the Contract Work Hours and Safety Standards Act (CWHSSA) awarded this period

Note: Do not include contracts included in previous semi-annual reports

2. Total dollar amount of prime contracts reported in item 1 above

3. List for each contract awarded this period:

Project	Contract	Wage Decision Number	Wage Decision Lock-In Date
<i>Name/Number</i>	<i>Amount</i>		
<i>EXAMPLE:</i> "Boy's Club Renovation # CD54005-65"	"\$0,000,000.00"	"FL040001/Mod 3, 6/25/04, Building"	"07/02/04 bid open date" ◀ Lock

*Use additional pages if necessary



WHAT IS THE LOCK-IN DATE? For contracts entered into pursuant to competitive bidding procedures, the bid opening date "locks-in" the wage decision **provided** that the contract is awarded within 90 days. If the contract is awarded more than 90 days after bid opening, the contract award date 'locks-in' the wage decision. For contracts, purchase orders or other agreements for which there is no bid opening or award date, use the construction start date as the lock-in date. However, for projects receiving assistance under Section 8 of the U.S. Housing Act of 1937 or contracts involving a *project* wage determination, the lock-in rules may vary from above. See Department of Labor Regulations, 29 CFR, Part 1, Section 1.6 and/or HUD Handbook 1344.1, or consult the HUD Labor Relations staff.

WHAT IT ISN'T: Do not use the wage decision publication date, unless that happens to correspond to one of the trigger events described above.

If you are not sure about any of this, please feel free to contact the Labor Relations staff in your state or region.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

Agency Name:	Agency Type: [e.g., CDBG, PHA, TDHE/IHA]	State:	LR2000 Agency ID #: (HUD Use Only)
Period Covered: Check One and Enter Year(s)			
<input type="checkbox"/> Period 1: October 1, ____ to March 31, ____		<input type="checkbox"/> Period 2: April 1, ____ to September 30, ____	
Agency Contact Person:		Agency Contact Phone/E-mail:	

PART II - ENFORCEMENT ACTIVITY*

Pertains to all projects, not just contract(s) awarded during the reporting period.

4. Number of employers against whom **complaints** were received (list employers and projects involved below):

Employer	Project(s)
-----------------	-------------------

5. (a) Number of cases (employers) referred to HUD Labor Relations for investigation or §5.11 hearing (list referrals below):

(b) Number of cases (employers) referred to the Department of Labor (DOL) for investigation or §5.11 hearing (list referrals below):

Employer	Project	HUD or DOL	Invest. Or Hearing
-----------------	----------------	-------------------	---------------------------

6. (a) **Number of workers for whom wage restitution was collected/dispursed:**
Report only once; if you previously reported workers for whom restitution was collected, do not report the same workers when funds are dispursed. Include workers to whom restitution was paid directly by the employer.

(b) **Total amount of straight time wage restitution collected/dispursed during this period:**
Report only once; if you report funds collected, do not report the disbursement. Include restitution amounts paid directly by the employer as reported on correction certified payrolls.

	\$
--	----

(c) **Total amount of CWHHSA overtime wage restitution collected/dispursed during this period:**
Report only once; if you report funds collected, do not report the disbursement. Include restitution amounts paid directly by the employer as reported on correction certified payrolls.

	\$
--	----

(d) **Total amount of liquidated damages collected:**

	\$
--	----

* Use additional pages if necessary

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

FORM B – FORM 4710 INSTRUCTIONS

Public reporting burden for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining data needed, and completing and reviewing the collection of information. The information is considered non-sensitive and does not require special protection. This information is required to obtain benefits. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

All Federal agencies administering programs subject to Davis-Bacon wage provisions are required by Department of Labor (DOL) regulations (29 CFR Part 5, Section 5.7(b)) to submit a report of all new covered contracts/projects and all enforcement activities each six months. In order for HUD to comply with this requirement, it must collect contract and enforcement information from local agencies that administer HUD-assisted programs subject to Davis-Bacon requirements. HUD requests that local agencies complete and submit a Semi-annual Enforcement Report each six months.

Local agencies and HUD must retain a copy of the Semi-annual Enforcement Report in its files.

*Please follow these instructions while compiling the **Semi-Annual Labor Standards Enforcement Report for Local Contracting Agencies (HUD Programs) (form HUD-4710)**.*

Introduction

Department of Labor (DOL) Regulations 29 CFR §5.7(b) require Federal agencies administering programs subject to Davis-Bacon and Related Act (DBRA) and Contract Work Hours and Safety Standards Act (CWHSSA) labor standards to furnish a Semi-Annual Labor Standards Enforcement Report to the Administrator of the Wage and Hour Division. Some HUD programs are administered by state and local agencies for labor standards compliance. HUD must collect information from such agencies in order to capture enforcement activities for all HUD programs in its reports to DOL.

Reporting Periods: **Period 1 October 1 through March 31**

Period 2 April 1 through September 30

Report Format: Each agency report consists of two parts:

Part I concerns contracting activity for work awarded during the reporting period;

Part II concerns enforcement activity for all contracts, regardless of the award date.

The HUD Labor Relations staff for your area will send a courtesy reminder shortly before the due date about preparing the report and will remind you of the date your report is due. However, you should maintain accurate records throughout the year of relevant contract information so that you can submit the report timely.

Definitions and Guidance

Part I - Contracting Activity - This part concerns only contracts that were **awarded** during this period. *Do not* include contracts that were awarded prior to this period even though the contracts may still be underway. *Do* include work subject to purchase order or other form of agreement, even if there is no formal contract award.

Item 1. Enter the total number of prime contracts subject to DBRA/CWHSSA **awarded** during this period. Track contracts by award or start of construction - **do not** track by bid opening date. Public Housing Authorities (PHAs), Tribally-designated Housing Entities (TDHEs)/Indian Housing Authorities (IHAs): Include force account work that is subject to DBRA/CWHSSA.

Item 2. Enter the total dollar amount of the contracts and/or PHA/TDHE/IHA force account work reported in Item 1.

Item 3. List each project/contract name, brief descriptive information, number or unique identifier, dollar amount, the wage decision and modification number in the contract, bid opening date, contract award date, and construction start date. Identify which milestone date triggered the wage decision "lock-in" (bid opening date, contract award date or start of construction date, as appropriate). If the project was not subject to sealed bids, indicate "NA" for bid opening date and proceed to identify the other dates.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**

PROJECT NUMBER: 1113990

Part II - Enforcement Activity - This part concerns *all* enforcement activity no matter when the contract was awarded or construction began.

- Item 4.** Enter the number of **employers** (contractors, subcontractors, lower-tier subcontractors) against whom complaints were received during the report period. List the names of the employers against whom complaints were received and the projects involved.
- Item 5.** Enter the number of employers that were referred to HUD Labor Relations or DOL staff for investigations, for hearings on appeal and/or debarment hearings. List the employer, project, and agency (HUD or DOL) to which the case was referred, and the reason for referral - investigation, appeal hearing (DOL Regulations 29 CFR Part 5, Section §5.11) and/or debarment (DOL Regulations 29 CFR Part 5, Section §5.12) hearing.
- Item 6.** Enter information relative to wage restitution that was **collected and/or disbursed** during the report period. This includes restitution disbursed by the agency; restitution reported on certified payroll correction reports, amounts collected but not disbursed because workers could not be found. Report straight time wage restitution separate from Contract Work Hours and Safety Standards Act (CWHSSA) overtime wage restitution. Also list liquidated damages collected for CWHSSA overtime violations.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

FORM C – HUD 2516 (with instructions)

NOTE: The data and instructions for this form are provided below. The format has been modified to enhance readability on letter size paper. A copy of the form follows.

1. Grantee/ProjectOwner/Developer/Sponsor/Builder/Agency
2. Location (City, State, Zip Code)
3. Name of Contact Person & Phone Number (including Area Code)
4. Reporting Period [] Oct 1 – Sep 30 (Annual –FY).
5. Program Code (for Public and Indian Housing Only) (see “5. Program Codes” below)
6. Date Submitted to Field Office.
7. (Tabular Format)
 - 7a. Grant/Project Number or HUD Case Number or other identification of property, subdivision, dwelling unit, etc.
 - 7b. Amount of Contract or Subcontract
 - 7c. Type of Trade Code (see “7c. Type of Trade Codes: Housing/Public Housing below)
 - 7d. Contractor or Subcontractor Business Racial/Ethnic (See “7d: Racial/Ethnic Codes” below)
 - 7e. Woman Owned Business (Yes or No)
 - 7f. Prime Contractor Identification (ID) Number
 - 7g. Section 3 (Yes or No) for Prime Contractor
 - 7h. Subcontractor Identification (ID) Number
 - 7i. Section 3 (Yes or No) for Subcontractor
 - 7j. Contractor/Subcontractor Names and Address

5. Program Codes (Complete for Housing and Public and Indian Housing Programs only):

- 1= All insured, including Section 8
- 2= Flexible Subsidy
- 3= Section 8 Noninsured, Non-HFDA
- 4= Insured (Management)
- 5= Section 202
- 6= HUD-Held (Management)
- 7= Public/India Housing
- 8= Section 811

7c. Type of Trade Codes: Housing/Public Housing

- 1= New Construction
- 2= Substantial Rehab
- 3= Repair
- 4= Service
- 5= Project Management
- 6= Professional
- 7= Tenant Services
- 8= Education/Training
- 9= Arch/Engrg. Appraisal
- 0= Other

7d: Racial/Ethnic Codes

- 1= White Americans
- 2= Black Americans
- 3= Native Americans
- 4= Hispanic Americans
- 5= Asian/Pacific Americans
- 6= Hasidic Jews

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements

PROJECT NUMBER: 1113990

This report is to be completed by grantees, developers, sponsors, builders, agencies, and/or project owners for reporting contract and subcontract activities of \$10,000 or more under the following programs: Community Development Block Grants (entitlement and small cities); Urban Development Action Grants, Housing Development Grants; Multifamily Insured and Noninsured; Public and Indian Housing Authorities,; and contracts entered into by recipients of CDBG rehabilitation assistance.

Contracts/subcontracts of less than \$10,000 need be reported only if such contracts represent a significant portion of your total contracting activity. Include only contracts executed during this reporting period.

This form has been modified to capture Section 3 contract data in columns 7g and 7i. Section 3 requires that the employment and other economic opportunities generated by HUD financial assistance for housing and community development programs shall, to the greatest extent feasible, be directed towards low- and very low-income persons, particularly those who are recipients of government assistance for housing. Recipients using this form to report Section 3 contract data must also use Part I of form HUD-60002 (see **Form D** Attached) to report employment and training opportunities data.

Form HUD-2516 is to be completed for public and Indian housing and most community development programs. Form HUD-60002 is to be completed by all other HUD programs including State administered community development programs covered under Section 3. A Section 3 Contractor/subcontractor is a business concern that provides economic opportunities to low and very low-income residents of the metropolitan area (or nonmetropolitan county), including a business concern that is 51 person or more owned by low-income residents; or provides subcontracting or business development opportunities to businesses owned by low or low-income residents. Low and very low-income residents; include participants in Youth build programs established under Subtitle D of Title IV of the Cranston-Gonzalez National Affordable Housing Act.

The terms “low-income persons” and “very-low-income persons” have the same meanings given the terms in section 3(b)(2) of the United States Housing Act of 1937. Low-income persons means families (including single persons) whose incomes do not exceed 80 per centum of the median income for the area, as determined by the Secretary, with adjustments for smaller and larger families, except that the Secretary may establish income ceilings higher or lower than 80 per centum of the median for the area on the basis of the Secretary’s findings that such variations are necessary because of prevailing levels of construction costs or unusually high or low-income families. Very low-income families (including single persons) whose incomes do not exceed 50 per centum of the median family income for the area, as determined by the Secretary with adjustments for smaller and larger families, except that the secretary may establish income ceilings higher or lower than 50 per centum of the median for the area on the basis of the Secretary’s findings that such variations are necessary because of unusually high or low family incomes.

Submit two (2) copies of this report to your local HUD Office within ten (10) days after the end of the reporting period you checked in item 4 on the front. Complete item 7h. Only once for each contractor/subcontractor on each semi-annual report.

Enter the prime contractor’s ID in items 7f. for all contacts and subcontracts. Include only contracts expected during this reporting period. PHAs/IHAS are to report all contracts/subcontracts.

Community Development Programs Instructions:

1. **Grantee:** Enter the name of the unit of government submitting this report.

3. **Contact Person:** Enter name and phone of person responsible for maintaining and submitting contract/subcontract data.

7a **Grant Number:** Enter the HUD Community Development Block Grant Identification Number (with dashes) For example: B-32-MC-25-0034. For Entitlement Programs and Small City multi-year comprehensive programs, enter the latest approved grant number.

7b. **Amount of Contract/Subcontract:** Enter the dollars amount rounded to the nearest dollar. If subcontractor ID number is provided in 7f, the dollar figure would be for the subcontract only and not for the prime contract.

7c. **Type of Trade:** Enter the numeric codes which best indicates the contractor’s/subcontractor’s service. If subcontractor ID number is provided in 7f., the type of trade code would be for the subcontractor only and not for the prime contractor.

7d. **Business Racial/Ethnic/Gender Code:** Enter the numeric code which indicates the racial/ethnic/gender character of the owner(s) and controller(s) of 51% of the business. When 51% or more is not owned and controlled by any single racial/ethnic/gender category, enter the code which seems most appropriate. If the subcontractor ID number is provided, the code would apply to the subcontractor and not to the prime contractor.

PROJECT NAME: **Montgomery Village and South Village Homes Lighting and Site Improvements**
PROJECT NUMBER: 1113990

7e. **Woman Owned Business:** Enter Yes or No.

7f. **Contractor Identification (ID) Number:** Enter the Employer (IRS) Number of the Prime Contractor as the unique identifier for prime recipient of HUD funds. Note that the Employer (IRS) Number must be provided for each contract/subcontract awarded.

7g. **Section 3 Contractor:** Enter Yes or No.

7h. **Subcontractor Identification (ID) Number:** Enter the Employer (IRS) Number of the subcontractor as the unique identifier for each subcontract awarded from HUD funds. When the subcontractor ID Number is provided, the respective Prime Contractor ID Number must also be provided.

7i. **Section 3 Contractor:** Enter Yes or No.

7j. **Contractor/Subcontractor Name and Address:** Enter this information for each firm receiving contract/subcontract activity only one time on each report for each firm

(FORM FOLLOWS)

SUBGRANTEE FEDERAL LABOR STANDARDS ATTACHMENTS for CDBG/ESG (5/2018) Page 25 of 28

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

Contract and Subcontract Activity

U.S. Department of Housing and Urban Development

OMB Approval No.: 2535-0117 (exp. 11/30/2009)

Public Reporting Burden for this collection of information is estimated to average .50 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information is voluntary. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB Control Number.

Executive Order 12421 dated July 14, 1983, directs the Minority Business Development Plans shall be developed by each Federal Agency and that these annual plans shall establish minority business development objectives. The information is used by HUD to monitor and evaluate MBE activities against the total program activity and the designated minority business enterprise (MBE) goals. The Department requires the information to provide guidance and oversight for programs for the development of minority business enterprise concerning Minority Business Development. If the information is not collected HUD would not be able to establish meaningful MBE goals nor evaluate MBE performance against these goals. While no assurances of confidentiality is pledged to respondents, HUD generally discloses this data only in response to a Freedom of Information request.

Privacy Act Notice - The United States Department of Housing and Urban Development, Federal Housing Administration, is authorized to solicit the information requested in this form by virtue of Title 12, United States Code, Section 1701 et seq., and regulations promulgated thereunder at Title 12, Code of Federal Regulations. It will not be disclosed or released outside the United States Department of Housing and Urban Development without your consent, except as required or permitted by law.

1. Grantee/Project Owner/Developer/Sponsor/Builder/Agency				Check if: PHA <input type="checkbox"/> IHA <input type="checkbox"/>	2. Location (City, State, ZIP Code)					
3a. Name of Contact Person			3b. Phone Number (including Area Code)		4. Reporting Period <input type="checkbox"/> Oct. 1 - Sept. 30 (Annual-FY)			5. Program Code (Not applicable for CPD programs.) See explanation of codes at bottom of page. Use a separate sheet for each program code.		6. Date Submitted to Field Office

Grant/Project Number or HUD Case Number or other identification of property, subdivision, dwelling unit, etc.	Amount of Contract or Subcontract	Type of Trade Code (See below)	Contractor or Subcontractor Business Racial/Ethnic Code (See below)	Woman Owned Business (Yes or No)	Prime Contractor Identification (ID) Number	Sec. 3	Subcontractor Identification (ID) Number	Sec. 3	Contractor/Subcontractor Name and Address				
									Name	Street	City	State	Zip Code
7a.	7b.	7c.	7d.	7e.	7f.	7g.	7h.	7i.	7j.				

- | | | |
|--|---|---|
| <p>CPD:
 1 = New Construction
 2 = Education/Training
 3 = Other</p> <p>7c: Type of Trade Codes:
 Housing/Public Housing:
 1 = New Construction
 2 = Substantial Rehab.
 3 = Repair
 4 = Service
 5 = Project Managt.</p> <p>6 = Professional
 7 = Tenant Services
 8 = Education/Training
 9 = Arch./Engrg. Appraisal
 0 = Other</p> | <p>7d: Racial/Ethnic Codes:
 1 = White Americans
 2 = Black Americans
 3 = Native Americans
 4 = Hispanic Americans
 5 = Asian/Pacific Americans
 6 = Hasidic Jews</p> | <p>5: Program Codes (Complete for Housing and Public and Indian Housing programs only):
 1 = All insured, including Section 8
 2 = Flexible Subsidy
 3 = Section 8 Noninsured, Non-HFDA
 4 = Insured (Management)
 5 = Section 202
 6 = HUD-Held (Management)
 7 = Public/Indian Housing</p> |
|--|---|---|
- Previous editions are obsolete. form HUD-2516 (8/98)

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

Part II: Contracts Awarded

1. Construction Contracts:	
A. Total dollar amount of all contracts awarded on the project	\$
B. Total dollar amount of contracts awarded to Section 3 businesses	\$
C. Percentage of the total dollar amount that was awarded to Section 3 businesses	%
D. Total number of Section 3 businesses receiving contracts	
2. Non-Construction Contracts:	
A. Total dollar amount all non-construction contracts awarded on the project/activity	\$
B. Total dollar amount of non-construction contracts awarded to Section 3 businesses	\$
C. Percentage of the total dollar amount that was awarded to Section 3 businesses	%
D. Total number of Section 3 businesses receiving non-construction contracts	

Part III: Summary

Indicate the efforts made to direct the employment and other economic opportunities generated by HUD financial assistance for housing and community development programs, to the greatest extent feasible, toward low- and very low-income persons, particularly those who are recipients of government assistance for housing. (Check all that apply.)

- Attempted to recruit low-income residents through: local advertising media, signs prominently displayed at the project site, contracts with the community organizations and public or private agencies operating within the metropolitan area (or nonmetropolitan county) in which the Section 3 covered program or project is located, or similar methods.
- Participated in a HUD program or other program which promotes the training or employment of Section 3 residents.
- Participated in a HUD program or other program which promotes the award of contracts to business concerns which meet the definition of Section 3 business concerns.
- Coordinated with Youthbuild Programs administered in the metropolitan area in which the Section 3 covered project is located.
- Other; describe below.

Public reporting for this collection of information is estimated to average 2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This agency may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB number.

Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u, mandates that the Department ensures that employment and other economic opportunities generated by its housing and community development assistance programs are directed toward low- and very-low income persons, particularly those who are recipients of government assistance housing. The regulations are found at 24 CFR Part 135. The information will be used by the Department to monitor program recipients' compliance with Section 3, to assess the results of the Department's efforts to meet the statutory objectives of Section 3, to prepare reports to Congress, and by recipients as self-monitoring tool. The data is entered into a database and will be analyzed and distributed. The collection of information involves recipients receiving Federal financial assistance for housing and community development programs covered by Section 3. The information will be collected annually to assist HUD in meeting its reporting requirements under Section 808(e)(6) of the Fair Housing Act and Section 916 of the HCDA of 1992. An assurance of confidentiality is not applicable to this form. The Privacy Act of 1974 and OMB Circular A-108 are not applicable. The reporting requirements do not contain sensitive questions. Data is cumulative; personal identifying information is not included.

PROJECT NAME: Montgomery Village and South Village Homes Lighting and Site Improvements
PROJECT NUMBER: 1113990

Form HUD-60002, Section 3 Summary Report, Economic Opportunities for Low- and Very Low-Income Persons.

Instructions: This form is to be used to report annual accomplishments regarding employment and other economic opportunities provided to low- and very low-income persons under Section 3 of the Housing and Urban Development Act of 1968. The Section 3 regulations apply to any *public and Indian housing programs* that receive: (1) development assistance pursuant to Section 5 of the U.S. Housing Act of 1937; (2) operating assistance pursuant to Section 9 of the U.S. Housing Act of 1937; or (3) modernization grants pursuant to Section 14 of the U.S. Housing Act of 1937 and to recipients of housing and community development assistance in excess of \$200,000 expended for: (1) housing rehabilitation (including reduction and abatement of lead-based paint hazards); (2) housing construction; or (3) other public construction projects; and to *contracts and subcontracts in excess of \$100,000 awarded in connection with the Section-3-covered activity.*

Form HUD-60002 has three parts, which are to be completed for all programs covered by Section 3. Part I relates to *employment and training*. The recipient has the option to determine numerical employment/training goals either on the basis of the number of hours worked by new hires (columns B, D, E and F). Part II of the form relates to *contracting*, and Part III summarizes recipients' *efforts* to comply with Section 3.

Recipients or contractors subject to Section 3 requirements must maintain appropriate documentation to establish that HUD financial assistance for housing and community development programs were directed toward low- and very low-income persons.* A recipient of Section 3 covered assistance shall submit one copy of this report to HUD Headquarters, Office of Fair Housing and Equal Opportunity. Where the program providing assistance requires an annual performance report, this Section 3 report is to be submitted at the same time the program performance report is submitted. Where an annual performance report is not required, this Section 3 report is to be submitted by January 10 and, if the project ends before December 31, within 10 days of project completion. *Only Prime Recipients are required to report to HUD. The report must include accomplishments of all recipients and their Section 3 covered contractors and subcontractors.*

- HUD Field Office: Enter the Field Office name .
1. Recipient: Enter the name and address of the recipient submitting this report.
 2. Federal Identification: Enter the number that appears on the award form (with dashes). The award may be a grant, cooperative agreement or contract.
 3. Dollar Amount of Award: Enter the dollar amount, rounded to the nearest dollar, received by the recipient.
 - 4 & 5. Contact Person/Phone: Enter the name and telephone number of the person with knowledge of the award and the recipient's implementation of Section 3.
 6. Reporting Period: Indicate the time period (months and year) this report covers.
 7. Date Report Submitted: Enter the appropriate date.

8. Program Code: Enter the appropriate program code as listed at the bottom of the page.
9. Program Name: Enter the name of HUD Program corresponding with the "Program Code" in number 8.

Part I: Employment and Training Opportunities

Column A: Contains various job categories. Professionals are defined as people who have special knowledge of an occupation (i.e. supervisors, architects, surveyors, planners, and computer programmers). For construction positions, list each trade and provide data in columns B through F for each trade where persons were employed. The category of "Other" includes occupations such as service workers.

Column B: (Mandatory Field) Enter the number of new hires for each category of workers identified in Column A in connection with this award. New hire refers to a person who is not on the contractor's or recipient's payroll for employment at the time of selection for the Section 3 covered award or at the time of receipt of Section 3 covered assistance.

Column C: (Mandatory Field) Enter the number of Section 3 new hires for each category of workers identified in Column A in connection with this award. Section 3 new hire refers to a Section 3 resident who is not on the contractor's or recipient's payroll for employment at the time of selection for the Section 3 covered award or at the time of receipt of Section 3 covered assistance.

Column D: Enter the percentage of all the staff hours of new hires (Section 3 residents) in connection with this award.

Column E: Enter the percentage of the total staff hours worked for Section 3 employees and trainees (including new hires) connected with this award. Include staff hours for part-time and full-time positions.

Column F: (Mandatory Field) Enter the number of Section 3 residents that were trained in connection with this award.

Part II: Contract Opportunities

Block 1: Construction Contracts

Item A: Enter the total dollar amount of all contracts awarded on the project/program.

Item B: Enter the total dollar amount of contracts connected with this project/program that were awarded to Section 3 businesses.

Item C: Enter the percentage of the total dollar amount of contracts connected with this project/program awarded to Section 3 businesses.

Item D: Enter the number of Section 3 businesses receiving awards.

Block 2: Non-Construction Contracts

Item A: Enter the total dollar amount of all contracts awarded on the project/program.

Item B: Enter the total dollar amount of contracts connected with this project awarded to Section 3 businesses.

Item C: Enter the percentage of the total dollar amount of contracts connected with this project/program awarded to Section 3 businesses.

Item D: Enter the number of Section 3 businesses receiving awards.

Part III: Summary of Efforts – Self-explanatory

Submit one (1) copy of this report to the HUD Headquarters Office of Fair Housing and Equal Opportunity, at the same time the performance report is submitted to the program office. The Section 3 report is submitted by January 10. Include only contracts executed during the period specified in item 8. PHAs/IHAs are to report all contracts/subcontracts.

* The terms "low-income persons" and very low-income persons" have the same meanings given the terms in section 3 (b) (2) of the United States Housing Act of 1937. *Low-income persons* mean families (including single persons) whose incomes do not exceed 80 percent of the median income for the area, as determined by the Secretary, with adjustments for smaller and larger families, except that

The Secretary may establish income ceilings higher or lower than 80 percent of the median for the area on the basis of the Secretary's findings such that variations are necessary because of prevailing levels of construction costs or unusually high- or low-income families. *Very low-income persons* mean low-income families (including single persons) whose incomes do not exceed 50 percent of the median family income area, as determined by the Secretary with adjustments or smaller and larger families, except that the Secretary may establish income ceilings higher or lower than 50 percent of the median for the area on the basis of the Secretary's findings that such variations are necessary because of unusually high or low family incomes.

SPECIAL CONTRACT PROVISIONS
PROJECT DESCRIPTION

1 of 1

PROJECT DESCRIPTION

The project is located in the Montgomery Village neighborhood of Montgomery County. Work under this Contract shall include all labor and materials necessary to complete the Montgomery Village and South Village Homes Lighting and Site Improvements as described in these specifications and the drawings. This Contract requires removal of existing light poles and the installation of new lightpoles and luminaires, installation of sidewalk, curb and gutter, handicapped ramps, landscaping and the installation of a stormwater management facility. The types, quantities, and characteristics of the various items of equipment are defined in the specifications and details for their installation are included in the drawings.

**SPECIAL CONTRACT PROVISIONS
SPECIFICATIONS**

SPECIFICATIONS

All work on this project shall conform to PART I – GENERAL PROVISIONS, PART II – TERMS AND CONDITIONS AND PART III – TECHNICAL REQUIREMENTS of the Maryland Department of Transportation, State Highway Administration's Specifications entitled, "Standard Specifications for Construction and Materials" dated July 2018, revisions thereof, or additions thereto, and the Special Provisions included in this Invitation For Bid.

The following also form a part of these specifications to the extent required by the reference thereto and are included in this Invitation for Bid:

- (a) Maryland State Highway Administration Book of Standards for Highway and Incidental Structures effective July 2018, and all additions and revisions thereto.
- (b) Montgomery County Department of Public Works and Transportation, "Design Standards, Revised June 2012" and all additions and revisions thereto.
- (c) "2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control".
- (d) The U.S. Department of Transportation, Federal Highway Administration, "Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Dated May 2012", including all addenda, additions, and revisions thereto.
- (e) "Montgomery County Road Construction Code and Standard Specification, 1967", and all addenda thereto.
- (f) "AASHTO Standard Specifications for Highway Bridges" dated 2002 for design including all interim specifications through 2003.
- (g) Sediment Control Handbook – Montgomery County Department of Permitting Services, Water Resources Management Section.

NOTE: The Book of Standards for Highway and Incidental Structures is now available only on the Administration's Internet Site at www.marylandroads.com. The Book of Standards can be located by clicking on Business with SHA: Business Standards and Specifications: and Book of Standards for Highway and Incidental Structures. Hard copies of the Book of Standards will no longer be sold in the Cashiers Office and hard copy distributions of the Standard updates will no longer be made.

SPECIAL CONTRACT PROVISIONS
RIGHT-OF-WAY STATUS
APPROVAL OF MATERIALS

RIGHT-OF-WAY STATUS

The right-of-way and /or easements, required for the area occupied by the subject project to be constructed under this contract, will be available to the Contractor prior to award.

Any and all additional rights-of-way or easements not provided herein but required by the Contractor for operations, plant, equipment, storage of materials, access to disposal areas, etc., must be obtained and paid for by the Contractor at his/her own expense.

APPROVAL OF MATERIALS

The Contractor is reminded that he/she shall notify the Engineer in writing of the proposed sources and supplies from which he plans to obtain all materials required for completion of the project **as soon as possible after receiving the contracts for bonding**. No asbestos or asbestos-like material will be permitted in materials used in unbound surfaces such as surface treatment, stone shoulders, maintenance of traffic stone, etc., where vehicular or pedestrian traffic will be maintained.

THERE SHALL BE NO PAYMENT FOR UNAPPROVED MATERIALS.

SPECIAL CONTRACT PROVISIONS
REQUIRED PERMITS

REQUIRED PERMITS

The following permits are required for this project:

- **Building/Electrical Permit**

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

SPECIAL PROVISIONS

**GENERAL
PROVISIONS**

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

1 of 7

GENERAL PROVISIONS

GP – SECTION 1
DEFINITIONS AND TERMS

GP-1.04 ABBREVIATIONS

1 **ADD:** following to the end of the list:

MSHA	Maryland State Highway Administration.
MCDOT	Montgomery County Department of Transportation
MCDPWT	Montgomery County Department of Public Works and Transportation
MCDGS	Montgomery County Department of General Services
MCDHCA	Montgomery County Department of Housing and Community Affairs
MNCPPC	Maryland National Capital Park and Planning Commission
WSSC	Washington Suburban Sanitary Commission
MOSH	Maryland Occupational Safety and Health
OSHA	Occupational Safety and Health Administration

GP-1.05 DEFINITIONS

2 **ADD:** The following:

Whenever used in these General Provisions or in other contract documents the following terms or abbreviations are used, the meaning shall be as follows:

"ADDENDUM" An addendum is a written or graphic instrument issued prior to the opening of Bids or Proposals, which clarifies, corrects or changes the solicitation.

"AUDIT PROVISIONS" Montgomery County shall have the right to examine the contractor's records pertaining to work performed under the contract to determine and verify the compliance with all contractual conditions. The County shall be granted access to such records at all reasonable times during the contract period and for three (3) years thereafter.

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

2 of 7

"BORING LOGS" Subsurface soil and geological information is based upon test borings. Such information concerning the character of subsurface material has been obtained for the exclusive use of the County to aid in the project design. This information is not part of the plans, Bid, or contract. Bidders or Contractors should not consider any of the data supplied by the County or its authorized agents as positive representations of any conditions you will encounter in the field nor should this information be considered as a basis for the computation of the unit prices used for bidding purposes. There is no expressed or implied agreement that uniformity of material exists between the explored locations.

The County will not consider any claims for damages because of the Contractor's reliance upon the boring information and will not pay additional compensation beyond unit prices stipulated. This information does not relieve prospective bidders of the responsibility for making their own site investigation.

"CLAIMS FOR DAMAGE" Reference is herein made to Section 13 (Claims) and Section 14 (Disputes) of the Montgomery County Procurement Regulations.

If the Contractor shall claim compensation for any damage sustained by reason of the acts of the County, he shall within ten (10) days after sustaining the alleged damage, make a written statement to the Engineer (defined on the following page). The written statement shall contain:

1. An explanation of the claim, including reference to all Contract provisions upon which it is based;
2. The amount of the claim;
3. The facts upon which the claim is based;
4. All pertinent data and correspondence that the Contractor relies upon to substantiate the claim; and
5. A certification by a senior official, officer, or general partner of the Contractor, that, to the best of the person's knowledge and belief, the claim is made in good faith, supporting data are accurate and complete, and the amount requested accurately reflects the Contract adjustment for which the person believes the County is liable.

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

3 of 7

The claim shall also contain itemized supporting data for the elements of cost the Contractor claims to have incurred or will incur. This data shall be in sufficient detail to permit analysis by the Engineer of material, labor, equipment, subcontract and overhead costs as well as profit and shall include all work covered by the claim, whether deleted, added or changed.

Whenever it shall appear to the Contractor that due to the exigencies of the work, he is about to incur damage, he shall at once notify the Engineer or his representative in writing of such fact and state the nature of his possible claim. Such notification shall not take the place of, but shall be in addition to, the written statement herein above required to be submitted within ten (10) days after the occurrence of an alleged cause for damage.

MERE PRESENTATION TO THE ENGINEER OF CHANGE IN CONSTRUCTION SCHEDULE EITHER GRAPHICALLY OR NARRATIVELY DOES NOT MEET THE NOTIFICATION REQUIREMENTS OF "CLAIMS FOR DAMAGE". IF THE CONTRACTOR INTENDS TO FILE A CLAIM, THE ENGINEER MUST BE FORMALLY NOTIFIED BY A LETTER SEPARATE FROM ANY PRESENTATION(S) ON THE CONSTRUCTION SCHEDULE OR SUBSEQUENT UPDATES.

"CONSTRUCTION DOCUMENTS TO SUCCESSFUL BIDDER" The successful bidder of the Contract will receive, upon award of the Contract, five sets of Plans and five Invitation for Bid books free of charge. Any additional Plan sets required by the Contractor may be purchased at the price noted in the Notice to Contractors. Individual Plan sheets may be purchased at the prevailing price as set by the County.

"COUNTY" - Shall mean Montgomery County, Maryland.

"DHCA" – The words "DHCA" (Department of Housing and Community Affairs) and "MCDHCA", also "MC-DHCA" (Montgomery County Department of Housing and Community Affairs) shall mean one and the same organization – namely, Montgomery County Department of Housing and Community Affairs

"ENGINEER" Shall mean the Director of the Montgomery County Department of Housing and Community Affairs (MCDHCA), acting directly or through a duly authorized representative within the scope of the particular duties assigned.

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

4 of 7

The duly authorized representative shall be the MC-DHCA Construction Manager or Inspector.

"ETHICS PROVISIONS" Pursuant to the requirements of the Montgomery County Code 2004, as amended, Chapters 11B and 19A, notice is hereby given as follows:

a. GIFTS and KICKBACKS

Gifts. A bidder, offeror, or contractor must not make or offer to make a gift to a public employee which the public employee is prohibited from accepting under Chapter 19A. (§11B-51).

Kickbacks. A person must not:

- (1) provide, attempt to provide, or offer to provide a kickback;
- (2) solicit, accept, or attempt to accept a kickback;
- (3) include, directly or indirectly, the amount of a kickback in the price charged by the subcontractor to the contractor, or by the prime contractor in the price charged by the prime contractor, to the County; or
- (4) claim that the unlawfully induced contract or subcontract fulfills any legal, regulatory, or contractual requirement. (§11B-51).

b. COVENANT AGAINST CONTINGENT FEES

A person must not retain another to secure a contract from the County under an agreement that in exchange for the contract, the person will pay another a commission, percentage of the contract, or a contingent fee. (§11B-53).

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

5 of 7

c. RESTRICTIONS IN EMPLOYMENT

Unless authorized by law or the Ethics Commission under Chapter 19A, a person while engaged in a procurement matter with the County must not employ or offer to employ a public employee if the duties of the public employee include significant participation in the procurement matter. Public employee, employ, and significant participation, as used in this section, are defined in Chapter 19A. (§11B-52).

No public employee or official may engage in outside employment unless approved by the ethics commission as not violating the provisions of the Charter of Chapter 19A. (§19A-12). The ethics commission may approve outside employment by granting a waiver authorized by Chapter 19A, and such approval shall be subject to the conditions of the waiver (§ 19A-8(a)).

Except as permitted by the ethics commission, an employee may not be employed by, or have a financial interest in, any entity subject to the authority of or contracting (including negotiations) with the government agency with which the employee is affiliated (§ 19A-11).

d. NON-DISCRIMINATION IN EMPLOYMENT

The Contractor agrees to comply with the non-discrimination in employment policies as required by §27-19, Montgomery County Code as well as all other applicable State and Federal laws and regulations regarding employment discrimination.

The Contractor assures the County that, in accordance with applicable law, it does not, and agrees that it will not, discriminate in any manner on the basis of race, color, religious creed, ancestry, national origin, age, sex, marital status, sexual orientation, gender identity, family responsibilities, or genetic status of any individual or disability of a qualified individual, or because of any reason that would not have been asserted but for the race, color, religious creed, ancestry, national origin, age, sex, marital status, disability, sexual orientation, gender identity, family responsibilities, or genetic status.

"EVIDENCE OF PAYMENT" – The Contractor shall furnish the Engineer with satisfactory evidence that all persons who have done work or furnished materials under the Contract and who have given written notices to the County before or within ten (10) days after the final completion and acceptance of the whole work done under the

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

6 of 7

Contract, that any balance for such work or materials is due and unpaid, have been fully paid or satisfactorily secured. In case such evidence is not furnished as aforesaid, such amount as may be necessary to meet the claim of the said persons may be retained from any monies due to the Contractor under the Contract, until the liabilities aforesaid shall be fully discharged or such notices withdrawn.

"HAZARD AND TOXIC SUBSTANCES" As required by the "Federal Hazard Communication Standard" (29 CFR 1910.1200), and the Maryland "Access to Information about Hazard and Toxic Substances" law (including the requirements of Code of Maryland Regulations (COMAR) 09.12.33.02(2011)) to label each hazardous material or chemical container, and to provide Material Safety Data Sheets to the purchaser. Deliveries to Montgomery County must comply with these requirements.

"MCDPWT" The word MCDPWT (Montgomery County Department of Public Works and Transportation) shall mean MCDOT (Montgomery County Department of Transportation).

"M-NCPPC" The word M-NCPPC or MNCPPC shall mean the Maryland National Capital Park & Planning Commission.

"M-NCPPC Construction Manager", "M-NCPPC Site Plan Enforcement Inspector" and **"M-NCPPC Arborist Construction Manager"** shall mean M-NCPPC Construction Manager or Inspector as well as MC-DHCA Construction Manager or Inspector.

"MSHA" or **"ADMINISTRATION"** The word "MSHA" (Maryland State Highway Administration) or "Administration" shall mean MCDOT (Montgomery County Department of Transportation).

"NAME AND SIGNATURE REQUIREMENTS FOR BIDS AND CONTRACTS" The correct and full legal business name of the entity involved must be used on bids received and on contract(s) issued as a result of this solicitation. A trade name, i.e., a shortened or different name under which the firm does business, must not be used when the full legal name is different. All business entities must have names that comply with State law, which requires a suffix indicating the business entity status of that business (e.g., Inc., incorporated, LLC, LP, etc.). Trade names may be indicated by individuals or business entities with the individual or business entity name followed by "t/a" (trading as) or "d/b/a" (doing business as), respectively.

The signature on the bid, contract, amendment, or related correspondence must conform to the following: All signatures must be made by an authorized officer, partner, manager, member, or employee. The signing of an offer or a contract is a representation by the person signing that the person signing is authorized to do so on behalf of the offeror or contractor.

SPECIAL PROVISIONS
GP – SECTION 1
DEFINITIONS AND TERMS

7 of 7

No bids will be accepted unless submitted in ink or typewritten. Changes made to the prices bid prior to the opening must be done legibly and initialed by the offeror making the changes.

"OWNER" shall mean Montgomery County, Maryland.

"PROCUREMENT REGULATION" The Montgomery County Procurement Regulations and the Maryland State Highway Administration (MSHA), General Provisions, are incorporated by reference and made a part of this contract. In the case of any inconsistency between this contract, the Montgomery County Procurement Regulations and the MSHA General Provisions, the Montgomery County Procurement Regulations shall govern.

"PURCHASING AGENT" Shall mean the Director, Department of General Services for Montgomery County, or a duly authorized representative.

"ROCK" - Where rock is shown on the plans, it has been so shown from the best information available, and it is shown for the information of all parties concerned; however, the County assumes no responsibility for the accuracy of such information. Should the bidder or Contractor rely on such information in preparing the bid or in the performance of the work, the Bidder / Contractor does so at their own risk.

Whether or not rock is shown on the plans, or noted in the Special Provisions, the Contractor is not relieved of the responsibility of making an investigation to determine if rock is present. **THE PRESENCE OF ROCK SHALL NOT ENTITLE THE CONTRACTOR TO ADDITIONAL COMPENSATION BEYOND THE UNIT PRICES STIPULATED OR BID FOR ANY CLASS EXCAVATION, PIPE AND STRUCTURE IN PLACE.**

"SIGNATURE DOCUMENTATION ON OFFERS OR A CONTRACT" Signatures of offerors and contractors must be in their correct legal form and must not be abbreviated to common usage or trade name form. All signatures must be made by an authorized officer, partner, manager, member or employee. The signing of an offer or a contract is representation by the person signing that the person signing is authorized to do so on behalf of the offeror or contractor. Contracts that are not signed in compliance with these requirements are voidable at the option of the County.

"STATE" The word state shall mean Montgomery County Government – the changing from MSHA to County shall not be to the exclusion of MSHA and FHWA Reviews.

SPECIAL PROVISIONS
GP – SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS

1 of 3

GENERAL PROVISIONS

GP-SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS

- 3 **DELETE:** GP-2.01 "BID IRREVOCABLE" in its entirety.

- 4 **DELETE:** GP-2.06 "PREPARATION OF BID" bold type "On Administration
Contracts....Preparation of Bid."

- 5 **DELETE:** GP-2.07 "PROPOSAL GUARANTY" in its entirety.

- 6 **DELETE:** GP-2.08 "DELIVERY OF BIDS" in its entirety.

- 7 **DELETE:** GP-2.09 "COMMUNICATIONS AND INTERPRETATION-PRIOR TO
BID OPENING" in its entirety. See NOTICE TO BIDDERS titled
A COMMUNICATIONS AND INTERPRETATION-PRIOR TO BID OPENING".

- 8 **DELETE:** GP-2.10 "AMENDMENTS TO INVITATION FOR BIDS" in its entirety.

9. **INSERT:** the following:

GP-2.10 SOLICITATIONS AMENDMENTS (ADDENDA)

Addenda will be mailed to all who are known by the Owner to have received a complete set of Bidding Documents.

SPECIAL PROVISIONS
GP – SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS

2 of 3

In the event that an amendment to this solicitation is issued, all solicitation terms and conditions will remain in effect unless they are specifically changed by the amendments. Offeror's must acknowledge receipt of such solicitation amendments to the place designated, and prior to the hour and date specified in the solicitation (as amended) for receipt of offers. **UNLESS A WAIVER IS GRANTED, OFFEROR'S THAT DO NOT TIMELY ACKNOWLEDGE RECEIPT OF SOLICITATION AMENDMENTS BY ONE OF THE FOLLOWING METHODS WILL BE REJECTED:**

- (a) By returning one signed copy of the amendment.
- (b) By acknowledging receipt of the amendment an at least one signed copy of the offer that is submitted.
- (c) By stating that the amendment is acknowledged in a signed letter that refers to the solicitation and amendment numbers.

A waiver may be granted by the Director, Department of General Services, if deemed to be in the County's best interest. No waiver may be granted, however, until the offeror's states in writing that the offeror will be bound by any substantive changes made by the amendment to the terms of the solicitation.

If an offeror desires to change an offer that has already been submitted, the change may be made by a signed letter that refers to the solicitation and amendment numbers, and which is received at the place designated and prior to the hour and date specified in the solicitation (as amended) for receipt of offers.

- 10 **DELETE:** GP-2.11 "PRE-OPENING MODIFICATIONS OR WITHDRAWAL OF BIDS" in its entirety.
- 11 **DELETE:** GP-2.12 "LATE BIDS, LATE WITHDRAWAL, AND LATE MODIFICATION" in its entirety.
- 13 **DELETE:** GP-2.13 "OPENING AND RECORDING OF BIDS" in its entirety.

SPECIAL PROVISIONS
GP – SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS

3 of 3

- 14 **DELETE:** **GP-2.14 "MISTAKES IN BIDS"** in its entirety.
- 15 **DELETE:** **GP-2.15 "MINOR IRREGULARITIES OR INFORMALITIES"** in its
entirety.
- 16 **DELETE:** **GP-2.16 "CANCELLATION OF INVITATIONS FOR BIDS"** in its
entirety.
- 16 **DELETE:** **GP-2.17 "REJECTION OF INDIVIDUAL BIDS OR PROPOSALS"** in
its entirety.
- 17 **DELETE:** **GP-2.18 "REJECTION OF ALL BIDS"** in its entirety.
- 18 **DELETE:** **GP-2.19 "BID EVALUATION AND AWARD"** in its entirety.
- 19 **DELETE:** **GP-2.20 "TIE BIDS"** in its entirety.
- 20 **DELETE:** **GP-2.22 "MULTIPLE OR ALTERNATE BIDS"** in its entirety.
- 21 **DELETE:** **GP-2.23 "BID PROTESTS"** in its entirety.

SPECIAL PROVISIONS
GP – SECTION 3
AWARD AND EXECUTION OF CONTRACT

1 of 1

GENERAL PROVISIONS

GP - SECTION 3
AWARD AND EXECUTION OF CONTRACT

- 22 **DELETE:** **GP-3.01 "AWARD OF CONTRACT"** in its entirety.
- 23 **DELETE:** **GP-3.02 "RETURN OF PROPOSAL GUARANTY"** in its entirety.
- 24 **DELETE:** **GP-3.03 "PERFORMANCE BOND AND PAYMENT BOND
REQUIREMENTS"** in its entirety.
- 25 **DELETE:** **GP-3.04 "EXECUTION OF CONTRACT"** in its entirety.
- 26 **DELETE:** **GP-3.05 "FAILURE TO EXECUTE CONTRACT"** in its entirety.

SPECIAL PROVISIONS
GP – SECTION 4
SCOPE OF WORK

1 of 1

GENERAL PROVISIONS

GP-SECTION 4
SCOPE OF WORK

25 **GP-4.09 FINAL CLEAN UP**

25 **ADD:** As the first paragraph.

The Contractor shall at all times during the Work keep the premises clean and orderly. All waste materials and rubbish shall be promptly removed. All directions from authorized public officials having jurisdiction over health and safety shall be observed.

Upon completion of the Work, all materials, equipment and appurtenances not required as a part of the completed project shall be completely removed from the site. All waste from concrete and asphalt operations and scattering of unused aggregate shall be removed.

GP-4.10 WARRANTY OF CONSTRUCTION

25 **DELETE:** The first paragraph in its entirety.

INSERT: The following:

The warranty as defined under paragraphs "A" through "G" does apply to this Contract and is hereby specified in this Invitation For Bids. The Contractor's Performance Bond shall remain in full force and effect during the warranty period as defined above.

SPECIAL PROVISIONS
GP – SECTION 5
CONTROL OF WORK

1 of 1

GENERAL PROVISIONS

GP-SECTION 5
CONTROL OF THE WORK

GP-5.05 COOPERATION WITH UTILITIES

28 **ADD:** After the last paragraph:

During the Site Investigation as required under GP-2.04, the Bidder shall be cognizant of all utility and appurtenances in their original, temporary, or final locations that may cause interference to his operations or final construction. If probable interference is determined, the Bidder shall immediately notify the County of such interference.

If the Bidder fails to notify the County of possible interference, no damages, additional time, or additional compensation of any kind shall be provided during the term of the contract.

34 **DELETE:** GP-5.14 "FILING OF CLAIM BY CONTRACTOR" in its entirety.

35 **DELETE:** GP-5.15 "DISPUTES" in its entirety

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

1 of 8

GENERAL PROVISIONS

GP-SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

GP-7.02 PERMITS AND LICENSES

39 **GP-7.02(a)**

ADD: After the first paragraph.

In accordance with the requirements of State and County law, the Contractor must obtain permits and/or approvals from the Montgomery County Department of Permitting Services for any off-site work which includes burrow pits, waste areas, and the treatment of the water/sediment. A copy of the permits and/or approvals shall be furnished to the Engineer prior to the starting of any work in those areas.

In the event of conflict between these requirements and sediment/erosion control laws or regulations of other Federal or State agencies, the more restrictive rules or regulations shall apply.

The Engineer reserves the right to inspect sediment and erosion control measures in off-site borrow pits and waste areas and to report violations of permit requirements to the appropriate agency.

42 **DELETE:** **GP-7.11 "PRESERVATION AND RESTORATION OF PROPERTY"**
in its entirety.

INSERT: The following:

GP-7.11 PRESERVATION AND RESTORATION OF PROPERTY

- (a) The Contractor shall not enter upon private property for any purpose without obtaining permission and he/she shall be responsible for the preservation of all

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

2 of 8

public and private property, trees, monuments, highway signs and markers, fences along and adjacent to the work, and shall use every precaution necessary to prevent damage or injury thereto. The highway signs and markers shall be carefully removed when grading operations begin, stored in a manner to keep them clean and dry and shall be re-erected at such new locations as may be directed by the Engineer. Any items damaged due to the Contractor's negligence will be replaced at no cost to the County. No separate pay item will be included for this work; costs shall be included in prices bid for other items. The Contractor shall take suitable precaution to prevent damage to underground or overhead public utility structures. The cost of maintaining any underground or overhead structures encountered in the prosecution of this work will not be paid for. Costs for this work shall be included in the prices bid for other items. Normally the maintenance of such underground or overhead structures is cared for by the utility company to whom they belong.

- (b) It shall be the Contractor's responsibility to carefully protect from disturbances or damages all land monuments and property markers until the Engineer has witnessed or otherwise referenced their location. Removal, if required will be performed under the direction and supervision of the Engineer. Normally the Engineer will be responsible for resetting all monuments and markers to insure accuracy. However, costs for resetting monuments and markers not witnessed by the Engineer or destroyed by the Contractor's negligence will be deducted from monies due him under terms of this contract.
- (c) The Contractor shall be responsible for all damages or injury to property of any character during the prosecution of the work, resulting from any act, omission, neglect or misconduct in his manner or method of executing said work satisfactorily, or due to his non execution of said work, or at any time due to defective work or materials, and said responsibility shall not be released until the work shall have been completed and accepted. When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, neglect or misconduct in the execution of the work or in consequence of the non execution thereof on the part of the Contractor, he shall restore, at his own expense, such property to a condition similar or equal to the condition existing before such damage or injury was done by repairing, rebuilding or otherwise restoring as may be directed, or he shall make good such damage or injury in an acceptable manner. In case of the failure on the part of the Contractor to restore such property or make good such damage or injury or otherwise restore such property as may be deemed necessary, the cost thereof will be deducted from any monies due or which may become due the Contractor under this contract.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

3 of 8

- (d) Special attention shall be given to the landscape features of the work and special care taken to protect the natural surroundings. The Contractor shall not deface, injure or destroy trees nor remove or cut them without first obtaining a Maryland Forest Service Permit. The roots of trees or shrubbery will not be cut unnecessarily, and the Contractor will be required to handwork or otherwise prevent damage to roots of trees, which extend into grading limits and/or from trees intended to be left in an undamaged state, within the construction limits. No road machinery of any description which might throw off gas or smoke in such volume as to damage vegetation shall be allowed to stand under such trees or shrubbery.
- (e) Selected trees, that, in the opinion of the Engineer, may be defaced, bruised, injured or otherwise damaged by the Contractor's construction equipment or operations shall be protected by boards or planks.
- (f) Any timber, trees, or landscape features scarred or damaged by the Contractor's operations shall be removed, neatly trimmed up or restored as nearly as possible to the original condition, as required by the Engineer and at the Contractor's expense. All scars made on trees by construction operations or the removal of limbs shall be painted as soon as possible with an approved paint. No ropes, cables or guys are to be fastened to or attached to any existing nearby trees for anchorages, or in lieu of placing of dead men, unless specifically authorized by the Engineer. In a special emergency the Contractor will first wrap the trunk with a sufficient thickness of burlap or rags, over which soft wood cleats shall be tied, before any wire, cable or rope is placed. The Contractor shall in any event be responsible for any damage to any trees so used and shall repair any such damage due to this use of the trees, if any occurs.
- (g) The Engineer may direct the Contractor to protect trees against blasting and dumping operations by placing lumber or poles around such trees. These precautions will be at the expense of the Contractor.
- (h) Where it is necessary to set or reset the curb along an existing concrete sidewalk and the pavement is disturbed in doing so, it shall in all cases, be restored by the removal of the damaged portions to a straight line parallel to the curb and the pavement replaced. Where necessary in order to obtain a workmanlike finish, the Contractor will be required to take up and replace the pavement to the nearest joint back of the curb. All sidewalk or pavement areas broken or cracked through carelessness or negligence on the part of the Contractor shall be restored by the Contractor at his own expense, to comply with these specifications.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

4 of 8

GP-7.12 LAND AIR AND WATER POLLUTION

44 **ADD**: The following:

(e) Control of Air Pollution

Air pollution is regulated by the County's Department of Environmental Protection (DEP) under State and County Law.

All trucks will be covered, consistent with the Maryland Motor Vehicle Laws.

Reasonable precautions, as determined by DEP, must be taken to prevent particulate matter from becoming airborne. This includes, but is not limited to, dust from site preparation, road usage, and materials in handling.

Burning of trash, refuse or construction debris is strictly prohibited.

Permits for open burning of land clearing debris will be issued only if all of the following conditions are met:

DEP is convinced that there is no practical alternative disposal method

The material being burned originated on the site (e.g., no hauling of materials from elsewhere)

Burning can be conducted at least 1500 feet (497 meters), in any direction, from an occupied building or publicly maintained roadway

Burning will take place in an "air curtain destructor" approved for design and operation by DEP

If all the above conditions can be met, burning pit applications can be obtained from the Division of Environmental Policy and Compliance, DEP, by calling 240-777-7770.

Take notice that, as a matter of law and policy, County Agencies and their contractors, enjoy no immunity from compliance with applicable laws and regulations. Therefore, violators will be subject to civil citation and other remedies as allowed by law, including Stop Work Orders.

If there are any questions, contact the Division of Environmental Policy and Compliance, DEP, at 240-777-7770.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

5 of 8

(a) Noise Control

The Montgomery County has a comprehensive Noise Control Ordinance (Chapter 31B of the Montgomery County Code), including provisions concerning noise from construction activities.

GENERAL ORDINANCE STANDARDS (Non-construction related)

Maximum allowable sound levels, measured at the nearest receiving property line, are 65dBA (A-weighted decibels) during daytime hours and 55 dBA during nighttime hours, for residential receiving properties (67 dBA daytime and 62dBA nighttime for non-residential receiving property). Mixed Use Zones are considered residential.

"Daytime" means from 7 am to 9 pm weekdays and 9 am and 9 pm weekends and holidays.

"Nighttime" means from 9 pm to 7 am weekdays and 9 pm to 9 am weekends and holidays.

"Receiving Property" means any property where people live or work and where noise is heard.

CONSTRUCTION EXEMPTION AND STANDARDS

"Construction" means temporary activities directly associated with site preparation, assembly, erection, repair, alteration, or demolition of structures or roadways. Construction Noise levels must be measured on a receiving property, but no closer than 50 feet from the noise source.

From 7 am to 5 pm Weekdays, Construction Noise Levels must not exceed:

75 dBA without a "Noise Suppression Plan"

85 dBA with a "Noise Suppression Plan"

"Noise Suppression Plan" means a written plan to use the most effective noise suppression equipment, materials, and methods appropriate and reasonable available for a particular type of construction.

At all times other than 7 am to 5 pm weekdays, the general standards specified must be met.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

6 of 8

For example: Assuming a residential or mixed use receiving property, construction levels from 5 pm to 9 pm weekdays and from 9 am to 9 pm on weekdays and holidays must not exceed 65 dBA. From 9 pm to 7 am weekdays and 9 am on weekends and holidays, the standard is 55 dBA.

Construction activities are also subject to the "Noise Disturbance" provisions of the Ordinance. Examples of Noise Disturbances are delivering materials or equipment or loading or unloading in a residential area or operating construction equipment with audible back-up warning devices during Nighttime Hours.

Summary - Construction Noise

Measured at nearest receiving property, but no closer than 50' from the noise source.

Weekdays (Monday - Friday), 7 am to 5 pm	
Without Suppression Plan	75 dBA
With Suppression Plan	85 dBA
Weekdays (Monday - Friday)	
5 pm to 9 pm	65 dBA
Weekdays (Monday - Friday)	
9 pm to 7 am	55 dBA
Saturday, Sunday, Holidays	
9 am to 9 pm	55 dBA
9 pm to 9 am	55 dBA

In the majority of circumstances in the County, the Receiving Property will be considered residential. In cases where the nearest receiving properties are non-residential, the standards will be 67 dBA/Daytime and 62 dBA/Nighttime, except from 7 am to 5 pm weekdays, when the higher construction exemption prevails.

While a Noise disturbance, as defined by the Ordinance, could conceivably occur at any time, it is most likely to happen during Nighttime hours. The most common complaint involves back-up beepers, and can be avoided by employing lawful alternatives to audible devices.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

7 of 8

The Department of Environmental Protection is currently developing Regulations for Noise Suppression Plans, as required by the revised Ordinance. In general, such plans will involve equipment selection and maintenance, scheduling and reasonable care in planning and conduction operations. Often, noise suppression measures can be fabricated on-site using materials at hand.

As a point of reference, two people speaking in "normal" tones of voice at a distance of three feet, will generate about 63 dBA between them. Therefore, normal, fully intelligible conversation would be possible at the receiving property line of a site generating 65 dBA or less. By comparison, for normal, intelligible speech at a distance of about ten feet between speakers, the background would have to be 55 dBA or less.

Most equipment manufacturers will have detailed noise performance specifications for their products. Many also provide silencing packages, both design and retrofit.

Copies of the revised Ordinance will be mailed upon request. Contact the Office of Environmental Policy and Compliance at 240-777-7770.

45 **DELETE:** GP-7.14 "LIABILITY INSURANCE" in its entirety.

Refer to **MANDATORY INSURANCE REQUIREMENTS.**

**GP-7.17 CONTRACTOR'S RESPONSIBILITY FOR
UTILITY PROPERTY AND SERVICES**

47 **ADD:** The following after the second paragraph.

All expenses incurred by the Contractor as a result of working around and protecting utilities, as well as cooperating with the owners of same will be included in the Contract unit prices for other items.

48 **DELETE:** GP-7.20 "NONDISCRIMINATION IN EMPLOYMENT" in its entirety.

SPECIAL PROVISIONS

GP – SECTION 7

LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

8 of 8

- 49 **DELETE:** **GP-7.22 "NONHIRING OF EMPLOYEES"** in its entirety.
- 50 **DELETE:** **GP-7.23 "CHOICE OF LAW"** in its entirety.
- 50 **DELETE:** **GP-7.25 "MULTI-YEAR CONTRACTS CONTINGENT UPON
APPROPRIATIONS"** in its entirety.
- 51 **DELETE:** **GP-7.26 "COST AND PRICE CERTIFICATION"** in its entirety.
- 52 **DELETE:** **GP-7.29 "MINORITY BUSINESS ENTERPRISE AND
AFFIRMATIVE ACTION"** Paragraphs (a) and (b) in their entirety.
- 53 **DELETE:** **GP-7.30 "PREVAILING WAGE CONTRACTS FOR PUBLIC
WORKS"** in its entirety.
- 53 **DELETE:** **GP-7.32 "FINANCIAL DISCLOSURE"** in its entirety.
- 53 **DELETE:** **GP-7.33 "POLITICAL CONTRIBUTION DISCLOSURE"** in its
entirety.
- 54 **DELETE:** **GP-7.34 "CONFLICT OF INTEREST LAW"** in its entirety.
- 54 **DELETE:** **GP-7.35 "PRE-EXISTING REGULATIONS"** in its entirety.

SPECIAL PROVISIONS
GP – SECTION 8
PROSECUTION AND PROGRESS

1 of 2

GENERAL PROVISIONS

GP-SECTION 8
PROSECUTION AND PROGRESS

55 **DELETE:** GP-8.01 "SUBCONTRACTING" in its entirety.

INSERT: The following.

GP-8.01 SUBCONTRACTING

The Contractor may utilize the services of specialty Subcontractors on those parts of the work which, under normal contracting practices, are performed by specialty Subcontractors.

The Contractor shall perform at least fifty (50) percent of the actual construction work with its own forces. "Its own forces" is defined as actual employees of the Contractor (not subcontractors or contract workers). Verification interviews may be conducted and/or certified payrolls may be required. "Fifty (50) percent of the actual construction work" is defined as one half of the total Contract Price excluding the cost of prefabricated items that become a permanent part of the construction. This requirement does not alter or waive any other provision or clause of this contract.

No portion of the Contract shall be subcontracted, assigned or otherwise disposed of except with the written consent of the Owner. Any assignment, subcontract or other disposition of all or part of this Contract without the express written consent of the Owner shall be null and void. The Contractor shall submit all Subcontractor names and qualifications for approval by the Owner prior to award of any subcontracts. Subcontractors may not initiate any work on the project prior to approval by the Owner. Consent to subcontract, assign or otherwise dispose of any portion of the Contract shall not be construed to relieve the Contractor or surety of any responsibility for the fulfilling of all the requirements of the Contract.

The Contractor shall incorporate by reference or otherwise include these General Provisions in every subcontract issued pursuant to or under this Contract, and shall require the same reference or inclusion be contained in every subcontract entered into by and of its subcontractors.

Nothing contained in this Contract shall create any contractual relation between any Subcontractor and the Owner.

SPECIAL PROVISIONS
GP – SECTION 8
PROSECUTION AND PROGRESS

2 of 2

GP-8.07 SUSPENSION OF WORK

59 **ADD:** To the end of the Section:

Work of an emergency nature ordered by the Engineer for the convenience of the traveling public or for the production or delivery of materials for storage, if performed during the period of suspension, shall not be charged to the Contract time.

"Unreasonable period of time" shall be defined as any suspensions, delays, or interruptions communicated in writing to the Contractor by the Engineer **greater than** ten percent (10%) of the Contract term that fall completely within any continuous six (6) month period during the term of the Contract.

59 **DELETE:** **GP-8.08 "TERMINATION FOR DEFAULT-DAMAGES FOR DELAY-TIME EXTENSIONS"** in its entirety.

61 **DELETE:** **GP-8.10 "TERMINATION FOR CONVENIENCE OF THE STATE"** in its entirety.

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

SPECIAL PROVISIONS

TERMS

AND

CONDITIONS

SPECIAL PROVISIONS

T C – SECTION 1 REFERENCES AND DEFINITIONS

1 of 2

TERMS AND CONDITIONS

**T C SECTION 1
REFERENCES AND DEFINITIONS**

TC-1.02 DEFINITIONS

83 **DELETE:** **Holidays** - In the State of Maryland, If a legal holiday falls on a Saturday, the Friday immediately preceding shall be deemed and treated as a holiday.

INSERT: The following.

Holidays - In Montgomery County, holidays occur on:

January 1	New Year's Day
3 rd Monday in January	Martin Luther King's Birthday
3 rd Monday in February	President's Day
4 th Monday in May	Memorial Day
July 4	Independence Day
1 st Monday in September	Labor Day
November 11	Veteran's Day
4 th Thursday in November	Thanksgiving Day
December 25	Christmas Day

If a legal holiday falls on a Sunday, the following Monday shall be deemed and treated as a holiday.

If a legal holiday falls on a Saturday, the Friday immediately preceding shall be deemed and treated as a holiday.

SPECIAL PROVISIONS

T C – SECTION 1 REFERENCES AND DEFINITIONS

2 of 2

83 **DELETE:** **Laboratory** - The testing laboratory of the State Highway Administration (or other Administrations) or any other testing laboratory designated by the procurement officer.

INSERT: The following.

Laboratory - The Montgomery County Materials Control Center or any other testing laboratory designated by the Montgomery County Materials Control Center.

86 **ADD:** After "Working Drawings"

Subgrade Soil Requirements - The top 12 inches of subgrade in cuts and fills shall comply with the following requirements:

- (a) The Liquid Limit shall not exceed 40.
- (b) The Plastic Limit shall not exceed 12.
- (c) The maximum dry weight shall not be less than 105 pounds per cubic foot as determined by A.A.S.H.T.O. Designation listed below:

CONSTRUCTION MATERIAL TOP 12 INCHES OF SUBGRADE	A.A.S.H.T.O. REQUIREMENTS		MINIMUM COMPACTION REQUIREMENTS
	DESIGNATION	METHOD	
ROADWAY – SOIL	T99	C	100%
ROADWAY – AGGREGATE	T180	D	95%
SHOULDERS – SOIL	T99	C	95%
SHOULDERS – AGGREGATE	T180	D	92%
SIDEWALK – SOIL	T99	C	95%
SIDEWALK – AGGREGATE	T180	D	92%

SPECIAL PROVISIONS

T C – SECTION 2 BIDDING REQUIREMENTS AND CONDITIONS

1 of 1

TERMS AND CONDITIONS

**T C SECTION 2
BIDDING REQUIREMENTS AND CONDITIONS**

87 **DELETE:** TC-2.01 PROJECT CLASSIFICATION in its entirety.

INSERT: The following.

TC-2.01 PROJECT CLASSIFICATION

The County will estimate the cost of the Contract and classify it within one cost group and letter designation as follows:

COST GROUP ESTIMATE	COST GROUP LETTER CLASS
Up to \$100,000	A
\$100,001 to \$500,000	B
\$500,001 to \$1,000,000	C
\$1,000,001 to \$2,500,000	D
\$2,500,001 to \$5,000,000	E
\$5,000,001 to \$10,000,000	F
\$10,000,001 to \$15,000,000	G
\$15,000,001 to \$30,000,000	H
\$30,000,001 to \$50,000,000	I
\$50,000,001 to \$75,000,000	J
\$75,000,001 to \$100,000,000	K
Over \$100,000,000	L

The letter designation for this project will be made available upon request.

87 **DELETE:** TC-2.02 "PREPARATION OF BID" in its entirety.

91 **DELETE:** TC-2.06 "PARTNERING" in its entirety.

SPECIAL PROVISIONS
T C – SECTION 3 SCOPE OF WORK

1 of 1

TERMS AND CONDITIONS

**TC SECTION 3
SCOPE OF WORK**

TC SECTION 3.03 CONTINGENT ITEMS

- 93 **DELETE:** The last sentence in the 2nd paragraph: "The requirements of GP-4.04 (Variations in Estimated Quantities) and TC-7.08 (Eliminated Items) shall apply.

INSERT: The following:

The Requirements of GP-4.04 (Variations in Estimated Quantities) will **NOT** apply and TC-7.08 (Eliminated Items) shall apply.

TC SECTION 3.06 WARRANTY OF CONSTRUCTION

- 94 **ADD:** The following:

TC SECTION 3.06 WARRANTY OF CONSTRUCTION

The warranty as defined under paragraphs "A" through "G" in GP-4.10 does apply to this Contract and is hereby specified in this Invitation For Bids. The Contractor's Performance Bond shall remain in full force and effect during the warranty period as defined above.

SPECIAL PROVISIONS
T C – SECTION 4 CONTROL OF WORK

1 of 2

TERMS AND CONDITIONS

TC SECTION 4
CONTROL OF WORK

TC-4.01 WORKING DRAWINGS.

(a) General.

94 **ADD:** After the last paragraph:

SHOP PLANS AND WORKING DRAWINGS

All shop plans and working drawings for the subject structure shall be sent to:

Johnson, Mirmiran & Thompson, Inc. (JMT)
40 Wight Avenue
Hunt Valley, Maryland 21030

ATTN: Jennifer J. Ray, Senior Associate

Phone: 410-316-2231

With a copy to:

Montgomery County DHCA
1401 Rockville Pike, 4th Floor
Rockville, MD 20852

ATTN: Ms. Cynthia Butler

Phone: 240-777-3652

To expedite the checking and distribution of working drawings, fabricators or suppliers may send prints directly to the above address with copies of all correspondence to the Contractor and the MCDHCA. If the Contractor requests that all plans be routed through his office then the establishment of such a procedure should be the first order of work so as to avoid possible misunderstandings as to the processing. Contractor shall be aware that this plan of action will delay the turn around time and will not therefore be a reason for delay claims.

The Contractor, fabricator, or supplier shall furnish to Johnson, Mirmiran & Thompson, Inc. (JMT) ten (10) prints each of all working drawings, etc., for primary review.

SPECIAL PROVISIONS

T C – SECTION 4 CONTROL OF WORK

2 of 2

Once primary review is complete, the Contractor, Fabricator, or Supplier shall furnish to the above address ten (10) additional prints for stamping and forwarding to the MCDHCA for distribution.

All shop plans and working drawings for the subject structures(s) will not be considered approved until they bear the approval stamps of the Design Engineer of Johnson, Mirmiran and Thompson, Inc. (JMT).

The Contractor shall be required to submit erection procedures no less than 30 days prior to the scheduled date of fabrication.

TC-4.02 FAILURE TO ADEQUATELY MAINTAIN PROJECT.

98 **ADD:** To the second paragraph.

Additionally, an appropriate deduction will be made from the Contractor's next progress estimate for each day or portion thereof that Maintenance of Traffic deficiencies exist, and will continue until the deficiencies are satisfactorily corrected and accepted by the Engineer. Any portion of a day will be assessed a full day deduction. The deduction will be equal to a prorata share of the lump sum price bid for Maintenance of Traffic or an amount prorated from the Engineer's estimate, whichever is more. The amount prorated will be the per diem amount established by using the working days (based upon calendar dates when required) divided into the total value of the bid item or the Engineer's estimate of that item, whichever is more.

The above noted deduction will be assessed on the next progress estimate if:

The Contractor does not take action to correct the deficiencies and properly assume the responsibilities of maintaining the project (as determined by the Engineer) within four hours of receiving a notice to comply with the required maintenance provisions.

The deduction will be equal to the daily prorated share of the lump sum price bid for Maintenance of Traffic or \$ 50.00 per day, whichever is more for each day or portion thereof that the deficiencies exist, and will continue until the deficiencies and proper assumption of the required maintenance provisions are satisfactorily corrected and accepted by the Engineer. The amount of monies deducted will be a permanent deduction and are not recoverable. Upon satisfactory correction of the deficiencies, payment of the Maintenance of Traffic lump sum item will resume.

SPECIAL PROVISIONS

T C – SECTION 5 LEGAL RELATIONS AND PROGRESS

1 of 1

TERMS AND CONDITIONS

**TC SECTION 5
LEGAL RELATIONS AND PROGRESS**

99 **DELETE:** TC -5.01 INSURANCE in its entirety.

INSERT: See "MANDATORY INSURANCE REQUIREMENTS" for this contract.

TC -5.03 SUBCONTRACTING AND SUBCONTRACTORS

101 **DELETE:** Subcontractors Prompt Payment section in its entirety.



*Maryland Department of Transportation
State Highway Administration*

SPECIAL PROVISIONS INSERT

TC 6.10 — RECYCLED OR REHANDLED MATERIAL

1 of 1

TERMS AND CONDITIONS

**TC SECTION 6
RESTRICTIONS AND PERMITS**

112 **DELETE:** TC 6.10 – RECYCLED OR REHANDLED MATERIAL
in its entirety.

INSERT: The following.

TC 6.10 – RECYCLED OR REHANDLED MATERIAL.

Refer to 900.03 in the Contract Documents.

SPECIAL PROVISIONS

T C – SECTION 6 RESTRICTIONS AND PERMITS

1 of 1

TERMS AND CONDITIONS

**TC SECTION 6
RESTRICTIONS AND PERMITS**

115 **DELETE:** TC-6.14 STORING MATERIALS AND EQUIPMENT ON/AGAINST STRUCTURES RESTRICTIONS in its entirety.

INSERT: The following.

TC-6.14 RESTRICTIONS FOR PLACING AND USING EQUIPMENT ON STRUCTURES, OR STORING MATERIALS ON/OR AGAINST STRUCTURES

Materials, and waste shall not be stored on or against any structure or structure element and equipment shall not be placed or used on any structure during the construction phase or finished or final configuration unless the written permission is obtained from the Administration's District Office and the Office of Structures for each type of material or equipment to be stored.

Loads, vehicle or other weight (materials etc.) that exceeds the bridge posted weight limit, if posted, or exceeds Maryland's legal vehicle loads on bridges, (with no posted bridge weight limits), are prohibited on the structure at any time, except as modified by the following. If the Contractor's intended operations will impose loads on the structure that exceed the weights listed above, the Contractor shall submit to the Engineer the type of material, its weight, the area that will be affected by the load, and its location on the structure. No stock pile of material regardless of unit weight shall be more than 4 ft high. If equipment is to be used, submit the maximum gross weight, axle spacing, load per axle, and proposed location on the structure. The maximum gross weight must include the vehicle weights in the most critical load position, i.e. front axle on crane with boom extended and element hanging. A special Hauling Permit is a requirement anytime equipment is moved over a structure that is over legal weight limit.

If any load requires evaluation, then a professional engineer registered in the State of Maryland and experienced in bridge design shall perform a load analysis to ensure that the load on the structure will not create an overstress condition on any bridge element. This analysis also includes effects of legal loads crossing the structure, if applicable. Analyses shall be submitted for review and loading cannot be imposed until written approval is received. Such submission does not guarantee acceptance by the Office of Structures, which reserves the sole right to accept or reject the proposed loading.

For structures under construction or rehabilitation, the Contractor shall also submit information pertaining to the phase of construction, such as which members have been modified or separated from the remainder of the structure, or have been newly constructed.

Any materials or equipment that would have a detrimental affect to the structure such as aluminum products placed against concrete surfaces shall be adequately protected to prohibit them from coming in contact with each other. Any discoloration or damage to the structure as a result of material or equipment being stored on/against the structure shall be removed or repaired.

SPECIAL PROVISIONS
T C – SECTION 7 PAYMENT

1 of 2

TERMS AND CONDITIONS

**TC SECTION 7
PAYMENT**

TC-7.04 SCOPE OF PAYMENT

123 **DELETE:** The sixth, seventh, and eighth paragraphs, respectively.

TC-7.05 PROGRESS PAYMENTS

(a) **Current Estimate.**

(2) **Monthly Estimates.**

124 **DELETE:** The first sentence: "Each month the Administration will pay the Contractor for the Contract Value of the work satisfactorily performed during the preceding calendar month, including authorized additions less variable Retainage specified in (3) "Variable Retainage."

INSERT: The following as the first sentence in its place:

Each month the County will pay the Contractor for the Contract value of the work satisfactorily performed during the preceding calendar month, including authorized additions less Retainage specified in (3) Retainage.

125 **DELETE:** (3) **Variable Retainage** in its entirety.

INSERT: The following:

(3) **Retainage.** Each Monthly Estimate will be subject to a Retainage of 10% of the actual work completed on the project for that month.

126 **DELETE:** (4) **Escrow Accounts for Retained Funds** in its entirety.

SPECIAL PROVISIONS
T C – SECTION 7 PAYMENT

2 of 2

TC-7.06 FINAL ACCEPTANCE AND FINAL PAYMENT

128 **DELETE:** (b) in its entirety.

INSERT: The following.

- (b) The Contractor shall then have a period of 30 days, dating from the date upon which he/she received the aforementioned tabulation from the County, in which:
- (1) To decide whether or not he/she will accept final payment upon such a basis, and
 - (2) To notify the County, in writing, of his/her decision. The Contractor may request an additional period up to 30 days in which to notify the County of his/her decision. In the event the Contractor notifies the County that he/she protests final payment on such a basis, that notification shall outline the reasons for said protest.

SPECIAL PROVISIONS

TECHNICAL
REQUIREMENTS

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

TABLE OF CONTENTS

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE
IMPROVEMENTS

<u>SPECIAL PROVISIONS, TECHNICAL REQUIREMENTS,</u>		<u>PAGE NO.</u>
01100	MEASUREMENT AND PAYMENT	132-143
02050	TEMPORARY FACILITIES	144-145
02100	SITE PREPARATION	146-148
02200	EARTHWORK	149-151
02600	SITE UTILITIES	152-153
02920	TURF AND GRASSES	154-159
02930	EXTERIOR PLANTS	160-171
03300	CONCRETE	172-175
07900	JOINTS AND SEALANTS	176-179
-----	CATAGORY 100	
	101 – CLEARING AND GRUBBING	180-182
	107 – CONSTRUCTION STAKEOUT	183-186
	108 – MOBILIZATION	187
	CATEGORY 200	
	201 – ROADWAY EXCAVATION (CLASS 1, 1A & 2)	188-192
	203 – BORROW EXCAVATION	193-197
	204 – EMBANKMENT AND SUBGRADE	198-201
	206 – REMOVAL OF EXISTING PAVEMENT, SIDEWALK, PAVED DITCHES, CURBS OR COMBINATION CURB AND GUTTER	
	CATEGORY 300	
	305 – MISCELLANEOUS STRUCTURES	203-205
-----	CATAGORY 600	
	602 – CURB, COMBINATION CURB AND GUTTER AND MONOLITHIC MEDIAN	206-208
	603 – SIDEWALKS	209-210
	607 – CHAIN LINK FENCE	211-213
	611 – DETECTABLE WARNING SURFACES	214
	CATAGORY 700 - LANDSCAPING	
	701 – SUBSOIL AND TOPSOIL	215-219
-----	708 – TURFGRASS SOD ESTABLISHMENT	220-224
	CATAGORY 800	
	800 – STREETLIGHT	225
	806 – LUMINAIRES	225
-----	808 – LIGHTING STRUCTURES & DETAILS	225-232

TABLE OF CONTENTS continued

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE
IMPROVEMENTS

<u>SPECIAL PROVISIONS, TECHNICAL REQUIREMENTS,</u>	<u>PAGE NO.</u>
813 – SIGNS	233-234
----- CATEGORY 900	
902 – PORTLAND CEMENT CONCRETE AND RELATED CEMENT PRODUCT	235-253
914 – CHAIN LINK FENCE	254
925 – DETECTABLE WARNING SURFACES	255-256

NOTE: Additional documents related to this work include a set of detailed construction plans. Bidders are to familiarize themselves thoroughly with this information in preparing bids.

SECTION 01100 – MEASUREMENT AND PAYMENT

PART 1 – GENERAL

The following subsection describes the measurement of and payment for the work to be done under the items listed in the PROPOSAL FORM.

Each unit or lump sum price stated in the PROPOSAL shall constitute full compensation as herein specified for each item of work completed in accordance with the Drawings and Specifications, including Contractor's overhead and profit, temporary facilities, insurance, permit fees, and all other costs of operations.

The items listed herein make certain specific references to portions of work included in that item; but no effort is made to list every facet of cost which is included. Each and every item shall be understood to include full compensation for all work, including that which is incidental to that item, except that work specifically included under another item.

Each unit or lump sum price is for a complete item or work, fully operational and ready for use by the County, unless specifically mentioned otherwise. Unless otherwise noted, all items are paid for after they have been installed, made complete and operational.

NOTE: Reference to the "MSHA Standard Specifications" is to the Maryland Department of Transportation *MSHA Standard Specification for Construction and Materials, July, 2018, and as amended.*

PART 2 – ITEMS

DEMOLITION

ITEM 1. REMOVAL AND DISPOSAL OF EXISTING LIGHTING STRUCTURE AND LUMINAIRE

1. This item shall constitute full compensation for removal and disposal of lighting structures, removal of existing concrete foundations and all incidentals necessary to complete the work. Removal of Existing Lighting Structure shall be done in accordance with the plans and specifications and with Sections 823 of the MD SHA Standard Specifications.
2. The quantity to be paid shall be the *number* of structures removed and disposed of.

ITEM 2. REMOVE AND DISPOSE OF EXISTING FENCE

1. The unit price shall constitute full compensation for removal and disposal of fence as noted on the plans and/or as directed by the County.
2. The quantity to be paid shall be the linear feet of split rail fence removed and disposed.

ITEM 3. REMOVE AND DISPOSE OF EXISTING ELECTRICAL SERVICE PANEL

1. This item shall include the removal and disposal of the existing electrical service panel as noted on the plans and/or as directed by the County.
2. The quantity to be paid shall be for *each* electrical service panel removed and disposed.

EXCAVATION

ITEM 4. CLASS 2 EXCAVATION

1. The unit price for this item shall constitute full compensation for excavation in accordance with Section 201 of the MSHA Standard Specifications. The unit price shall constitute full compensation for excavation below concrete, sidewalk and/or asphalt pavement including existing grass areas and as noted on the plans and/or as directed by the County.
2. Class 2 Excavation shall be measured and paid for at the contract unit price per *cubic yard* of material excavated.

ITEM 5. FURNISH AND INSTALL COMMON BORROW

1. This item shall constitute full compensation for providing, placing and compacting as required, backfill material only in accordance with Section 203 of the MSHA Standard Specifications and as noted on the plans and/or as directed by the County.
2. The quantity for this item shall be paid for at the Contract unit price per *cubic yard* of backfill placed.

DRAINAGE

ITEM 6. FURNISH AND INSTALL NO. 2 AGGREGATE STONE FOR STORMWATER MANAGEMENT FACILITIES

1. The quantity to be paid shall be in accordance with Section 316 of the MSHA Standard Specifications. The unit price for this item shall constitute full compensation for furnishing and installation of No. 2 Aggregate Stone as noted on the plans and/or as directed by the County.
2. The quantity to be paid shall be per *ton* of No. 2 Aggregate Stone placed.

ITEM 7. FURNISH AND INSTALL NON-WOVEN GEOTEXTILE, CLASS PE

1. The quantity to be paid shall be in accordance with Section 919 of the MSHA Standard Specifications. The unit price for this item shall constitute full compensation for furnishing and installing Non-Woven Geotextile, Class PE

fabric.

2. The quantity to be paid shall be per *square yard* of non-woven geotextile, class PE installed.

ITEM 8. FURNISH AND INSTALL STANDARD 10' COG INLET-MINIMUM DEPTH (SHA STANDARD MD 374.31)

1. The unit price shall constitute full compensation for furnishing and installation of a Standard 10' COG Inlet (SHA Standard MD 374.31). Removal of an existing drainage structure is contingent to this item. Refer to the drainage plan for placement of Standard 10' COG Inlet.
2. The quantity to be paid shall be per *each* Standard 10' COG Inlet (SHA Standard MD 374.31) installed.

ITEM 9. FURNISH AND INSTALL NO. 57 AGGREGATE FOR STORMWATER MANAGEMENT FACILITIES

1. The quantity to be paid shall be in accordance with Section 316 of the MSHA Standard Specifications, as noted on the plans and/or as directed by the County. The unit price for this item shall constitute full compensation for furnishing and installation of #57 aggregate stone for stormwater management facilities.
2. The quantity to be paid shall be the number of *cubic yards* of #57 aggregate stone placed at the stormwater management facility.

ITEM 10. FURNISH AND INSTALL COARSE SAND FOR STORMWATER MANAGEMENT FACILITIES

1. This item shall constitute full compensation for furnishing and installing Coarse Sand for Stormwater Management Facilities in accordance with Section 316 of the MSHA Standard Specifications and as noted on the plans and/or as directed by the County.
2. Coarse Sand for Stormwater Management Facilities will be measured and paid for at the Contract unit price per *cubic yard*.

ITEM 11. FURNISH AND INSTALL BIORETENTION SOIL MIX (BSM)

1. This item shall constitute full compensation for furnishing and installing Bioretention soil mix in accordance with Section 316 of the MSHA Standard Specifications and as noted on the plans and/or as directed by the County.
2. Bioretention Soil Mix (BSM) will be measured and paid for at the Contract unit price per *cubic yard*.

ITEM 12. STORMWATER MANAGEMENT FACILITY, AS-BUILT CERTIFICATION

1. This item shall constitute the submission of a certification package that affirms that stormwater management (SWM) facilities and practices are constructed as specified or are functionally equivalent to the designs in the approved SWM Report, revising the certification package as needed until final acceptance. in accordance with Section 317 of the MSHA Standard Specifications. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.
2. Stormwater Management (SWM) Facility As-Built Certification will not be measured but will be paid for at the Contract lump sum price.

CONCRETE AND ASPHALT CONSTRUCTION

ITEM 13. FURNISH AND INSTALL SUPERPAVE ASPHALT MIX. 25.0 MM FOR FULL-DEPTH PATCH, PG 64S-22 LEVEL 2

1. The unit price shall constitute full compensation for furnishing, hauling, placing all material, additional removal of pavement above the aggregate base, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Superpave asphalt mix shall be furnished and installed in accordance with the plans and specifications, as well as Section 505 of the MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *square yards* installed.

ITEM 14. FURNISH AND INSTALL 5" CONCRETE SIDEWALK

1. The payment will be full compensation for furnishing and installing 5" thick concrete sidewalk, all excavation, backfill, disposal of excess or unsuitable material, forms, reinforcement when specified, joints, sealer, compaction, curing, finishing, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. This item shall be furnished and installed in accordance with the plans and specifications, as well as Section 603 of the MD SHA Standard Specifications (July 2018).
2. Concrete Sidewalks will be measured and paid for at the Contract unit price per *square foot* of finished surface including sidewalk ramps.

ITEM 15. FURNISH AND INSTALL DETECTABLE WARNING SURFACE FOR CURB RAMPS

1. This unit price is for the furnishing and installation of detectable warning surfaces. Ensure that the detectable warning surface is in accordance with the most recent accessibility guidelines of the Americans with Disabilities Act

(ADA). The detectable warning surface must be selected from the Qualified Product List (QPL) as indicated in Section 611 MD SHA Standard Specifications.

2. Detectable Warning Surfaces will be measured and paid for at the Contract unit price per *square foot*. The payment will be full compensation for removal and disposal of old treatments, including adhesives and sealants, reapplying, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

ITEM 16. FURNISH AND INSTALL TYPE A COMBINATION CURB AND 12” GUTTER (MDSHA STANDARD MD. 620.02)

1. The unit price shall constitute the full compensation for the forming, furnishing and installation of Type A Combination Curb and Gutter (MDSHA Standard MD. 620.02), including expansion joints, sealants, reinforcements, forms, waterproofing membrane and all appurtenant work. The payment will be full compensation for all excavation, backfill, disposal of excess or unsuitable material, forms, reinforcement when specified, joints, sealer, compaction, curing, finishing, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.
2. Type A Combination Curb and Gutter will be measured and paid for at the Contract unit price per *linear foot* of finished curb and gutter installed.

ITEM 17. FURNISH AND INSTALL 5 INCH WHITE PAVEMENT MARKING PAINT LINE (FOR CROSSWALK)

1. The unit price for this item shall constitute full compensation for furnishing and installing 5 Inch White Pavement marking for crosswalk in the Grover’s Forge Section of Montgomery Village. This item shall be installed as noted on the plans and/or as directed by the County.
2. White Pavement Marking Paint lines will be measured and paid for at the Contract unit price per *linear foot* for the color and width specified.

FENCING

ITEM 18. FURNISH AND INSTALL 6 FOOT GALVANIZED CHAIN LINK FENCE WITH BLACK BONDED VINYL COATING

1. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. Installation of chain link fence shall be done in accordance with the plans and specifications and with Sections 607 of the MD SHA Standard Specifications and in accordance with the manufacturer’s recommendations.
2. Chain Link Fence will be measured and paid for at the Contract unit price per

linear foot for the actual number of linear feet measured to centers of end posts.

ELECTRICAL

ITEM 19. FURNISH AND INSTALL 12' DECORATIVE LIGHT POLE

1. This item shall constitute full compensation for the furnishing and installation of light poles and all appurtenant work. Installation of poles shall be done in accordance with the plans and specifications and with Sections 808 of the MD SHA Standard Specifications and in accordance with the manufacturer's recommendations.
2. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The quantity to be paid shall be the *number* of light poles actually installed.

ITEM 20. FURNISH AND INSTALL CONCRETE FOR LIGHT FOUNDATION

2. The unit price shall constitute full compensation for concrete, corrugated metal pipe or forms, reinforcement steel, anchor bolts, excavation, backfill, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Concrete for Light Foundation shall be furnished and installed in accordance with the plans and specifications, as well as Section 801 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *cubic yards* installed.

ITEM 21. FURNISH AND INSTALL LED ROADWAY LUMINAIRE (30W LED LUMINAIRE)

1. LED Roadway Luminaires will be measured and paid for at the contract unit price per each. The payment will be full compensation for the LED Roadway Luminaire and drivers, mounting hardware, wiring, integral transformer, shorting cap, and all material, labor, equipment, tools, and incidentals necessary to complete the work. Installation of luminaires shall be done in accordance with the plans and specifications and with Sections 806 of the MD SHA Standard Specifications and in accordance with the manufacturer's recommendations.
2. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The quantity to be paid shall be the *number* of luminaires actually installed.

ITEM 22. FURNISH AND INSTALL JUNCTION BOX

1. This item shall constitute full compensation for furnishing and installing a junction box as noted on the plans and/or as directed by the County. The payment

will be full compensation for all excavation, aggregate drain, concrete, bolts, bricks, pipes, backfill, sealer, frames and covers, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Junction boxes shall be done in accordance with the plans and specifications and with Sections 811 of the MD SHA Standard Specifications.

2. Junction Boxes will be measured and paid for at the Contract unit price per each.

ITEM 23. FURNISH AND INSTALL DUCT CABLE – 2 CONDUCTOR, NO 6 AWG, 600V

1. The unit price shall constitute full compensation for all duct cable, trench excavation, backfill, sidewalk restoration, wire splices, duct end seals, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Duct Cable shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *linear feet* installed.

ITEM 24. FURNISH AND INSTALL CABLE – 1 CONDUCTOR, NO 6 AWG, TYPE USE, 600V

1. The unit price shall constitute full compensation for all duct cable, trench excavation, backfill, sidewalk restoration, wire splices, duct end seals, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Duct Cable shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *linear feet* installed.

ITEM 25. FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE

1. The unit price shall constitute full compensation for all ground wire, trench excavation, backfill, sidewalk restoration, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Bare Copper Ground Wire shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *linear feet* installed.

ITEM 26. FURNISH AND INSTALL TYPE I CONNECTOR KIT

1. The unit price shall constitute full compensation for all connector kits, wire splices, duct end seals, and all material, labor, equipment, tools, and incidentals necessary to complete the work. Type I Connector Kit shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA

Standard Specifications (July 2018).

2. The quantity to be paid shall for *each* Type I Connector Kit installed.

ITEM 27. FURNISH AND INSTALL TYPE II CONNECTOR KIT

1. The unit price shall constitute full compensation for all connector kits, wire splices, duct end seals, and all material, labor, equipment, tools, and incidentals necessary to complete the work. Type II Connector Kit shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall for *each* Type II Connector Kit installed.

ITEM 28. FURNISH AND INSTALL TYPE III CONNECTOR KIT

1. The unit price shall constitute full compensation for all connector kits, wire splices, duct end seals, and all material, labor, equipment, tools, and incidentals necessary to complete the work. Type III Connector Kit shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall for *each* Type III Connector Kit installed.

ITEM 29. FURNISH AND INSTALL TYPE IV CONNECTOR KIT

1. The unit price shall constitute full compensation for all connector kits, wire splices, duct end seals, and all material, labor, equipment, tools, and incidentals necessary to complete the work. Type IV Connector Kit shall be furnished and installed in accordance with the plans and specifications, as well as Section 810 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall for *each* Type IV Connector Kit installed.

ITEM 30. FURNISH AND INSTALL GROUND ROD (3/4 INCH DIAMETER X 10 FOOT LENGTH)

1. The unit price shall constitute full compensation for lugs, exothermic welds, excavation, backfill, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. Ground Rods shall be furnished and installed in accordance with the plans and specifications, as well as Section 804 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be for *each* 10 foot ground rod furnished and installed.

ITEM 31. FURNISH AND INSTALL REMOTE LIGHTING CONTROL CABINET 60 AMP

1. This item shall include the furnishing and installation of a remote lighting control cabinet, 60 AMP as noted on the plans and/or as directed by the County. This item includes the equipment enclosure, panel boards, transformers, circuit breakers, lighting contactor, relay, photoelectric controls, thermostats, selector switches, fans, lightning arresters, conduit, wiring and wiring devices, and all other equipment necessary to provide a complete functioning lighting cabinet as specified. Protect all electrical outlets with ground fault circuit interrupters (GFCI).
2. Remote Lighting Control Cabinets will be measured and paid for at the Contract unit price per *each* of the type and size specified. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

ITEM 32. FURNISH AND INSTALL 2 INCH DIAMETER RIGID PVC CONDUIT, SCHEDULE 80

1. The unit price shall constitute full compensation for all excavation, backfill, encasement concrete, asphalt mixes, paint, pull wires, and for all material, labor, equipment, tools, and incidentals necessary to complete the work. 2 Inch diameter rigid PVC schedule 80 conduit shall be furnished and installed in accordance with the plans and specifications, as well as Section 805 MD SHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of *linear feet* installed.

LANDSCAPING

ITEM 33. FURNISH & INSTALL 4 INCH DEPTH, TOP SOIL

1. This item shall constitute full compensation for the furnishing and installation of a four inch (4") layer of County approved top soil and shall be in accordance with the specifications and plans as well as Section 701 of the MSHA Standard Specifications (July 2018).
2. The quantity to be paid shall be the number of square yards of approved top soil actually furnished and installed.

ITEM 34. FURNISH & INSTALL TURFGRASS ESTABLISHMENT

1. This item shall constitute full compensation for the furnishing and installation of turfgrass sod in accordance with Section 705 of MSHA Standard Specifications (July 2018) and as indicated on the plans. The payment will be full compensation for all material, labor, equipment, tools, disposal fees and incidentals necessary to complete the work.
2. The quantity to be paid shall be the number of square yards of approved turfgrass furnished and installed.

ITEM 35. FURNISH AND INSTALL CERCIS CANADENSIS 'FOREST PANSY', 2" CAL.,

B&B/#20 CONT.

1. This item shall constitute full compensation for the furnishing and installation of a **CERCIS CANADENSIS 'FOREST PANSY', 2" CAL** tree, all excavation, along with the required amounts of planting soil fertilizer mix, temporary storage and all appurtenant work. Maintenance for one year, and a one year replacement warranty is required for all landscape elements furnished and installed. The size, root type, location and spacing will be as indicated on the plans.
2. The quantity to be paid shall be each tree planted, maintained and warrantied.

ITEM 36. FURNISH AND INSTALL CORNUS SERICEA 'FARROW' ARCTIC FIRE, 18" HT. #3 CONT.

1. This item shall constitute full compensation for the furnishing and installation of **CORNUS SERICEA 'FARROW' ARCTIC FIRE, 18" HT. #3 CONT.** all excavation, along with the required amounts of planting soil fertilizer mix, temporary storage and all appurtenant work. Maintenance for one year, and a one year replacement warranty is required for all landscape elements furnished and installed. The size, root type, location and spacing will be as indicated on the plans.
2. The quantity to be paid shall be each plant installed, maintained and warrantied.

ITEM 37. FURNISH AND INSTALL ILEX GLABRA 'SHAMROCK', 24" HT., #3 CONT.

1. This item shall constitute full compensation for the furnishing and installation of **ILEX GLABRA 'SHAMROCK', 24" HT. #3 CONT.** all excavation, along with the required amounts of planting soil fertilizer mix, temporary storage and all appurtenant work. Maintenance for one year, and a one year replacement warranty is required for all landscape elements furnished and installed. The size, root type, location and spacing will be as indicated on the plans.
2. The quantity to be paid shall be each plant installed, maintained and warrantied.

ITEM 38. FURNISH AND INSTALL ECHINACEA PURPUREA, #SP4, CONT.

1. This item shall constitute full compensation for the furnishing and installation of **ECHINACEA PURPUREA, #SP4, CONT.** all excavation, along with the required amounts of planting soil fertilizer mix, temporary storage and all appurtenant work. Maintenance for one year, and a one year replacement warranty is required for all landscape elements furnished and installed. The size, root type, location and spacing will be as indicated on the plans.
2. The quantity to be paid shall be each plant installed, maintained and warrantied.

ITEM 39. FURNISH AND INSTALL PANICUM VIRGATUM 'SHENANDOAH', #1 CONT.

1. This item shall constitute full compensation for the furnishing and installation of

PANICUM VIRGATUM ‘SHENANDOAH’, #1 CONT. all excavation, along with the required amounts of planting soil fertilizer mix, temporary storage and all appurtenant work. Maintenance for one year, and a one year replacement warranty is required for all landscape elements furnished and installed. The size, root type, location and spacing will be as indicated on the plans.

2. The quantity to be paid shall be each plant installed, maintained and warrantied.

ITEM 40. FURNISH AND INSTALL 3” DEPTH SHREDDED HARDWOOD BARK MULCH

1. This item shall constitute full compensation for the furnishing and installation of a three inch (3”) layer of shredded hardwood bark (SHB) mulch in accordance with Section 920 of MSHA Standard Specifications (July 2018) and as indicated on the plans.
2. The quantity to be paid shall be the number of *square yards* of approved shredded hardwood bark mulch furnished and installed.

MISCELLANEOUS

ITEM 41. CONSTRUCTION STAKEOUT

1. This item shall constitute full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work in accordance with Section 107 of the MSHA Standard Specification.
2. Construction Stakeout will not be measured but will be paid for at the Contract *lump sum* price.

ITEM 42. MOBILIZATION

1. This item shall constitute full compensation for all work in accordance with Section 108 of the MSHA Standard Specification.
2. Mobilization will not be measured but will be paid for at the Contract *lump sum* price.

ITEM 43. TEST PIT EXCAVATION AND BACKFILLING (CONTINGENT)

1. The unit price for this item shall constitute full compensation for test pits, 5’ long by 3’ wide by 5’ deep, to determine locations of underground obstructions such as utilities, drainage systems, and any other similar items, as directed by the County or the Engineer. The unit price for this item also includes backfilling, compacting, and restoring the surface of test pit holes in accordance with Section 205 of the MSHA Standard Specifications. These pits shall be hand dug.

2. The quantity to be paid shall be for *each* test pit excavated, backfilled and compacted.

ITEM 44. PERMIT ACQUISITION (ELECTRICAL PERMIT)

1. This item shall constitute full compensation for all tasks and coordination required to obtain electrical permits to complete all work included within the contract documents.
2. The acquisition of permits shall be paid as *lump sum*.

ITEM 45. FURNISH AND INSTALL SHEET ALUMINUM SIGNS

1. This item shall constitute full compensation for the furnishing and installation of signs, mounting hardware and all incidentals required to complete the work. Installation of signs shall be done in accordance with the plans and specifications, Section 813 of the MSHA Standard Specifications and as directed by the County.
2. Sheet Aluminum signs will be measured and paid for at the Contract unit price per *square foot* of area of the vertical front face of the completed sign.

ITEM 46. FURNISH, SET, RESET TYPE III BARRICADE FOR MAINTENANCE OF PEDESTRIAN TRAFFIC

1. This item shall include the furnishing, setting, resetting, maintaining, and removal of barricades for maintenance of pedestrian traffic in accordance with Section 104.13 of the MSHA Standard Specifications and as directed by the County.
2. Barricades will be measured and paid for at the Contract unit price per *each* barricade installed.

SECTION 02050 – TEMPORARY FACILITIES

PART 1 – GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all labor and materials for temporary facilities required during construction operations. The Contractor is responsible for all costs associated with any temporary facilities provided.

1.2 TEMPORARY POWER

The Contractor shall make his own arrangements for, and pay all charges for, temporary power.

1.3 TEMPORARY WATER

The Contractor shall make his own arrangements for, and pay all charges for, temporary water.

1.4 TEMPORARY FIELD TOILET FACILITIES

The Contractor shall make his own arrangements for, and pay all charges for, temporary field toilet facilities.

1.5 CONSTRUCTION TELEPHONE

The Contractor shall arrange for and pay for portable cell phone service for calls, whereby the construction site can be communicated with during working hours and until final payment is made.

1.6 TRAFFIC CONTROL

- A. The Contractor shall provide traffic control and protection for the duration of this project in accordance with Section 104 of the MSHA Standard Specifications, the Plans, and as modified herein.

All advance warning signs for lane closures, intermediate information signs, and standard signs shall be installed in accordance with the “Manual of Uniform Traffic Control Devices for Streets and Highways.”

All traffic control devices shall remain in place until specific authorization for removal is received from the County.

- B. The Contractor’s attention is directed to Article 21.2 of the Supplementary General Conditions in reference to the filing of the required traffic maintenance plan.

1.7 TEMPORARY ACCESS WALKS

Temporary access walks shall be as specified in Section 02100, SITE PREPARATION and on County Maintenance of Traffic Plan, Appendix I.

1.8 TEMPORARY STORAGE FACILITIES (CONTRACTOR'S OPTION)

- A. Provide and maintain, on or adjacent to the project site, storage facilities (e.g., temporary buildings, storage sheds, fenced areas, trailers, etc.) required for work execution.
- B. Storage facility locations:
 - 1. Approved by the County's Representative.
 - 2. Submit three copies of plan indicating proposed storage facility locations and obtain approval from the County's Representative and Property Owner prior to start of construction..

Remove storage facilities and restore affected areas at project's completion or when directed by the County's Representative. Restoration to be approved by the County's Representative and Property Owner.

PART 2 - MATERIALS

Not applicable.

PART 3 - EXECUTION

Not applicable.

*****END OF SECTION 02050*****

SECTION 02100 - SITE PREPARATION

PART 1 – GENERAL

1.1 SCOPE OF WORK

- A. The Contractor shall provide all equipment and do all work necessary to prepare the site, complete, as indicated on the drawings and as specified.
- B. Demolition work, as specified herein, is not intended to be performed as a wrecking operation but as preparatory work relative to the performance of the various construction operations of the Project. The Contractor shall pay special attention to the Project Limits as shown on Plans.
- C. Items involved in the demolition and/or excavation such as pavement and sidewalks of whatever material shall not be classified as rock or hard surface excavation.

1.2 RELATED WORK

The Contractor shall coordinate the work of this Section with related work specified under other Sections, including:

Section 02050: TEMPORARY FACILITIES
Section 02200: EARTHWORK
Section 02600: SITE UTILITIES
Section 03300: CONCRETE
Section 16050: BASIC ELECTRICAL METHODS AND MATERIALS

1.3 JOB CONDITIONS

- A. Dust Control: To prevent unnecessary spread of dust during performance of exterior demolition work, thoroughly moisten surfaces and debris as required to prevent dust from being a nuisance to the public, to neighbors, and to concurrent performance of other work on the site. Water for use in dust control shall be obtained from Contractor's own source.
- B. Protection: Exercise care during demolition work to confine demolition operations to the areas indicated on the Drawings. The physical means and methods used for protection are at the Contractor's option. However, the Contractor shall be responsible for replacement and restitution work of whatever nature at no expense to the County.
 - 1. Any damage to the County or private property not identified as to be demolished or removed shall be replaced or repaired at the Contractor's expense, to the satisfaction of the County or Owner.
 - 2. If public safety could be at risk during the process of the demolition work, provide adequate protective measures to protect public, pedestrian and vehicular traffic.
 - 3. Signs, signals, and barricades used shall conform to requirements of State and City laws, rules, regulations, precautions, orders and decrees.
- C. Cleaning: The Contractor shall remove all debris, leftover Construction materials, etc. from job site on a daily basis.

1.4 INFORMATION NOT GUARANTEED

All information on the drawings and in the specifications relating to subsurface conditions, natural phenomena, existing utilities and structures is from the best sources presently available. All such information is furnished only for information and convenience, and is not guaranteed.

PART 2 - MATERIALS

2.1 SALVAGE MATERIAL

Material indicated on the Drawings or designated in the field by the Engineer to be removed and stockpiled shall be removed and stockpiled at the General Contractor's construction staging area, unless otherwise directed by these specifications and/or by the County's representative.

2.2 MATERIAL TO BE DISPOSED OF

All material resulting from site preparation and not scheduled for salvaging shall become the property of the Contractor and shall be legally and suitably disposed of off-site. Disposal shall be performed as promptly as possible and not left until the final clean up.

PART 3 - EXECUTION

3.1 INSPECTION

The Contractor shall:

- A. Prior to the performance of the actual work, carefully inspect the limits of demolition items and verify with the Owner the items being removed and items to be preserved.
- B. Locate existing exposed and buried utilities and determine the requirement for their protection, or their disposition, with respect to the demolition work. It is the responsibility of the Contractor to notify all utility companies, all pipe line owners or other parties affected within the construction area. The Contractor shall contact "Miss Utility" at least 48 hours prior to the beginning of any work at 1-800-257-7777.

3.2 GENERAL PERFORMANCE

- A. The means and methods of performing demolition operations are the sole responsibility of the Contractor.
- B. Demolished material shall not be broken into small pieces and used as fill, but shall be loaded into trucks and removed from site daily.
- C. The Contractor shall erect and maintain a substantial temporary fence to separate pedestrian traffic from the proposed construction.

3.3 PAVEMENT- SIDEWALK REMOVAL

Existing concrete sidewalk indicated to be removed shall be removed by the Contractor in accordance with Section 206 of the Standard Specifications.

3.4 TEMPORARY ACCESS WALK CONSTRUCTION

- A. Pedestrian access to existing buildings shall be maintained at all times.
- B. During sidewalk construction, pedestrian access shall be maintained at all times during excavation and construction. Pedestrian boardwalk shall be used as needed to provide access using a minimum of 4' x 8' by 5/8" exterior grade plywood.

3.5 DISPOSAL AND SALVAGE

- A. Legally dispose of all debris from demolition operations, daily.
- B. Salvage: The County shall have the right to claim as salvage any of the materials "removed" under the work of this Contract. When the Contractor has removed such items should such right of salvage be exercised by the County, the Contractor shall move and neatly store removed items in a location agreeable to the Owner in a manner approved by the Owner.

3.6 BACKFILLING

Backfill to level of rough grading in the area of demolished items shall be in accordance with Section 02200, Earthwork.

*****END OF SECTION 02100*****

SECTION 02200 – EARTHWORK

PART 1 – GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment and services necessary for and reasonably incidental to providing the required earthwork and site preparation within the project limits as shown on the drawings and/or specified herein.

1.2 RELATED WORK

The Contractor shall coordinate the work of this Section with related work specified under other Sections, including:

Section 02100: SITE PREPARATION
Section 02600: SITE UTILITIES
Section 03300: CONCRETE

1.3 EXISTING CONDITIONS

The Contractor shall become thoroughly familiar with the site, consult records and drawings of adjacent structures and of existing utilities and their connections, and note all conditions which may influence the work of this Section.

1.4 INFORMATION NOT GUARANTEED

All information on the drawings and in the specifications relating to subsurface conditions, natural phenomena, existing utilities and structures is from the best sources presently available. All such information is furnished only for information and convenience, and is not guaranteed.

PART 2 - MATERIAL

2.1 GENERAL

- A. The Contractor shall utilize suitable material resulting from on-site excavations when the excavated quantities permit, and as directed for backfill. The suitability of any excavated material for on-site use shall be at the discretion of the County.
- B. Material needed in addition to that available from on-site operations shall be obtained from suitable deposits and meet the applicable specification. The Contractor shall furnish all fill and backfill material needed to complete the work.

2.2 SUITABLE MATERIAL

- A. Suitable material shall be material resulting from on-site excavations which is free of organic matter, including logs, stumps, and roots, rock larger than 6 inches in greatest dimension, and debris such as concrete.
- B. Suitable excavated material shall be of such gradation as to form a stable and firm subgrade.

2.3 TRENCH BACKFILL

Trench backfill material shall be fine aggregate as specified in section 950.05 of the MSHA Standard Specifications.

2.4 SAND

Sand shall meet the requirements of AASHTO M6.

PART 3 - EXECUTION

3.1 SAW CUTTING

Saw cutting shall be executed along the building line or as indicated on the drawings, along the curb, and on the road bed as shown on the drawings. Saw cutting shall be performed in a straight and neat manner.

3.2 PROTECTION OF UTILITIES TO REMAIN

- A. Underground utilities have been indicated on the drawings to the extent of information available, but no guarantee is made that all utilities and structures are shown.
- B. As excavation approaches underground utilities and structures, excavation shall be done by hand tools.
- C. Utilities, structures, curbs, pavements, and other features intended to remain which are damaged due to the Contractors operations shall be restored or replaced, at the Contractors expense, to at least their original condition.
- D. Survey markers which are disturbed shall be restored at the Contractor's expense by a Land Surveyor registered in the State of Maryland.
- E. Utilities which will interfere with the progress of the work shall not be interrupted without the permission of the utility owner.

3.3 FREEZING

No excavations to full depth shall be made when freezing temperatures are expected, unless the structures are placed immediately after the excavation is completed. The excavation bottom shall be protected from freezing if the placing of earth is delayed.

3.4 EARTH EXCAVATION

- A. Earth excavation shall be in accordance with Sections 201 and 404 of the MSHA Standard Specifications, except as modified herein.
- B. All broken bituminous surface material, broken concrete, broken rock, boulders, stones 6 inches or larger, stumps, roots, and other related material deemed by the County to be unsuitable for reuse, shall be suitably disposed of off-site.
- C. If material unsuitable for foundations is found at or below the excavation bottom, the Contractor

shall remove such material to the required width and depth and replace it with thoroughly compacted aggregate sub-base.

- D. Trench backfill material shall be the fine aggregate as specified in Section 901 of the MSHA Standard Specifications.

3.5 BACKFILLING AND COMPACTION

- A. Fill and backfill under structures and pavements shall be placed in 6 inch layers and compacted to 95 percent, as determined by Method D of ASTM D1557, unless otherwise directed or except for the following.
- B. Trenches and French Drains shall be backfilled and compacted in accordance with Section 809 of the MSHA Standard Specifications.
- C. Backfill shall not be placed around structures until the concrete has sufficiently set.
- D. If specified, backfilling for certain utilities shall not be done until testing is complete.
- E. If a pipeline is backfilled before testing and fails a test, the Contractor shall remove and later replace such backfill at his own expense in order to repair or replace defective joints or pipe.

3.6 GRADING

Grading shall be done to lines and levels indicated on the plans.

3.7 DISPOSAL

All material resulting from excavations which is unsuitable for reuse shall become the property of the Contractor and suitably disposed of off-site.

3.8 TEST PIT EXCAVATION

The Contractor, under the direction of the County, shall perform Test Pit Excavation to locate existing utilities that may conflict with the proposed construction.

Test pits shall be of the size, depth, and location as approved by the County. Each pit shall be tamp backfilled after horizontal and vertical locations of the utilities have been obtained.

*****END OF SECTION 02200*****

SECTION 02600 - SITE UTILITIES

PART 1 - GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all labor, materials, equipment and services necessary for and reasonably incidental to reconstructing, adjusting, and/or relocating all utilities necessary to construct the project according to plans. This work includes, trench drains, water facilities, storm drain, and sewer facilities. This includes minor adjustments (up 6" or down 6") to the above-mentioned facilities, as well as to telephone, gas, and electric facilities. This also includes the labor, equipment, and incidentals necessary to adjust water valves.

1.2 RELATED WORK

The Contractor shall coordinate the work of this Section with related work specified under other Sections, including:

Section 02100: SITE PREPARATION
Section 02200: EARTHWORK

1.3 EXISTING CONDITIONS AND INFORMATION ON DRAWINGS

The location of existing utilities on the drawings has been obtained from records, plans, and field surveys, but is not guaranteed to be either precise or complete. All existing utilities not scheduled for removal shall be protected from damage during the execution of this contract. Any damage done shall be repaired at the Contractor's expense. The project shall be completely marked on the ground by "Miss Utility," telephone 1-800-257-7777, before any work is started.

1.4 GENERAL

- A. All work shall be done in compliance with the appropriate utilities most recent standards and specifications, and the Maryland Department of Transportation, State Highway Administration, *Standards Specifications for Construction and Materials*, dated July 2018.

Any adjustments to public utilities shall be fully coordinated with the utility owners thereof, as follows:

Water/ Storm Systems: Washington Suburban Sanitary Commission
Telephone: 301-206-9672

Gas System - Washington Gas Light Company
Telephone: 703-750-4215

Electric System - Potomac Electric Power Company
Telephone: 301-548-4305

Telephone System - Verizon - MD
Telephone: 301-595-6140

COMCAST
Telephone: 301-294-7774

- B. For approval of materials and inspection of water and sewer work, contact Mr. Ahmad Karami, Washington Suburban Sanitary District - telephone (301) 206-9672 between 7:30 AM and 4:00 PM. a minimum of five (5) days in advance of beginning any work to arrange for inspection.
- C. All work within the public right-of-way of Fenton Village shall be approved by the County and shall comply with the conditions of a permit to be issued by the Montgomery County Department of Permitting Services.

PART 2 - MATERIAL

2.1 GENERAL

- A. All materials used to construct utilities shall comply with provisions of paragraph 1.4 of PART I above.
- B. All materials required to accomplish the adjustment of water and sewer facilities under the supervision of WSSC must be approved by the Quality Assurance Section of the Washington Suburban Sanitary Commission.

2.2 FIRE HYDRANTS

- A. Contractor to provide WSSC with plans and details, in 8 ½" x 11" format, of proposed fire hydrant relocation, five (5) days in advance of beginning any work to arrange for inspection and direction from WSSC.
- B. During excavation and construction all work pertaining to the relocation of fire hydrants shall be in the presence of and under the direct supervision of the County Project Coordinator and the WSSC inspector as indicated in paragraph 1.4 B of PART I above.
- C. Contractor is responsible to field verify, and provide WSSC and the Engineer, all buried line elevations prior to beginning any relocation work. All proposed invert elevations shall match existing invert elevations.
- D. Determination of relocating existing fire hydrant materials and facilities or installing new fire hydrant materials and facilities will be field verified and directed by WSSC during construction.

PART 3 - EXECUTION

3.1 GENERAL

All work shall be performed to meet provisions of paragraph 1.4 of PART I above. All work to be done on water and sewer facilities shall also meet provisions of paragraph 2.1 B and 2.2 of PART 2 above.

*****END OF SECTION 02600*****

SECTION 02920

TURF AND GRASSES

PART 1 GENERAL

A. SUMMARY

1. Section Includes:
 - a. Sodding.
2. Related Requirements:
 - a. Section 02200 "Earthwork" for subgrade preparation.
 - b. Section 02930 "Exterior Plants" for trees, shrubs, ground covers and soil testing and placement requirements.

B. DEFINITIONS

1. Finish Grade: Elevation of finished surface of planting soil.
2. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. Pesticides include insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. They also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
3. Pests: Living organisms that occur where they are not desired or that cause damage to plants, animals, or people. Pests include insects, mites, grubs, mollusks (snails and slugs), rodents (gophers, moles, and mice), unwanted plants (weeds), fungi, bacteria, and viruses.
4. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329115 "Soil Preparation (Performance Specification)" and drawing designations for planting soils.
5. Subgrade: The surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.

C. INFORMATIONAL SUBMITTALS

1. Qualification Data: For landscape Installer.
2. Certification of Grass Seed: From seed vendor for each grass-seed monostand or mixture, stating the botanical and common name, percentage by weight of each species and variety, and percentage of purity, germination, and weed seed. Include the year of production and date of packaging.

- a. Certification of each seed mixture for turfgrass sod. Include identification of source and name and telephone number of supplier.
3. Product Certificates: For fertilizers, from manufacturer.
4. Pesticides and Herbicides: Product label and manufacturer's application instructions specific to Project.

D. CLOSEOUT SUBMITTALS

1. Maintenance Data: Recommended procedures to be established by the County for maintenance of turf during a calendar year. Submit before expiration of required maintenance periods.

E. QUALITY ASSURANCE

1. Installer Qualifications: A qualified landscape installer whose work has resulted in successful turf establishment.
 - a. Experience: Five years' experience in turf installation.
 - b. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - c. Pesticide Applicator: State licensed, commercial.

F. DELIVERY, STORAGE, AND HANDLING

1. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.
2. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.
3. Bulk Materials:
 - a. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 - b. Provide erosion-control measures to prevent erosion or displacement of bulk materials; discharge of soil-bearing water runoff; and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 - c. Accompany each delivery of bulk materials with appropriate certificates.

G. FIELD CONDITIONS

1. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with initial maintenance periods to provide required maintenance from date of planting completion.
 - a. Spring Planting: March 1 to May 15.
 - b. Fall Planting: October 1 to December 15.

2. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit planting to be performed when beneficial and optimum results may be obtained. Apply products during favorable weather conditions according to manufacturer's written instructions.

PART 2 PRODUCTS

A. TURFGRASS SOD

1. Turfgrass Sod: MD State Certified, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
2. Turfgrass Species: Sod of grass species as follows, with not less than 85 percent germination, not less than 95 percent pure seed, and not more than 0.2 percent weed seed:
 - a. Sun and Partial Shade: Proportioned by weight as follows:
 1. 90 percent turf-type tall fescue (*Festuca arundinacea*); an equal blend of three cultivars.
 2. 10 percent Kentucky bluegrass (*Poa pratensis*).

B. FERTILIZERS

1. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - a. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.
2. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - a. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified soil-testing laboratory.

C. PESTICIDES

1. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.
2. Pre-Emergent Herbicide (Selective and Nonselective): Effective for controlling the germination or growth of weeds within planted areas at the soil level directly below the mulch layer.
3. Post-Emergent Herbicide (Selective and Nonselective): Effective for controlling weed growth that has already germinated.

PART 3 EXECUTION

A. EXAMINATION

1. Examine areas to be planted for compliance with requirements and other conditions affecting installation and performance of the Work.
 - a. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in soil within a planting area.
 - b. Suspend planting operations during periods of excessive soil moisture until the moisture content reaches acceptable levels to attain the required results.
 - c. Uniformly moisten excessively dry soil that is not workable or which is dusty.
2. Proceed with installation only after unsatisfactory conditions have been corrected.
3. If contamination by foreign or deleterious material or liquid is present in soil within a planting area, remove the soil and contamination as directed by the County and replace with new planting soil.

B. PREPARATION

1. Protect structures; utilities; sidewalks; pavements; and other facilities, trees, shrubs, and plantings from damage caused by planting operations.
 - a. Protect grade stakes set by others until directed to remove them.

C. TURF AREA PREPARATION

1. General: Prepare planting area for soil placement and mix planting soil according to Section 329115 "Soil Preparation (Performance Specification)."
2. Placing Planting Soil: Place and mix planting soil in place over exposed subgrade.
 - a. Reduce elevation of planting soil to allow for soil thickness of sod.
3. Moistening prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
4. Before planting, obtain the County's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

D. SODDING

1. Lay sod within 24 hours of harvesting unless a suitable preservation method is accepted by the County prior to delivery time. Do not lay sod if dormant or if ground is frozen or muddy.
2. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during

installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.

3. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

E. TURF MAINTENANCE

1. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf. Roll, regrade, and replant bare or eroded areas and mulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.
 - a. Fill in as necessary soil subsidence that may occur because of settling or other processes. Replace materials and turf damaged or lost in areas of subsidence.
 - b. Apply treatments as required to keep turf and soil free of pests and pathogens or disease. Use integrated pest management practices whenever possible to minimize the use of pesticides and reduce hazards.
2. Watering: Install and maintain temporary piping, hoses, and turf-watering equipment to convey water from sources and to keep turf uniformly moist to a depth of 4 inches.
 - a. Schedule watering to prevent wilting, puddling, or erosion. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 - b. Water turf with fine spray at a minimum rate of 1 inch per week unless rainfall precipitation is adequate.
3. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
 - a. Mow turf-type tall fescue to a height of 2 to 3 inches.

F. SATISFACTORY TURF

1. Turf installations shall meet the following criteria as determined by the County:
 - a. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.

- G.** Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

H. PESTICIDE APPLICATION

1. Apply pesticides and other chemical products and biological control agents according to requirements of authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with the County's operations and others in proximity to the Work. Notify the County before each application is performed.

2. Post-Emergent Herbicides (Selective and Nonselective): Apply only as necessary to treat already-germinated weeds and according to manufacturer's written recommendations.

I. CLEANUP AND PROTECTION

1. Promptly remove soil and debris created by turf work from paved areas. Clean wheels of vehicles before leaving site to avoid tracking soil onto roads, walks, or other paved areas.
2. Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off the County's property.
3. Erect temporary fencing or barricades and warning signs as required to protect newly planted areas from traffic. Maintain fencing and barricades throughout initial maintenance period and remove after plantings are established.

J. MAINTENANCE SERVICE

1. Turf Maintenance Service: Provide full maintenance by skilled employees of landscape Installer. Maintain as required in "Turf Maintenance" Article. Begin maintenance immediately after each area is planted and continue until acceptable turf is established, but for not less than the following periods:
 - a. Sodded Turf: 30 days from date of planting completion.

*****END OF SECTION 02920*****

SECTION 02930

EXTERIOR PLANTS

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. The Contractor shall furnish all labor, plants, materials, equipment services, and incidentals for furnishing, installing, maintaining and guaranteeing landscape necessary for plantings and other incidental items necessary for satisfactory completion of all planting as shown on the drawings and/or as specified in accordance with Landscape Specification Guidelines by Landscape Contractors Association, latest edition. (2014)
- B. The work shall include, but is not limited to:
 - 1. Supplying plants, topsoil, manure, mulch, peat moss, and guying materials.
 - 2. Mixing planting soil.
 - 3. Placing plants and materials.
 - 4. Maintaining plants.
 - 5. Fulfilling the guarantee and replacement requirements.

1.2 RELATED SECTIONS

The Contractor shall coordinate the work of this section with related work specified under other sections including:

Section 02200: EARTHWORK
Section 02600: SITE UTILITIES
Section 02920: TURF AND GRASSES
Section 03300: CONCRETE

1.3 QUALITY ASSURANCE STANDARDS

- A. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen. (ANSI Z60.1)
- B. Reference Codes and Standards:
 - 1. American Standard for Nursery Stock (ANSI Z60.1)
 - 2. Bailey's Standard Cyclopedic of Horticulture
 - 3. Standardized Plant Names, American Joint Committee on Horticultural Nomenclature (AJCHN)
 - 4. Hortus III
- C. Source Quality Control:
 - 1. Packaged products shall indicate the analysis and recommendations for use on the

manufacturer's package and arrive on site as originally' packaged and unopened.

2. For freshly dug plants, use nursery grown stock acclimated to the soil and climatic conditions in the local area of intended planting.
3. The Contractor shall submit to the County for approval, the names, and locations of nurseries which he proposes to use as sources of acceptable plant materials. The Contractor shall determine that the materials meet the requirements of this section. Proposed materials shall be flagged at the nurseries by the Contractor prior to viewing by the County.
4. The Contractor shall schedule with the County a time for viewing plant material in nursery, in order for the County to determine whether plant materials conform to specification requirements. Trips to nurseries shall be efficiently arranged to allow the County to maximize its viewing time. A minimum of 6 weeks shall be allowed for this viewing prior to time that plants are to be dug.
5. The County may choose to attach his seal to each plant, or representative samples.
6. Where requested by the County, photographs of plant material or representative samples of plants shall be submitted.
7. Use plants grown under good nursery practices for a period of two full growing seasons.
8. Plant material shall be subject to inspection, shall be selected from nurseries by the County at the place of growth or holding yard for conformity to specification requirements as to quality, size and variety.
9. Tagging of trees at nursery does not preclude the County's right to reject material at the site of planting.

D. Contractor On-Site Supervision

1. The Contractor shall arrange with the landscape subcontractor to have a competent Senior Landscape Foreman who shall be in attendance at the project site at all times during the progress of the work specified in this section.
2. The Senior Foreman shall have progressively responsible experience as a foreman on projects of similar size and complexity.

1.4 SUBMITTAL

- A. Within ten (10) calendar days after the County's written Notification of Intent to Awards a Contract, submit detailed production schedule to the County indicating various work items and dates each item will be staked or flagged, started, and completed.
- B. Submit schedule for digging and delivery dates for all Plant Materials with Production Schedule.
- C. Samples: Samples, manufacturer's literature, or laboratory analytical data, as applicable, of all materials other than plants shall be submitted for approval to the County.
- D. Soil Supplement Product Certification: Submit, prior to installation, written statements certifying that such products have a guaranteed analysis in conformance with the recommendations for soil supplements contained in the tests and analyses called for in Section 1.9 below.

- E. Plant Certifications: Submit, prior to installation, plant material certificates certifying the plants to be typical and the species or variety in conformity to the current edition of “American Standard for Nursery Stock” of the American Nursery and Landscape Association (ANLA).

- F. Submit, prior to installation, a label from the manufacturer’s container certifying that the following products meet the specified requirements:
 - 1. Iron sulfate
 - 2. Limestone
 - 3. Commercial fertilizer
 - 4. Anti-desiccant
 - 5. Fungicide
 - 6. Insecticide

- G. Certification of inspection shall accompany the invoice for each shipment of plants as required by law for transportation. Disease-free and insect-free certificates shall be submitted to the County. File certificates with the County prior to acceptance of the material. Inspection by federal or state-governments at place of growth does not preclude rejection of the plants at the site.

- H. Submit statement of qualifications of the proposed Senior Landscape Foreman to the County for review and approval, within ten (10) calendar days after the date of the County’s written Notification of Intent to Award a Contract.

- I. All submittals shall be forwarded in a single package to the County’s Representative within ten (10) calendar days of the date of the County’s written Notification of Intent to Award a Contract, except items otherwise noted.

- J. One month prior to the end of the one-year Maintenance Period, submit written maintenance instructions, recommending procedures for continuing maintenance of Plant Materials.

1.5 SUBSTITUTION

- A. If a Contract plant is found to be unavailable, the Contractor shall notify the County. It is the responsibility of the Contractor to demonstrate lack of availability. Substitutions for convenience will not be considered.

- B. The Contractor shall select another equivalent, available plant and submit details to the County for approval. Approval of a substitution is at the sole discretion of the County and may be rejected for any reason.

- C. Approved substitute plants shall be of the same size, value, and quality as the original plant.

1.6 UTILITIES

- A. The Contractor shall call utility companies to locate all the utilities and notify the County ahead of planting.

- B. If there is a conflict between any utility, underground or overhead, and any proposed plant material, it is the responsibility of the Contractor to notify the County prior to commencement of work. The County must approve any plant material location changes prior to installation. Any additional cost due to relocating plant material as a result of utility conflicts shall be borne by the Contractor.

1.7 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Deliver packaged products to the site in unopened containers with labels intact and legible.
- B. Deliver plant materials to the site in a protected condition to prevent wind damage and drying. Plant materials exhibiting a “heated” or “sweated” condition due to tight packaging or poor ventilation are subject to rejection.
- C. Deliver plants tagged with the name and size legibly indicated in accordance with the ANLA standards of practice. Provide at least one tagged plant in each bundle or lot. In all cases, botanical names shall take precedence over common names.
- D. Store packaged products in such a manner to prevent moisture damage and other forms of contamination.
- E. Prepare dug plants for handling and shipment with balled and burlapped (B&B) root systems. Perform B&B work in accordance with ANLA standards and in accordance with ASNI Z60.1 concerning diameter and depths of balls on B&B plants. Handle plants from bottom of ball. B&B plants arriving at the site with broken, loose, dried or fractured balls, or with abraded bark, are subject to rejection. When a plant has been so rejected, the Contractor shall at once remove it from the area of the work and replace it.
- F. Plants shall not be dug at the nursery or approved source until the Contractor is ready to transport them from their original locations to the site of the work or acceptable storage locations.
- G. Unless otherwise authorized by the County, the Contractor shall notify the County at least 48 hours in advance of the anticipated delivery date of any plant material. A legible copy of the invoice, showing kinds and sizes of materials included for each shipment shall be furnished to the County. Certificate of Inspection, when required, shall accompany each shipment of plant materials.
- H. Anti-desiccant shall be applied to all plants dug in foliage.
- I. Temporary Storage: No plant shall remain in temporary storage over the winter or summer. Plants that are not planted immediately shall be protected as follows:
 - 1. Plants shall remain on the site of the work no longer than three days prior to being planted or placed in storage.
 - 2. The earth balls shall be kept moist and their solidity carefully preserved. To prevent drying out or freezing, they shall be stored in a compact group with a suitable mulch material placed around and between the balls so they are completely covered. The duration and method of storage of plants and mulch material shall be approved by the County.

1.8 JOB CONDITIONS

- A. Environmental Requirements: Do not perform work of the Section when soil or weather conditions are unsuitable. Unsuitable conditions include soil saturated with moisture or frozen in place and precipitation of any kind present or occurring during the work.

- B. Plant Setting Dates: October 15 to December 15 unless otherwise approved by the County in writing. Any request for deviation from the planting dates shall be made no less than four weeks in advance of requested planting dates.
- C. Unforeseen Contingencies: The Contractor will not be held responsible for unforeseen contingencies (other than those in Section 1.6 above) such as, but not limited to, rock, water, clay pan or other obstacles encountered in excavation work which are not apparent on the surface. Course of action will be decided at the time of encounter, per approval of the County.
- D. Drainage: No plants shall be planted in situations that show obviously poor drainage. Such situations shall be brought to the attention of the County and, if necessary, corrective measures shall be taken or the plants shall be relocated.
- E. Water: Water will be supplied by the Contractor.
- F. Utilities: The Contractor shall note the potential minimum earth cover of buried utilities and shall be prepared to dig all tree pits by hand to minimize disturbances. Hand digging will not be considered as extra, and no additional payments will be made for such work.

1.9 CONTRACTOR’S INSPECTION AND TESTING

- A. Testing, analyses, and inspection of soil required by the Contractor for his own information or guidance shall be at his own expense.
- B. The Contractor shall provide soil tests from two separate, representative locations on site, as well as for imported topsoil. The sample size shall be 1/8 cubic foot per sample. The Contractor shall engage (at their own expense) a state laboratory or recognized commercial laboratory acceptable to the County to perform the following tests and analyses:

Material
Topsoil
(Both on-site
and import)

Tests and Analysis Required
Mechanical analysis of soil and determination of pH, organic content,
and nutrient content.

Recommendations shall be made by the testing agency as to the type and quantity of soil additives required to bring nutrient content and mechanical analysis to satisfactory levels for planting.

No planting shall proceed until these tests have been run, the test results reported to the County and the County has given permission to proceed with plant excavations.

Test reports shall distinguish between recommendations for amending soil for use with trees, shrubs, and ground covers.

- 1. Materials shall not be used in construction until test results have been reviewed by the County.
- 2. All costs associated with testing shall be at the expense of the Contractor.
- 3. Any on-site topsoil found unsuitable for planting shall be removed from the project site and disposed of in accordance with all local laws, codes and ordinances at no additional cost to the County.

1.10 INSPECTION, ACCEPTANCE AND GUARANTEE

A. Initial Acceptance

1. The County will inspect all work for initial acceptance upon written request of the Contractor. The request shall be received at least ten calendar days before the anticipated date of inspection.
2. Initial acceptance of plant material by the County shall be for general conformance to specified size, character, and quality, and shall not relieve the Contractor of responsibility for full conformance to the Contract Documents, including correct species.
3. Upon completion and re-inspection of all repairs or renewals necessary, the County will determine the work of this Section to be initially accepted.

B. Guarantee Period

1. The guarantee period for plant material shall begin at the date of initial acceptance.
2. All plant material shall be guaranteed by the Contractor for a period of two years from the date of acceptance to be in good, healthy, and flourishing condition.
3. If dormancy of plants requires verification of viability during the next growing season, the Guarantee Period for these plants will commence following such verification.
4. For any delay in completion of planting operations which extends the planting into more than one planting season, the Warranty Period shall begin whenever Substantial Completion Acceptance is granted.
5. For any partially completed work, the Guarantee Period shall begin upon the date of Substantial Completion Acceptance of such work.

C. Replacements

1. The Contractor shall replace, without cost to the County as soon as weather conditions permit, and within the specified planting period, all dead plants and all plants not in a vigorous, thriving condition as determined by the County during and at the end of the guarantee period. The plants shall be free of dead or dying branched and branch tips, and shall bear foliage of normal density, size, and color. Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this Specification. Do not make replacement in any season unfavorable for planting.
2. Any plants that are 25 percent or more dead shall be considered dead when the main leader has died back or 25 percent or more of the crown is dead.
3. The Contractor shall make all necessary repairs to complete work due to plant replacements. Such repairs shall be done at no extra cost to the County.
4. The guarantee of all replacement plants shall extend for an additional period of two years from the date of their initial acceptance after replacement. In the event that a replacement

plant is not acceptable during or at the end of the said extended guarantee period, the County may elect subsequent replacement or credit for each item.

D. Guarantee Period Inspections

The Contractor shall make as many periodic inspections as necessary during the guarantee period at no additional cost to the County, to determine what changes, if any should be made to the maintenance program. The Contractor shall submit in writing to the County all recommended changes.

1. Final Inspection and Final Acceptance
2. At the end of the guarantee period, the County will inspect all guaranteed work for Final Acceptance upon written request of the Contractor. The request shall be received at least ten calendar days before the anticipated date for Final Inspection.
3. Upon completion and re-inspection of full repairs or renewals necessary in the judgment of the County at that time, the County will grant Final Acceptance of the work of this Section.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. Plants shall conform to the varieties specified in the plant list and be true to botanical name as listed. Plants shall be in accordance with the latest version of ANSI Z60.1, except as otherwise stated in the specifications or shown on the Drawings. Where the drawings or specifications are in conflict with ANSI Z60.1, the drawings and specifications shall prevail.
- B. Planting stock shall be well-branched and well-formed, sound, vigorous, healthy, and free from disease, sun-scald, windburn, abrasion, disfiguring knots, cuts of limbs over 3/4 inch which have not completely callused, and harmful insects or insect eggs and shall have healthy, normal and unbroken root systems. Deciduous trees shall be symmetrically developed, of uniform habit or growth, with straight holes or stems, and free from objectionable disfigurements. Tree species shall have a single main trunk. Plants shall have been grown under climatic conditions similar to those in the locality of the project for at least two years.
- C. Plants planted in rows shall be matching in form.
- D. The minimum acceptable sizes of all plants, measured before pruning and with branches in normal position, shall conform to the measurements indicated on the drawings. Plants larger in size than the specified may be used with the approval of the County with no change in the contract price. If larger plants are used, the ball of earth or spread of roots shall be increased in accordance with ANSI Z60.1. Plants shall not be pruned before delivery.
- E. Plant material shall be nursery grown unless otherwise indicated and shall conform to the requirements and recommendations of ANSI Z60.1. Plants shall be dug and prepared for shipment in a manner that will not cause damage to branches, shape, and future development after planting.
 1. Balled and burlapped (B&B) plants shall have ball sizes conforming to ANSI Z60.1. Plants shall be balled with firm natural balls of soil. B&B plants shall be wrapped firmly with burlap or strong cloth and tied securely. In size grading balled-and-burlapped trees, caliper shall take precedence over height. Caliper of the trunk shall be taken 6 inches above the

natural ground level for trees up to and including 4-inch caliper size. For trees larger than 4-inch caliper, caliper shall be taken at 12 inches above the natural ground level.

2. Container grown plants shall have sufficient root growth to hold the earth intact when removed from containers but shall not be root bound.

2.2 ANTI-DESICCANT

Anti-desiccant: "Wilt-pruf" Nursery Specialty Products, Inc., 410 Greenwich Avenue, Greenwich, Connecticut 06830, or approved equivalent.

2.3 PEAT MOSS / COMPOST

- A. Commercially available material consisting of shredded sedge peat and reed peat or sphagnum moss peat, or combinations of such, from fresh water sites. Peats in advanced stages of decay (parent material not identifiable) are not permitted. Use peat having a minimum organic content of 80 percent organic matter by weight, a pH value of 3.5 to 5.5, and a maximum ash content of 15 percent.
- B. Compost: Well-rotted decomposed leaf material.

2.4 FERTILIZER

- A. Planting tablets shall be Agriform 20-10-5 Planting Tablets or approved equal, tightly compressed, long lasting and slow release, weights of 5, 10, and 21 grams with an analysis of 20-10-5 derived from the sources listed in the guaranteed analysis. Place tablet(s) beside the root ball about one inch from root tips. Do not place tablet(s) in bottom of the hole. Complete backfill, tamp, and water.

2.5 TOPSOIL

- A. On-site stockpiled topsoil is not available to the Contractor. Provide imported topsoil as required from sources approved by the County. Topsoil shall only be used for the 2" surface layer of the planting pits. Provide amendments specified to bring topsoil to standards specified.
- B. Topsoil, whether stripped from site or supplied from off-site, shall be a sandy loam or loam soil as defined by the USDA Soil Conservation Service, Soil Classification System, and shall have the following mechanical analysis:

<u>Textural Class</u>	<u>% of Total Weight</u>	<u>Average</u>
Sand (0.05-2.0 mil dia range)	30 to 70	50
Silt (0.002-0.5 mil dia range)	20 to 50	35
Clay (less than 0.002 mil dia range)	5 to 25	15

95% of topsoil shall pass a 2.0 mil sieve.

Topsoil shall be free of stone 1" or larger in longest dimension, earth clods, plant parts and debris.

Organic matter content shall be 4%-12% of dry weight.

Topsoil shall not contain toxic substances harmful to plant growth.

2.6 PLANTING SOIL

- A. Planting soil shall be derived from subsoil from existing plant pits and amendments determined by the soil analysis.

- B. Planting soil shall NOT be sieved. Large clods of earth, clay, roots, etc. are acceptable. Contractor shall collect the existing soil and mix with recommended amendments ONLY ONCE prior to placement in the planting pits.
- C. Planting soil shall meet the same texture class percent as Topsoil per 2.5 above, but shall not be sieved.

2.7 MULCH

- A. Mulch material for plants shall be uncolored, double shredded hardwood mulch. Bark mulch or shredded bark will not be accepted. Material shall be mulching grade, uniform in size, and free of foreign matter.

2.8 WATER

Potable water: to be supplied by the Contractor.

2.9 FUNGICIDE

Fungicide shall be Zinc ethylene bisdithiocarbonate (Zineb), or approved equal.

PART 3 - EXECUTION

3.1 PLANTING PROCEDURES FOR TREES AND SHRUBS

- A. Layout of work:

Prior to digging plant pits, Contractor shall layout and stake proposed locations for all plant materials. Layout shall be approved by the County prior to installation.
- B. Test Pits:

Should stake locations lie in proximity to subsurface utilities, Contractor may perform subsurface exploration to verify utility locations, at the instruction of the County.
- C. Digging Plant Pits:
 - 1. Walls of plant pits shall be dug so that they are 45° from vertical and scarified. Bottoms shall be scarified to depth of 3”.
 - 2. Plant pits must be a minimum of 12 inches larger for shrubs on every side of the plant ball and three times the diameter of the root ball for trees.

3. Plant pits shall be deep enough to allow no more than 1/8 of the ball depth to be above existing grade. The bottom of the planting pit shall have a mound of four- (4) inches high compacted planting soil where the root ball will be placed. Loose soil at the bottom of the pit shall be compacted to inhibit settling. Root ball support mounds shall be compacted to 80% per ASRM D698.
4. Add fertilizer specified.

D. Backfill Plant Pits:

1. Backfill plant pit with the planting soil mixture stated in the specifications.
2. Make sure plant remains straight during backfilling procedure.
3. Backfill sides of plant pit halfway with planting soil mixture and tamp as pit is being filled.
4. Cut rope or wire from ball and remove from plant. Pull burlap back to expose the top one-half of the tree ball. Completely remove all plastic wraps and twine.
5. Finish backfilling side of plant pit and tamp firmly. Add the final 2 inches of topsoil to the top of the planting soil mix and tamp firmly.
6. Never cover top of tree ball with soil.
7. Apply a layer of shredded hardwood bark mulch to a uniform depth of 3 inches. Never allow mulch to come in contact with the trunk of the tree. Mulch “volcanoes”; steep piles of mulch placed against the trunk of the tree, will not be accepted.
8. Water to saturation on the interior of the tree pit until it is filled, even if it is raining. A second watering may be necessary to ensure saturation of the root ball.

E. Fungicide Spraying

Immediately after planting, all trunks of deciduous trees shall be sprayed with fungicide spray, applied as directed by manufacturer.

F. Anti-Desiccant Application

1. In extremely hot weather, apply anti-desiccant as per manufacturer’s directions.
2. Spray deciduous trees, which are moved in full-leaf with anti-desiccant at nursery before and two weeks after planting.

G. Pruning

1. General
 - a. Prune only to remove dead, broken or crossed branches.
 - b. DO NOT cut the main leader when pruning trees.
 - c. If side branches are cut to balance tree, make all cuts flush with lateral branch.

- d. All cuts greater than 1/2 inch shall be carefully pared over with a sharp knife.
- e. Remove all strings from the plants.
- f. Do not remove plant tags until after Final Acceptance.

3.2 CLEAN-UP

- A. Clean up all rubbish and debris caused by this work and remove from site. Keep site clean during maintenance period.
- B. Sweep and wash surfaces soiled by this operation.

3.3 INITIAL WARRANTY ACCEPTANCE

- A. Contractor shall request County inspection for initial acceptance of Contract work at least 10 calendar days before estimated date of completion. This acceptance shall initiate the two-year warranty period.
- B. Initial acceptance of plant material by the County shall be for general conformance to specified size, character, and quality, and shall not relieve the Contractor of responsibility for full conformance to the Contract Documents, including current species.
- C.

3.4 MAINTENANCE OF PLANTING

- A. Maintenance shall begin immediately after each plant is planted and shall continue through the warranty period until date of Final Acceptance.
- B. The Contractor shall, at the direction of the County, install and maintain 20 gallon “treegator” drip irrigation bags on trees that show distress or display unhealthy and non-vigorous growth conditions that are determined to be from inadequate water levels
- C. During planting and for a period of two (2) years after Initial Acceptance of original planting operations, the Contractor shall maintain plants and shall perform work incidental thereto by replanting plant replacements, resetting plants to proper grades and positions, watering, draining, feeding, weeding, cultivating, fertilizing, pruning, re-mulching, controlling insects and diseases, re-guying, and by performing all other operations of care for promotion or foot growth and plant life so that all work is in a satisfactory condition at the completion of the Contract and throughout the Warranty Period.

3.5 WARRANTY PERIOD

- A. Contractor shall guarantee all plant material for a period of two years, to be free from diseases and insects and in a healthy and vigorous growing condition from initial planting through the date of Final Acceptance by the County. At that time, all maintenance and replacement responsibility will be transferred to the County.

- B. During the warranty and maintenance period, replace planted trees that are dead, or are in an unhealthy, unsightly, or badly impaired condition. Remove dead plants or cut off at the ground line as soon as the condition is evident. Replace with healthy plants of comparable size and quality as soon as is reasonably possible. Do not make replacement in any season unfavorable for planting.
- C. Contractor shall be required to replace all plant material as many times as required to meet the terms of Final Acceptance.
- D. The Contractor will not be held responsible or liable for damage to plants and planting materials by animals, vandalism, malicious or careless damage by humans or agencies over which he has no control, by fire and storm damage.

3.6 FINAL ACCEPTENCE

- A. At the conclusion of the warranty period, the County will make a final inspection of the work to determine condition of all plants. Plants not in a healthy growing condition, as determined by the County, will be noted. Remove immediately and replace as soon as seasonal conditions permit with healthy plants of the same kinds and sizes as originally specified. Make such replacement in the same manner as specified for the original planting, and at no extra cost to the County.

*****END OF SECTION 02930*****

SECTION 03300 – CONCRETE

PART 1 – GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all labor, materials, and proper equipment and services necessary for and reasonably incidental to installing the cast-in place concrete work items as shown on the drawings and/ or as specified herein. Form work, reinforcement, placing, and incidental hardware are included.

1.2 RELATED WORK

Section 02100: SITE PREPARATION
Section 02200: EARTHWORK
Section 02600: SITE UTILITIES

1.3 COMPLIANCE WITH CODES

The Contractor shall comply with the latest approved edition of ACI Standards, MSHA Standard Specifications, and all local codes. Where requirements of the specifications and the drawings are exceeded by those of local codes and regulations, the Contractor shall comply with the local codes and regulations at no additional cost to the County.

PART 2 - MATERIALS AND ACCESSORIES

The Contractor shall comply with all requirements and standards of the **MSHA Specifications**, Articles 33.09, 34.08, 34.09, 35.03 and Article 35.04, including the following:

2.1 CEMENT

Portland Cement, ASTM C- 150-65, Type I: for air-entraining Portland Cement. ASTM C-I 75, Type 1A (or Portland Cement with approved air-entraining agent).

2.2 FINE AGGREGATE

Clean, hard natural sand, ASM C-33-64 maximum size 3/8”.

2.3 WATER

Clean, fresh and free from harmful matter.

2.4 REINFORCEMENT STEEL BARS

Per ASTM A-6 I 5-68, grade 60 wire mesh: 6” x 6” grade 6/6.

2.5 METAL ACCESSORIES

A. Form Ties: Adjustable length, leaving holes not larger than 1” in concrete face. Following form removal, metal shall be a minimum of 1” from interior finished concrete surface and 2” from exterior.

- B. Chairs and Spacers: Metal of stock design for use intended. Accessories in exposed concrete shall be galvanized. Include all spacers, chairs, bolsters, holding bars, ties and other devices necessary for properly placing, spacing, supporting and fastening reinforcement in place. Metal accessories shall conform to CRSI "Manual of Standard Practice for Reinforced Concrete Construction".

2.6 TEMPORARY FORMS

5/8" minimum Class 1 BB, EXT-DFPA PLYFORM plywood for all exposed concrete form work.

2.7 EXPANSION JOINT FILLERS

Asphalt impregnated fiberboard, conforming to ASTM D-1751-65 for interior work and self-expanding corkboard, conforming to ASTM D-1752-60T, Type 3, for exterior work. Joint fillers: ½" thick and extend full thickness of the slab unless noted.

2.8 CURING COMPOUND

"Sure Cure" by Kaufman Products, Inc., or approved equal. Apply one coat for interior work, two coats for exterior slabs. Waterproof paper, "Sisalkraft" or approved equal.

2.9 HARDENER

"Hvdroment," as manufactured by Upco Co., or similar product, manufactured by Aquabar Co., The Master Builders Co., Sonneborn Building Products, Inc., and Standard Dry Wall Products, Inc., or "approved equal".

PART 3 - EXECUTION

The Contractor shall comply with the following:

3.1 FORM WORK

Conform to shape, line and dimensions shown. Construct forms plumb, straight and with sufficiently tight joints to prevent leakage. Shore or truss forms to prevent deflection, displacement, and to safely support construction loads. Coat with grease part of form ties to be removed. Clean and wet forms immediately before placing concrete: do not wet when freezing is possible. Exercise care in forming exposed concrete: back up joints between form board sheets and secure solidly to framing members.

3.2 REINFORCING

- A. Fabricate and install reinforcing and provide standard supporting accessories in accordance with ACI, "Manual of Standard Practice for Detailing Reinforced Concrete Structures," ACI 135.
- B. Remove rust, scale, paint and coatings from reinforcing. Place accurately, support on chairs spaced to prevent sagging. Furnish and install additional supports if directed. Position and wire to prevent movement during concrete placement; provide necessary support bars.
- C. Provide for installation of metal angles, channels, plates, inserts, hangers, ties, anchors, dowels, bolts, slots, sleeves, blocking, conduits furnished by other trades, etc. Coordinate locations with other trades and secure in position before concrete placement. If sleeves, conduits, outlet boxes, pipes, etc. interfere with reinforcing, County.

- D. Reinforcing for the 16' high light pole footings shall include four (4) anchor bolts measuring 3/4"x 36" with a four- (4) inch bend provided by the owner. The top nine (9) inches of the anchor bolts to be dip galvanized, conforming to ASTM A-153 and the rod shall have 55,000 psi, minimum yield strength, conforming to ASTM-675, grade 70. The Contractor shall provide and install reinforcing bars as follows: Number four (#4) rebar arranged in a circular pattern with number four (4) rebar ties at twelve (12) inches horizontally. The pattern for the anchor bolts will be provided by the manufacturer of streetlight pole. (See details in drawings.)

3.3 STRENGTH, PROPORTION AND CONSISTENCY

- A. Strength: Use of $f'c = 3.000$ psi at 28 days minimum, test strength concrete for all reinforced and structural work, unless otherwise noted on drawings, containing not less than six bags of cement per cubic yard and water-cement ratio of not more than 6-1/2 gallons per bag of cement.
- B. All concrete to be air entrained, with no more than six gallons of water per bag of cement and containing 6%, plus or minus 1%, entraining air. Use entraining cement, or an air entraining admixture conforming to ASTM C-260-65T.
- C. Do not place concrete which has had water added more than one hour before placing. Use no accelerating agents or other admixtures without specific approval.
- D. For grout, use 1 part Portland cement and 1 part sand.

3.4 MIXING

Use ready mixed concrete mixed and delivered in accordance with ASTM C-95-65. Have delivery tickets available to the County upon request.

3.5 CONTROL TESTS

Contractor to retain the services of a testing laboratory and pay all costs to take samples, make tests and submit four (4) copies of tests results. One additional test cylinder shall be taken during cold weather concreting, and will be cured at the job site under the same conditions as the concrete it represents.

3.6 EXTENT OF TESTS

- A. Secure minimum of three test cylinders from each day's pour of structural concrete, including footings.
- B. Test one cylinder at the age of seven days and two cylinders at the age of 28 days. Secure samples: per ASTM C- 72-54(58). Specimens made to check the adequacy of the design for strength of concrete, or as a basis for acceptance of concrete: Made and laboratory cured, per ASTM C-31-65. Additional tests of specimens cured entirely under field conditions may be utilized to check the adequacy of curing and protection of the concrete as directed. Make strength tests per ASTM-39-61.
- C. If tests indicate that concrete does not meet specified requirements, comply with remedial measures determined by County, without additional cost to County.
- D. Slump Tests: Make tests for slump for each set of test cylinders taken at the place of deposit and in accordance with ASTM C-143-58. Unless otherwise noted or specified, the slump shall be in accordance with Section 902.10.03, Task A. of the MSHA Standard Specifications.

- E. The Contractor shall submit to the County, and send to the testing agency, his proposed concrete mix design for review, prior to commencement of the work.
- F. The Contractor shall provide free access to the work and cooperate with the testing agency selected by the County. The Contractor shall notify the testing agency and the County of his intent to place concrete at least 24 hours prior to scheduled time of placement.
- G. Any core testing of concrete or test cylinders required by the County shall be at the expense of the Contractor. Core testing may be required for each day's operation when concrete is poured.

3.7 WEATHER CONDITIONS

Follow methods and recommended practice for placing, protecting and curing concrete as provided in ACI Standard 604 for winter concreting and ACI Standard 605 for hot weather concreting.

3.8 PLACEMENT

- A. Preparation: Before placing concrete, remove all debris, water and ice from the places to be occupied by the concrete. Wet or oil woods forms thoroughly (except in freezing weather) and clean the reinforcement of ice or other coatings. Form work and the placement of reinforcement, pipes, sleeves, conduit, hangers, anchors and other inserts shall be inspected and approved by the County and the local building department before an concrete is deposited. Notify the County min. 48 hours in advance.
- B. Place all concrete in accordance with requirements of the American Concrete Institute Building Code.
- C. Secure approval of County and mechanical trades before placing concrete: depress all conduit over 1-1/4" completely below top of finished concrete. Except where otherwise specified or indicated, set continuous expansion joint filer strips where edge of slab abuts vertical surface.

3.9 CURING

Protect concrete against frost and rapid drying and keep moist for six days after placing.

3.10 FINISHING

All exposed concrete must be trowel finished, smooth and free of cracks, dimples, extraneous material, etc.

3.11 CLEANING

- A. Clean all exposed concrete surfaces and all adjoining work stained by leakage of concrete to meet County's approval.
- B. Cut out surface defects where directed or where structural strength of concrete will not be impaired and refill with fresh concrete. Do not make cuts deeper than one inch (1"), and thoroughly wet just prior to filling with concrete of stiff consistency and of approximately, the same mix as the adjoining work.

3.12 PROTECTION

Cover exposed concrete with building paper and use planking at points of heavy traffic.

*****END OF SECTION 03300*****

SECTION 07900 - JOINTS AND SEALANTS

PART 1 - GENERAL

1.1 SCOPE OF WORK

The Contractor shall furnish all materials and equipment, and do all work necessary to construct joints and sealants, as indicated on the drawings and as specified.

1.2 RELATED WORK

The Contractor shall coordinate the work of this Section with related work specified under other Sections, including:

Section 02870: SITE FURNISHINGS

Section 03300: CONCRETE

Section 04200: MASONRY

PART 2 - MATERIALS

2.1 EXPANSION JOINTS

- A. Concrete base courses shall have expansion joints conforming to ASTM C 1190.
- B. Expansion joints which will be exposed to view shall be as follows:
 - 1. Pre-molded joint filler shall be 1/2" preformed cork, non-asphaltic, conforming to ASTM D 1752. The joint filler shall be compatible with the sealant.
 - 2. Sealant shall be Sonolastic SL I, or approved equal, polyurethane elastomeric type sealant, conforming to Federal Spec. TT-S-00230C. Sonolastic SL I is a one-component polyurethane self-leveling and non- priming and requires no mixing.
 - 3. Sealant colors shall match the sidewalk pavement colors. The Contractor shall submit samples of sealant colors to the County Representative for approval.
 - 4. Joint sealers shall be in accordance with Section 501.03.16 of the Standard Specifications and these Specifications. The color of the joint sealant shall match the sidewalk color. Submit samples to County for approval prior to use.

5. Expansion joints shall be provided using pre-molded cork-type joint filler at concrete work abutting curbs other than those curbs along the roadway edge or at radius curb returns at driveway aprons, structures and other fixed objects. Backer rod and sealant shall be used with cork-type joint filler.
6. Expansion joints at concrete work abutting curb along the roadway edge or at radius curb returns at driveway aprons shall be 3-ply roofing paper.

2.2 CONTROL JOINTS

The Contractor shall install control joints at indicated locations during edging operations.

2.3 NON-SHRINK GROUT

Non-shrink grout shall be a non-ferrous grout, such as Pac-It Grout, manufactured by W.R. Meadows, Inc., or an approved equal.

PART 3 - EXECUTION

3.1 CONSTRUCTING EXPANSION JOINTS

- A. Pavements shall be placed with the pre-molded joint filler in place and to the proper elevation to allow for the proper sealant depth.
- B. After the concrete has set, the joints shall be thoroughly cleaned to remove all loose materials. Sealant shall be applied to clean, dry and structurally sound surfaces. Adjacent surfaces shall be protected with non-staining masking tape as necessary.
- C. Sealant shall be applied in accordance with the manufacturer's written recommendations, using hand guns or pressure equipment on properly prepared surfaces. Temperature of sealant and concrete shall be as recommended by the sealant manufacturer. Sealant shall be forced into the joint in front of the tip of caulking gun, not pulled after it, and shall be forced against the sides to prevent entrapped air or pulling of sealant off the sides.
- D. Sealant shall be finished slightly recessed from the adjacent surfaces, adjusted in accordance with the outside air temperature. The colder the day, the greater the recess needed. Masking tape shall be removed immediately after tooling of the sealant and before the sealant face starts to skin over. Excess sealant shall be removed from adjacent surfaces.
- E. Construct expansion joints properly aligned with face perpendicular to concrete surface.

- F. Locate expansion joints as indicated. Align expansion joints with abutting curbs and walks.

3.2 CONSTRUCTING CONTROL JOINTS

Provide tooled control joints (score lines) sectioning concrete into areas indicated on the plans and as directed by the County. Hand tool control joints to depth, pattern and at spacing indicated. Saw cut joints are not permitted. Control joints shall be properly aligned with face perpendicular to concrete surface. Joints shall be at locations shown on the plans and not to exceed 20-foot spacing in any direction.

3.3 GROUTING

For signage sleeves, install grout in sleeve in accordance with manufacturer's instructions, being sure to fully fill all voids in signage sleeve once the post is installed.

*****END OF SECTION 07900*****

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

SPECIAL PROVISIONS
101 – CLEARING AND GRUBBING

CATEGORY 100

101 CLEARING AND GRUBBING

101.01 DESCRIPTION

Clear and grub within the specified limits.

101.01.01 Definitions

- (a) **Clearing.** The removal and disposal of trees, fallen timber and rotten wood, brush, shrubs, vegetation, rubbish, fences, and structures not specified in the Contract Documents for removal and disposal. Unless otherwise specified, clearing outside the LOD includes the removal of rubbish only.
- (b) **Grubbing.** An earth-disturbing activity, which includes the removing from the ground and disposing of all stumps, roots and stubs, brush, and debris.
- (c) **Limits of Disturbance (LOD).** The maximum allowable limit of earth disturbance as delineated in the Contract Documents. When not delineated in the Contract Documents, the LOD will be 10 feet beyond the top of cut, toe of slope, or limit of ditch excavation. Do not perform earth-disturbing activities beyond the LOD without authorization.
- (d) **Limits.** Clearing and grubbing is confined to the LOD and authorized modifications to the LOD. When indicated in the Contract Documents, the limit of clearing may include the area between the LOD and the right-of-way or easement lines.
- (e) **Grading Unit.** A contiguous area of erodible material exposed at one time, not to exceed 20 acres.
- (f) **Disturbed Area.** An area where erodible material is exposed by construction activities.
- (g) **Stabilization Measures.** Activities that prevent erosion. These activities include the placement of temporary mulch, temporary seed, permanent seeding such as turfgrass establishment, soil stabilization matting, riprap, stone aggregate, and asphalt or concrete paving. The placement of one or more of these temporary or permanent stabilization measures to the satisfaction of the Engineer will meet the requirements for proceeding to the next grading unit or operation.

101.02 MATERIALS

Not applicable.

101.03 CONSTRUCTION

101.03.01 Erosion and Sediment Control. Unless otherwise specified or approved, limit the clearing and grubbing area to a single 20-acre grading unit per grading operation. Once this first unit is half graded and stabilization measures are in place and approved, the work may proceed to a second 20-acre grading unit. When approved by the Engineer, the clearing and grubbing area may exceed the one grading unit requirement when necessary to balance earthwork or when grading interchanges. Maintain erosion and sediment controls as specified.

SPECIAL PROVISIONS

101 – CLEARING AND GRUBBING

The grading operation will be limited to the Contractor's ability to provide adequate resources to perform the grading in a timely manner and to provide and maintain the proper erosion and sediment control measures. The Engineer is the final authority in this determination. When wet soil conditions are encountered, the clearing, grubbing, and grading of another unit will be allowed, once stabilization of the initial unit is approved.

The maximum area that may be cleared and grubbed is limited to a single grading unit unless otherwise specified and approved. Work may proceed to a subsequent grading unit once at least 50 percent of the current grading unit is stabilized as determined and approved by the Regional Environmental Coordinator. Unless specifically approved, no more than 30 acres cumulatively may be disturbed at any given time.

101.03.02 Tree Preservation Areas and Tree Branch Pruning. Trees, shrubs and plants to remain in place will be designated on the plans in conformance with Section 120 or will be designated by the Engineer.

(a) Protect Tree Preservation Areas and other designated plants in conformance with GP7.11 and as specified in Section 120.

(b) Perform Tree Branch Pruning in conformance with Section 712. Cut and trim tree branches overhanging paved areas of the roadway to maintain a vertical clearance of 16 ft above the pavement, or conform to the specifications of any Tree Preservation Plan developed by the Administration.

101.03.03 Fences. Remove and dispose of all fences within the right of way, unless otherwise specified.

101.03.04 Mailboxes. Remove and reset mailboxes as directed.

101.03.05 Grubbing

(a) **Excavation Areas.** Remove all embedded stumps and roots to a depth of at least 3 ft below the subgrade or slope surface. Refill all depressions made below the subgrade or slope surfaces with materials suitable for embankment and compact as specified in Section 204.

(b) **Low Embankments.** Grub areas where the total depth of the embankment is less than 3 ft.

(c) **High Embankments.** In areas where the embankment is 3 ft or more in depth, cut off trees and stumps as close to the ground as practical but not greater than 1 ft above the ground surface. Near the toe of embankment slopes, remove trees and stumps that are within 1 ft of the slope surface.

(d) **Stormwater Management (SWM) Facilities.** In areas specified for SWM facilities, grub excavation areas and embankments as specified in 101.03.05 (a) and (b) regardless of the total depth of the embankment. When SWM facility embankments include embankment cores, grub to a depth at least equal to the depth of the cut-off trench.

101.03.06 Stream and Channel Changes. When an LOD is not specified, clear and grub 5 ft beyond the top of the cut slopes or as directed.

101.03.07 Disposal

(a) **Burning.** Burn only under the constant care of a watchperson and according to applicable laws and ordinances of respective jurisdictions.

SPECIAL PROVISIONS

101 – CLEARING AND GRUBBING

(b) Disposal Locations. Remove from the right-of-way and dispose of all unburned material and debris. Make all necessary arrangements to obtain suitable disposal locations. Furnish the Engineer with a copy of resulting agreements.

(c) Wood Disposal. If disposal of wood to the public is proposed, submit the disposal plan to the District Engineer for review, and obtain approval prior to beginning the clearing and grubbing operation. Perform this method of disposal from a location that is off the job site.

(d) Ash Tree Quarantine. Wood of Ash trees of the genus *Fraxinus* is quarantined, and may not be moved outside the State of Maryland.

101.03.08 Damage to Trees and Other Protected Resources.

(a) Ensure that the LOD and all protected resources are demarcated as specified in Section 107.

(b) Perform damage repair and damage compensation as specified in Section 712 for damage beyond the LOD due to work operations. Refer to Occupying Wetlands provisions in the Contract Documents for unauthorized impacts to wetlands, wetland buffers, Waters of the United States (WUS), and floodplains.

101.04 MEASUREMENT AND PAYMENT

Clearing and Grubbing will not be measured but will be paid for at the Contract lump sum price. The payment will be full compensation for the removal and disposal of fences, removal and resetting of mailboxes, damage repair and compensation for trees, restoration measures for damaged or destroyed protected resources, repair to other damaged properties, removal and disposal of existing buildings when not covered as a specific pay item in the Contract Documents, and material, labor, equipment, tools, and incidentals necessary to complete the work.

101.04.01 Tree Branch Pruning to remove branches overhanging paved areas, and any other Tree Branch Pruning specified in the Contract Documents, will be paid for separately at the Contract lump sum price.

SPECIAL PROVISIONS
107 – CONSTRUCTION STAKEOUT

107 CONSTRUCTION STAKEOUT

107.01 DESCRIPTION

Furnish, place, and maintain construction layout stakes. Demarcate (flag) the Limit of Disturbance (LOD), and protected resources including, wetlands, wetland buffers, waters of the United States, floodplains, and tree preservation areas.

The LOD is defined as the maximum allowable limit of earth disturbance as delineated in the Contract Documents. When not delineated in the Contract Documents, the LOD will be the top of cut, toe of slope, or limit of ditch excavation.

No clearing or earth disturbance activity may begin until the LOD and all protected resources are demarcated as specified.

107.02 MATERIALS

Refer to 107.03.09.

107.03 CONSTRUCTION

107.03.01 Line and Grade. The Engineer will provide the following:

(a) Roadway Stakeout.

- (1) A staked center line of the roadway with stations not over 100 ft apart.
- (2) Appropriately spaced bench marks and necessary references, including all points of curvature (PC) and points of tangency (PT), for the preservation and control of the center line.
- (3) Two sets of prints of the cross sections. Use the cross sections as a guide only. Dimensions or elevations scaled from the cross sections are not sufficiently precise for use in construction.

(b) Structure Stakeout.

- (1) A staked center line or working line, whichever applies, with stations not over 100 ft apart and extending at least 100 ft beyond each end of the structure.
- (2) When the structure is on a curve, a staked center line or working line, whichever applies, consisting of stations not over 100 ft apart and including the PC, PT, and at least one point on the tangents beyond each end of the curve.
- (3) At least two bench marks, one on each end of the structure.

107.03.02 Equipment and Personnel. Use competent personnel and state-of-the-art equipment for all engineering work required to set and maintain the specified elevations and dimensions.

107.03.03 Control Markers. Preserve the center line and bench marks set by the Engineer. Replace any disturbed or destroyed controls at no additional cost to the Administration.

107.03.04 Control Stakes. For roadways as specified in 107.03.01(a), furnish, set, and preserve stakes at each station along each side of the project on the right-of-way or easement line, whichever is farther from the center line of construction. Where only part of an ultimate dual highway is to be constructed, set the stakes on the side of the future improvement 10 ft beyond the construction limits. On each of these stakes, mark the offset distance from the center line and its top elevation or the cut or fill to the profile grade line. Place additional stakes as necessary or as directed to ensure the correct layout of the work.

107.03.05 Layout. For structures, proceed with the layout work as specified in 107.03.01(b). Before any actual construction begins, rerun and check the Engineer's lines and grades. Then establish all center line or working line intersections with the center line or center of bearing of all piers, bents, and abutments. From these field layouts, check the proposed span lengths by either electronic distance measurement or chaining from the field layouts. When chaining, compensate for temperature, sag, and horizontal alignment. Check the location of the structure to affirm its correct location with relation to existing structures, roads, and existing conditions that are to remain. If any discrepancies are found, notify the Engineer at once in writing. Ensure that all lines established on the ground are preserved or referenced, marked, and kept available at all times.

Ensure that the field elevations of all bridge seats are correct and that they are finished to proper grade. When steel beams or girders are incorporated in the project, determine the deflection of each member by running elevations over the tops of the beams or girders after they are in place and before attaching any forms. Apply this information to the deflection diagram to determine the corrected elevation of bottom slab forms and screed supports. The Engineer will check the assembled information. Make necessary adjustments prior to placing concrete.

107.03.06 Utilities. Promptly upon request, furnish references to control points, alignment, and grade data to the utility companies or agencies working within the limits of the project, so that they may properly locate and coordinate their work and improvements.

Intersection Utility Stakeout. Notify the appropriate agencies at least 72 hours (excluding weekends and holidays) prior to the anticipated time for beginning any underground work.

(a) Request a MISS UTILITY stakeout and possess a valid MISS UTILITY clearance ticket number for any underground work.

(b) Contact all utilities within the limits of the project who are not a member of MISS UTILITY and obtain a stakeout of their respective facilities.

(c) Request the Office of Traffic & Safety's Signal Operations Section to stakeout Administration maintained traffic signal facilities.

(d) Request the District Engineer to stakeout their lighting facilities. Stakeout the proposed construction as indicated in the Contract Documents. Allow the Engineer to verify the location of the proposed facilities.

107.03.07 Right-of-Way and Easement Lines. Promptly upon request, define the project right-of-way and easement lines for adjacent property owners.

107.03.08 Subgrade, Subbase and Base Controls. When placing subgrade, subbase, and base courses, furnish a string line and grade with fixed controls having longitudinal and transverse spacing of no more

than 25 ft. Along each form line for cement concrete pavement, provide the line and grade with fixed controls not to exceed 25 ft.

(a) Automated Machine Control. When approved by the Engineer, construction equipment guided by Global Positioning System (GPS) or Robotic Total Station (RTS) equipment may be utilized in the placement of subgrade, subbase, base courses, and other roadway materials. Preserve the stakeout established by the Engineer and set additional controls as directed.

(1) If utilizing GPS and RTS equipment, develop and submit a Digital Terrain Model (DTM) for review. If using the Contract Documents and any Administration furnished DTM data, a DTM shall be developed independently. In order to use any Administration furnished DTM data, the Administration and its designers shall be released from all liability for the accuracy of the data and its conformance to the Contract Documents.

(2) Establish primary control points at appropriate intervals along the length of the project. Where project work is performed beyond the project limits, establish control points at intervals not to exceed 1000 ft. Determine the horizontal position of these points by static GPS sessions or by traverse connection from the original base line control points. Establish the elevation of these control points using differential leveling from the project benchmarks, forming closed loops where practical. Prior to construction activities, provide a copy of all new control point information to the Engineer. Correct all deficiencies at no additional cost to the Administration.

(3) Provide control points and conventional grade stakes at critical points such as PCs and PTs, super elevation points such as begin full super and half-level plane inclined, and other critical points required for construction of structures and utility relocation or coordination. The Engineer will determine whether additional stakeout and control points are necessary.

(4) Provide adequate control points, stationing, and stakes for coordination activities involving environmental agencies, utility companies, and Contractors on adjacent projects.

(b) Real-Time Kinematic (RTK) GPS. May be utilized to control equipment where the grade tolerance is ± 0.1 ft or greater.

(c) RTS Positioning. RTS shall be utilized where grade tolerances are less than ± 0.1 ft. Check the index error of the vertical circle of the RTS and adjust as necessary prior to each day's operations. Begin and end each work session by checking between adjacent control points.

(d) Grade Busts. Grade busts and all associated quantity adjustments or errors resulting from the Contractor's activities shall be corrected and at no additional cost to the Administration.

(e) Utilizing Automated Controlled Equipment. When automated controlled equipment is used, furnish a GPS Rover instrument for Administration use during the project, along with 8 hours of formal training on GPS/RTS and the utilized systems. Provide a surveyor to perform verification when discrepancies arise.

(f) Test Sections. Perform test sections for GPS and RTS systems to demonstrate the capability, knowledge, equipment, and experience to properly operate the systems and achieve acceptable tolerances. If this ability is not demonstrated, conventional stakeout procedures will be required.

107.03.09 Demarcation. Perform all demarcation as specified or directed. Demarcate wetlands using the Administration's standard 1-1/2 in pink and white striped vinyl flagging with "SHA WETLAND" printed in

blue letters. Demarcate the LOD and other applicable protected resources using a minimum 2-mil vinyl that is 1-½ inch wide with 7/8 in. letters, and locate as directed.

Establish tree preservation areas as specified in Section 120.

When directed, reflag areas where flagging has been destroyed. If the destroyed flagging is not replaced within 48 hours, the Engineer may proceed to reflag the area. The cost of the reflagging by the Engineer will be deducted from any monies due under the Contract.

Remove all flagging at the completion of construction.

107.04 MEASUREMENT AND PAYMENT

Construction Stakeout will not be measured but will be paid for at the Contract lump sum price. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. Payment of the Contract lump sum price will be prorated and paid in equal amounts on each monthly estimate. The number of months used for prorating will be the number estimated to complete the work.

108 MOBILIZATION

108.01 DESCRIPTION

Construction preparatory operations that include the movement of personnel and equipment to the project site and the establishment of the Contractor's offices, buildings, and other facilities necessary to begin work.

108.02 MATERIALS

Not applicable.

108.03 CONSTRUCTION

Not applicable.

108.04 MEASUREMENT AND PAYMENT

Mobilization will not be measured but will be paid for at the Contract lump sum price. The cost of all required insurance and bonds will be incidental to the Mobilization item.

Payment of 50 percent of the Mobilization item will be made in the first monthly estimate after the Contractor has established the necessary facilities. The remaining 50 percent will be prorated and paid in equal amounts on each of the next five monthly estimates. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

Payment of the Mobilization item will not be made more than once, regardless of the fact that the Contractor may have, for any reason, shut the work down on the project or moved their equipment away from the project and then back again.

If an item for mobilization is not provided, the cost of mobilization, including the required insurance and bonds, will be incidental to the other items specified in the Contract Documents.

SPECIAL PROVISIONS
200 – GRADING

201 ROADWAY EXCAVATION (CLASS 1, CLASS 1-A, CLASS 2)

201.01 DESCRIPTION

Excavate and grade for roadways and appurtenances to the lines and grades specified.

201.01.01 Classification

CLASS 1 — All excavation where the width of the bottom of the cut is 15 ft or more.

CLASS 1-A — All excavation of unsuitable material below the lowest excavation limits established.

CLASS 2 — All excavation where the width of the bottom of the cut is less than 15 ft. Excavation for flumes, ditches outside cut or fill slopes, and stream and channel changes are included in this classification unless otherwise specified.

201.01.02 Excavation. Excavation includes the following:

- (a) Cut areas within the boundary faces of the typical cross sections specified, including ditches within the cut sections, entrances, approach roads, streets, intersections, gutters, ditches, berm ditches, and flumes.
- (b) Topsoil salvaged within the specified limits of excavation or as directed.
- (c) The removal and disposal of existing pavement, sidewalks, curb, and combination curb and gutter, when within the limits of Class 1 or Class 2 excavation. Perform this work as specified in Section 206.
- (d) The removal and disposal of below grade structures other than as specified in Sections 102 and 207.

201.02 MATERIALS

Not applicable.

201.03 CONSTRUCTION

201.03.01 Grading Units. Each unit is the surface area of erodible earth that can be exposed to construction operations without undue erosion or sedimentation. Refer to 101.03.01 for the size and number of units that can be opened at one time.

201.03.02 Use of Excavated Materials. Refer to TC-3.03 and Section 203. Do not waste excavated material without prior approval. Do not use borrow unless provisions have been made for utilizing all available suitable excavated material in embankments.

201.03.03 Broken Pavement Material. Existing pavement, sidewalks, gutter, curb, and combination curb and gutter within the excavation may be broken and used in embankments provided that the materials conform to 204.02.01. If the Engineer determines that the material is unsuitable, dispose of it as excess or unsuitable material.

201.03.04 Rock Excavation

(a) Boulders and Rock. Boulders and rock from the excavation may be broken and used in embankment if the materials conform to 204.02.01.

(b) Blasting. Refer to TC-6.07. Where rock encountered in cuts requires drilling and blasting, finished slopes shall remain reasonably straight and clean.

(c) Presplitting When presplitting of rock slopes is specified, perform the presplitting operation prior to the primary blasting. Apply the knowledge gained from excavation of the presplit face to subsequent presplitting operations. Do not drill any portion of any primary blast hole closer to the proposed finished slope than half the spacing of the drilling pattern.

Submit a plan for the proposed presplitting operations for approval. Include the drill size, lift height, explosive and detonator specifications, loading pattern, stemming materials, stemming depth, charge size, and charge timing.

Limit the initial presplit shot to a length of 100 ft. Drill 2 to 3 in. diameter holes on the same plane along the slope line and at the slope angle specified in the Contract Documents. Unless otherwise directed, drill holes on maximum 3 ft centers and to a maximum depth of 20 ft. If the vertical depth of cut to be presplit is greater than the maximum permissible depth of holes as determined by the Engineer, perform the blasting in two or more lifts. In this case, set back the first line of drill holes a sufficient distance from the slope line to allow for a 1 ft offset for each succeeding line of drill holes.

Before proceeding, excavate the initial presplit shot for inspection by the Engineer. If the results are found to be satisfactory, continue the presplitting using the approved drilling and loading pattern. Whenever the presplitting is found to be unsatisfactory, make adjustments in the operations and repeat the inspection procedure used for the initial presplit shot.

Ensure that the presplit face is within 6 in. from the front of the line of drill holes and 1 ft from the back of the line of drill holes, except where the character of the material (badly broken rock, vertical seams, etc.) will result in irregularities.

Extend the line of presplit holes at least 30 ft beyond the limits of the primary blast holes or to the end of the cut.

Use cartridge explosives that are manufactured for presplitting and that are no more than half the diameter of the presplit hole. Do not use bulk explosives.

The Engineer may stop the presplitting operations wherever the rock is of a character that no apparent advantage is gained.

201.03.05 Frozen Material. Do not place frozen material in embankments. Stockpile the material outside the construction limits and reserve it for future use. Replace any material that is wasted. Rehandling of excavated material and replacement of wasted material shall be at no additional cost to the Administration.

201.03.06 Serrated Slopes. Serrated cut slopes have continuously benched faces. Construct serrated slopes as specified or as directed. Construct the benches as the excavation progresses, parallel to each other, level, and not graded to drain.

201.03.07 Drainage. Construct all drainage as specified in Section 308. Maintain the roadbed in a well-drained condition at all times. Do not place excavated material within 3 ft of the edge of the ditch or channel. Do not allow material to obstruct normal surface drainage into the ditch or channel. Construct

ditches draining from cuts to embankments or otherwise to avoid damage to embankments by erosion. Prior to placing any surface material, install all drainage necessary to provide free and uninterrupted flow of surface and underground water. When stabilized side and outlet ditches provide the principal means for drainage, cut and stabilize ditches as the first order of work in the grading operation.

201.03.08 Excavation Beyond Specified Limits. Except by written authorization, do not widen cut or excavation sections beyond the limits of the typical cross section specified. When authorized, the procurement of additional material for embankments, unless otherwise specified under Borrow Excavation, will be as follows:

(a) **Finished Excavation.** Finish the widening of cut sections so that the completed flat and slope areas are uniform in appearance. Do not cut slopes steeper than specified or as directed.

(b) **Roadway Excavation Limits**

(1) If the Engineer directs the Contractor to excavate beyond the limits of the typical cross section originally proposed, prior to starting roadway excavation in a cut section, all material within the limits will be classified as Class 1 Excavation.

(2) If the Contractor, with approval of the Engineer, elects to obtain additional material by widening cuts beyond the limits of the typical cross section originally proposed and within the right of way or easement, the excavation of the materials will be classified as Class 1 Excavation.

(c) **Borrow Excavation Beyond Specified Limits.** If the Engineer directs the Contractor to excavate beyond the limits of the typical cross section originally proposed, after the Contractor has substantially completed the roadway excavation in a cut section, all material removed beyond the limits of the typical cross section will be classified as Borrow Excavation.

201.03.09 Unsuitable Material. Remove unstable or other unsuitable material encountered at or below the specified typical section to the extent directed by the Engineer as Class 1-A Excavation. In rock areas, the limit of measurement for excavation will be the bottom of the typical section. Except when rock is encountered at subgrade, backfill all voids created by the removal of unsuitable material using the material specified. Furnish material that conforms to Section 916.

201.03.10 Coal Deposits. Notify the Bureau of Mines when coal is encountered. Send the notice to the Director, Bureau of Mines, Maryland Department of Natural Resources. Dispose of any coal encountered on the project as directed by the Engineer.

201.03.11 Widening for Staged Roadway Construction. Limit the area to be excavated for widening to the extent that the excavated area can be backfilled within the same working day using the excavated material or common borrow to form a temporary wedge. Refer to Standard No. MD 104.01-28 for the area to be backfilled. Maintain the 4:1 or flatter fill slope. Compact the material as directed and leave it in place until placement of the graded aggregate base course.

201.04 MEASUREMENT AND PAYMENT

Roadway excavation will be measured and paid for at the Contract unit price per cubic yard for the pertinent Class of Excavation. Removal of earthwork, sidewalks, pavement, curb and gutter and any other items to be removed that are not otherwise specified under another item in the plans to be considered part of Class II Excavation. The payment will be full compensation for all excavation and hauling, blasting, formation and compaction of embankments and backfills, disposing of excess and unsuitable materials, preparation and completion of subgrade and shoulders except as otherwise specified, serrated slopes, rounded and transition slopes, and for all material,

labor, equipment, tools, and incidentals necessary to complete the work. Payment will not be made for excavation of any material used for purposes other than those designated.

When only one bid item for either Class 1 or Class 2 Excavation is established in the Contract Documents, all roadway excavation (except Class 1-A Excavations) shall be included in the unit bid price, regardless of the width of the excavation.

201.04.01 Limits of Measurement

(a) Roadway Excavation. The lower limit of measurement will be the surface upon which roadway materials, including base course, surfacing, or selected capping material is to be placed in either pavement or shoulder areas.

(b) Concrete Pavements. Measurement will be taken to 1 foot outside of the outer edge of the pavement on each side. Where concrete curb or combination concrete curb and gutter is built contiguous to the pavement, measurement for excavation will be the outer limits of the concrete curb or combination curb and gutter.

(c) Rocks and Boulders. If ledge rock, scattered rock, or boulders of ½ cubic yard or larger volume are removed, any resulting undercutting approved by the Engineer will be measured for payment.

(d) Slides or Breakages. Slides or breakages not attributable to the Contractor's negligence, as determined by the Engineer, will be measured and included in the final quantities for Class 1 Excavation.

(e) Topsoil and Root Mat. Measurement will be made for the removal of topsoil and root mat when it is required to be removed from fill areas. In the case of removal of root mat, Class 1 Excavation shall only apply when the strata underlying the root mat are suitable for supporting embankment. If material is unsuitable for supporting embankment, then removal of root mat and unsuitable material will be measured as Class 1-A Excavation.

Excavation will always be measured in its original position. No liquids will be included in any measurement.

No measurement will be made for any additional excavation required to construct new curb, curb and gutter, paved ditch, paved gutter, paved flume, or sidewalk paving.

201.04.02 Template Method of Measurement. Unless otherwise specified, excavation will be computed using the template from preliminary cross sections of the original ground surface combined with templates of the typical cross sections. If this method is used, the following volumes will be excluded.

(a) Undercutting for cushion over rock.

(b) Entrances and intersections for which details are not specified in the Contract Documents and for which no quantity was allowed in the Contract Documents.

(c) Salvaged topsoil from under embankments.

(d) Removal of root mat from under embankments.

The template method will not be used:

(a) Where there are approved changes in design and typical section.

- (b) Where there are approved deviations from planned slope faces in rock cuts.
- (c) Where the original ground conditions upon which preliminary cross sections were taken have been changed before the Contractor begins work.
- (d) For Class 1-A Excavation.
- (e) When the work of the Contractor does not conform to the line, grade, or cross section specified in the Contract Documents or as changed by subsequent written authorization by the Engineer. Unless corrective action is required, payment will be based on the changed quantities as determined by the cross section method in 201.04.03.

201.04.03 Cross Section Method of Measurement. When specified, quantities for payment of Excavation will be computed by average end areas from the cross sections of the original ground combined with cross sections of the completed work. Class 1 Excavation will be allowed in median areas of cut sections only where 4 inches or greater of topsoil is to be placed. This method will also apply to Class 1-A and Class 2 Excavation unless otherwise specified.

201.04.04 Presplitting will not be measured but the cost will be incidental to the Contract unit price per cubic yard for the pertinent Class of Excavation in which it occurs.

201.04.05 Removal of existing pavement, sidewalk, paved ditches, curb, or combination curb and gutter outside the limits of construction will be measured and paid for as specified in 206.04.

201.04.06 Removal of existing pavement, sidewalk, paved ditches, curb, and combination curb and gutter within the limits of any Class of Excavation will not be measured but the cost will be incidental to the Contract unit price per cubic yard for the pertinent Class of Excavation in which it occurs.

201.04.07 The Contractor or the Administration may elect to recompute quantities in any section where it is believed the planned quantities are incorrect. When recomputation reveals an error, the corrected quantity will be used.

201.04.08 The excavated material or common borrow required to fill the temporary wedge area as specified in 201.03.11, maintaining the 4:1 or flatter slope, compaction, and removal of the material will not be measured but the cost will be incidental to the Contract unit price for the pertinent Class of Excavation. Refer to 104.12.04 for measurement and payment of Drums.

201.04.09 Backfill for unsuitable material will be measured and paid for at the Contract unit price for the pertinent item specified in the Contract Documents.

203 BORROW EXCAVATION

203.01 DESCRIPTION

Furnish, excavate, haul, and place approved materials for embankments and backfills when sufficient quantities of suitable materials are not available from other excavations specified in the Contract Documents. This includes all work prescribed for backfills, embankments, subgrade, and earth shoulders, all necessary clearing and grubbing, the removal and disposal of overburden or other unsuitable spoil material, and the trimming, shaping, dressing, draining, and reclamation of the pit or location from which borrow material is secured. Refer to 201.03.02 before securing borrow.

203.01.01 Contractor's Options. As a duly authorized agent of the Administration, select one of the following three methods to obtain borrow material for use on public highway contracts:

OPTION 1 - Acquire material from a licensed commercial operating supplier.

OPTION 2 - Make application to the Maryland Department of the Environment under the Annotated Code of Maryland, Environment, Title 15, Subtitle 8, entitled "Surface Mining".

OPTION 3 - Make application to the Administration to operate under the standard adopted in conformance with the Annotated Code of Maryland, Environment, Title 15, Subtitle 8, Surface Mining, Subsection 15-834 entitled "Exemptions." If this option is selected submit an application to the Administration fulfilling all the requirements of the cited subtitle.

Provide notification of the option selected to the Administration.

203.01.02 Notice to Contractor—Borrow Pits. If proposed, a borrow pit may be established on privately owned property. The Administration may grant an "Exemption for a Surface Mining Permit" normally issued by the Maryland Department of the Environment, Water Management Administration (WMA). Before a permit can be granted, submit written proof to the Administration that all local permits or approvals have been secured for the borrow pits.

This project is located in Fill in blank (use drop-down). The following conditions applicable to the county or city shall be complied with and documented.

DISTRICT 1

Dorchester (DO) County

- Site plan approved by Soil Conservation District.
- Grading permit from County Highway Department (except City of Cambridge).
- Planning and Zoning approval for use.
- Critical Areas approval (if applicable).
- Inspection by County.

Somerset (SO) County

- Site plan approved by Soil Conservation District.
- Grading Permit from the County.
- Land Use permit.
- Critical Areas approval by Planning and Zoning (if applicable).
- Inspection by SHA.

Wicomico (WI) County

Site plan approved by Soil Conservation District.
Certificate of compliance with Planning and Zoning if located in Critical Area. Inspection
by SHA.

Worcester (WO) County

Site plan approved by Soil Conservation District.
Critical areas approved by Planning and Zoning (if applicable).
Inspection by SHA.

DISTRICT 2

Caroline (CO), Cecil (CE), Queen Anne's (QA) and Talbot (TA) Counties

Site plan approved by Soil Conservation District.
Planning and Zoning approval.
Critical Areas approval (if applicable).
Inspection by SHA.

Kent (KE) County

Site plan approved by Soil Conservation District.
Grading permit.
Planning and Zoning approval.
Critical Areas approval (if applicable).
Inspection by SHA.

DISTRICT 3

Montgomery (MO) County

Sediment control permit and plan approval by County
Department of Environmental Protection, Division of
Water Resources Management, Storm Water Management Section/Sediment Control.
Approval by Maryland National Capital Park and Planning Commission (if applicable).
Inspection by County.

Prince Georges (PG) County

Site Plan approved by Soil Conservation District.
County Grading Permit.
Tree conservation plan approval by Maryland National Capital Park and Planning
Commission (if applicable).
Critical Areas approval (if applicable).
Payment of all pertinent county fees and/or securing of county required bonding.
Inspection by SHA with oversight by County.

DISTRICT 4

Baltimore (BA) County

Site Plan approved by the Department of Environmental Protection and the Soil
Conservation District.
County Grading Permit.
Critical Areas approval by the Department of Environmental Protection and Resource
Management (if applicable).
Inspection by County.

Harford (HA) County
Site Plan approved by Soil Conservation District.
County Grading Permit.
Critical Areas approval (if applicable).
Inspection by County.

DISTRICT 5

Anne Arundel (AA) County
Site Plan approved by Soil Conservation District.
Planning and zoning approval - special exception required.
Grading plan issued by the County Department of Inspections and Permits. Critical Areas approval (if applicable).
Inspection by County and SHA.

Calvert (CA) County
Site Plan approved by Soil Conservation District.
Grading plan issued by the County after a mining permit or exemption is issued. Critical Areas approval (if applicable).
Inspection by SHA.

Charles (CH) County
Site Plan approved by Soil Conservation District.
Special exception granted by the County.
Critical Areas approval (if applicable).
Inspection by SHA.

St. Mary's (SM) County
Site Plan approved by Soil Conservation District.
County Grading Permit.
Critical Areas approval (if applicable).
Inspection by SHA.

DISTRICT 6

Allegany (AL) County
Site plan approved by Soil Conservation District.
Informational copy of plans to County Planning and Zoning Commission. Inspection by SHA.

Garrett (GA) and Washington (WA) Counties
Site plan approval by Soil Conservation District.
Inspection by SHA.

DISTRICT 7

Carroll (CL) County
Site plan approved by County Planning Commission.
Sediment control plan approval by Soil Conservation District.
County Grading Permit.
Inspection by County.

Frederick (FR) County
Site plan approved by Soil Conservation District.
County Grading Permit.
Inspection by SHA.

Howard (HO) County
Site Plan approved by Soil Conservation District.
County Grading Permit.
Inspection by County.

BALTIMORE CITY (BC)

Site plan approved Baltimore City Department of Public Works (BCDPW).
Inspection by BCDPW.

STATE AND FEDERAL PROPERTY

Borrow pits located on state and federal property are subject to Maryland Department of the Environment approval.
Inspection by SHA.

An exemption under Option 3 will require approval of an excavation and reclamation plan along with the drainage patterns and methods of attaining satisfactory drainage and soil conservation as the work progresses. The plan shall provide for surface restoration suitable for the proposed subsequent land use after reclamation is completed and the proposed method of accomplishment.

203.01.03 Borrow Pits Within Jurisdictional Resources. Borrow pits located within tidal or nontidal wetlands, waterways, and 100 year floodplains require approval by the appropriate Federal and State Authorities. Obtain and provide all required permits.

If the pit is in operation and the Administration discovers that the work does not meet these regulations, the Administration will notify the contractor to make the necessary corrections and all other operations shall cease until the work is in compliance.

203.02 MATERIALS

Section 916.

203.03 CONSTRUCTION

203.03.01 Clearing and Grubbing. Section 101.

203.03.02 Borrow Pit Material. Notify the Engineer at least 30 days in advance of the opening of any borrow pit so that soil analysis, elevations, and measurements of the ground may be made. After the pit is opened, use the excavated material only for the project intended. Do not excavate additional material for other purposes until a final survey is made of the pit.

203.03.03 Borrow Pit After Excavation. Meet the requirements of the Reclamation (Permit) Plan after the necessary quantity of materials has been removed. Avoid steep slopes and sheer faces. Seed and mulch all disturbed areas as specified in Section 705, at no additional cost to the Administration. Shaping and seeding requirements do not apply to commercial borrow pits.

203.03.04 Borrow Excavation Beyond Specified Limits. Refer to 201.03.08.

203.03.05 Compaction. Refer to 204.03.04.

203.04 MEASUREMENT AND PAYMENT

Borrow excavation will be measured and paid for at the Contract unit price per cubic yard for the pertinent Borrow item. The payment will be full compensation for clearing and grubbing, furnishing, excavating and hauling, sloping, draining and reclamation of pits (if Option 2 or 3 is selected), the formation and compaction of embankments, backfills, subgrade, manipulation and additives for select borrow, all work and materials for earth shoulders except as otherwise specified, disposing of all unsuitable spoil material, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

When requested by the Contractor in writing, the Engineer may approve an alternate method of measurement for the computation of borrow excavation quantities. This alternate method will not be considered for approval unless the Contractor can show that the cross section method computed by average end area is not a feasible method of measurement. When approved in writing, this alternate method will consist of measuring the borrow excavation in approved hauling vehicles. Refer to TC-7.01 and the following:

- (a) Prior to the start of hauling operations, provide the identification number of each vehicle to be used. The Engineer will determine the water level capacity of each vehicle. The measured capacity will be multiplied by a factor of 0.85 to determine the pay volume.
- (b) Furnish a delivery ticket to the Engineer for each load of borrow material delivered to the project with the information listed below. Only tickets signed by the Engineer will be used in the computation of the borrow quantity.
 - (1) The supplier's name.
 - (2) The Administration's Contract number.
 - (3) The date and ticket number.
 - (4) Vehicle identification number.
 - (5) Type of material delivered.
 - (6) Pay volume computed as specified in (a).

204 EMBANKMENT AND SUBGRADE

204.01 DESCRIPTION

Construct embankment and subgrade using suitable material obtained from roadway, structure, borrow, and other excavation included in the Contract. Place, process, and compact material to the specified line and grade.

204.02 MATERIALS

Unless otherwise specified, use soils and soil aggregate mixtures that meet the common borrow requirements specified in Section 916.

204.02.01 Rock. Rock may be used in embankments, if individual pieces do not exceed 24 in. in any dimension. Larger size rocks may be wasted with the approval of the Engineer.

204.02.02 Frozen Material. Refer to 201.03.05. In addition, do not cover any material that freezes after being placed in the embankment until it has thawed.

204.02.03 Embankment Adjacent to Structures. The Engineer may require the use of specially selected material adjacent to structures to protect the structure from damage. Do not use rock. At locations of pile supported foundations, use embankment material that will allow piles to be easily driven.

204.03 CONSTRUCTION

204.03.01 Embankment Foundation

(a) **Foundation Material.** The Engineer will inspect and approve the area prior to construction of the embankment. Remove topsoil, root mat, and unsuitable material to the depth directed.

(b) **Embankment Over Existing Pavement.** Thoroughly break up, scarify, or remove the pavement as specified or as directed.

(c) **Test Rolling.** When specified or directed, test the foundation by rolling with a 35 ton pneumatic tired roller, or as approved.

204.03.02 Placing and Spreading. Place the material in horizontal layers across the full width of the embankment. Maintain an adequate crown to provide drainage at all times. Maintain side slopes at the specified slope throughout the progress of the work.

(a) Embankment on Unstable Ground. When embankment is to be constructed on ground that will not support the weight of the construction equipment, the first layer of the fill may be constructed by depositing material in a layer no thicker than that required to support the equipment. Place subsequent layers as specified in (b).

(b) Earth Embankment. Except when specified, do not place layers exceeding 8 in. compacted depth.

(c) Rock Embankment

(1) Determine the thickness of layers by the size of the rock or a 24 in. maximum depth, whichever is less. Where the embankment is less than 6 ft below the subgrade at the profile grade line, place the material in layers not exceeding 8 in. compacted depth. Solidly fill and choke these layers with spalls, rock dust, or earth. Fill and compact each layer before placing the next layer.

(2) Place the rock material to a uniform top surface, determined by connecting with straight lines the points on the typical cross section that are 9 in. below any median ditch invert and 9 in. below the bottom of the pavement structure and then sloping downward and outward under the shoulders at the rate of 3/4 in. per ft to the outer slope of the embankment.

(3) Unless otherwise specified, construct the remaining upper portion of the embankment, using suitable earth that is free from stones retained on a 3 in. sieve.

204.03.03 Benching. When placing and compacting embankment on hillsides or against existing embankments, continuously bench the slopes where the slope is steeper than 4:1 when measured at right angles to the roadway. Perform the benching operation as the embankment is constructed in layers. Maintain a bench width of at least 5 ft. Begin each horizontal cut at the intersection of the original ground and the vertical sides of the previous cut. If the material cut from the benches meets embankment requirements, compact this material along with the new embankment material.

204.03.04 Compaction. Immediately after spreading each layer of fill, compact the material with approved equipment. Perform all rolling in a longitudinal direction along the embankment. Begin at the outer edges and progress towards the center. Vary the travel paths of traffic and equipment over the width of the embankment to aid in obtaining uniform compaction.

Compact the material that is 1 ft below the top of subgrade to at least 92 percent of the maximum dry density per T 180. Compact the top 1 ft to at least 97 percent of the maximum dry density. Determine in-place density per MSMT 350 or 352. When necessary, add water or dry the layer in order to compact to the required density. When finally compacted to the required density, the resultant moisture content of embankment material shall be within two percentage points of optimum.

Provide a portland cement concrete compaction block having dimensions 18 in. x 18 in. x 9 in., weighing at least 200 lb, and with one 18 in. x 18 in. level and broomed working surface.

204.03.05 Stability of Embankments. Remove and replace with acceptable material any embankment or portion thereof that has been constructed with unsuitable material. Remove and replace unstable material and remove and replace portions of the embankment that become unstable or displaced as the result of the construction operations.

204.03.06 Protection of Structures and Utilities During Construction. Protect all structures and utilities from any damage in the handling, processing, or compacting of embankment or backfill material. Exercise caution near arches, retaining walls, culverts, and utility trenches to prevent undue strain or movement. In areas where rollers cannot be used, refer to Section 210.

204.03.07 Subgrade. After all cuts, embankment, and backfilling have been substantially completed, construct and shape the subgrade to the specified cross section. Test roll the subgrade as specified in 204.03.01 (c).

204.03.08 Maintenance. Maintain the embankment and subgrade until final acceptance. Use acceptable material from excavation or borrow to replace embankment and subgrade material that may be lost or displaced as a result of natural causes such as storms and cloudbursts, or as a result of unavoidable movement or settlement of the ground or foundation upon which the embankment and subgrade is constructed. Maintain ditches and drains at all times. Keep all traffic on the embankment and subgrade to a minimum. Remove ruts that are 2 in. or more in depth by reshaping and recompacting.

204.04 MEASUREMENT AND PAYMENT

Embankment, subgrade, and all necessary work will not be measured but the cost will be incidental to the Contract unit price per cubic yard for the pertinent Class of Excavation. The payment will be full compensation for the formation, sprinkling, compacting, test rolling, shaping, scarifying, breaking or removing of the existing pavement, sloping, trimming, finishing, maintaining embankments and subgrade, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

Replacement of material lost as a result of natural causes will be measured and paid for at the Contract unit price per cubic yard for the pertinent Class of Excavation item or as directed by the Engineer.

Compaction by means of mechanical tampers or vibratory compactors will not be measured but the cost will be incidental to the pertinent Class of Excavation item.

206 REMOVAL OF EXISTING PAVEMENT, SIDEWALK, PAVED DITCHES, CURBS, OR COMBINATION CURB AND GUTTER

206.01 DESCRIPTION

Remove to full depth and dispose of existing pavement, sidewalk, paved ditches, curb, or combination curb and gutter.

206.02 MATERIALS Not applicable.

206.03 CONSTRUCTION

206.03.01 Full Depth Saw Cut. Saw cut to full depth the existing pavement, sidewalk, paved ditches, curb, or combination curb and gutter along the lines specified or as directed.

206.03.02 Use of Removed Pavement, Sidewalk, Paved Ditches, Curb, or Combination Curb and Gutter. When approved, removed materials may be broken and used in the work. Refer to 204.02.01.

206.03.03 Protection of Retained Pavement, Sidewalk, Paved Ditches, Curb, or Combination Curb and Gutter. Protect all sections designated to remain from being damaged. Repair or replace damaged areas.

206.04 MEASUREMENT AND PAYMENT.

The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

206.04.01 Removal of existing pavement, sidewalk, paved ditches, curb or combination curb and gutter, and full depth saw cuts within the limits of any class of excavation will not be measured but the cost will be incidental to the Contract unit price for the Class of Excavation in which it occurs.

206.04.02 Saw cuts, removal of existing pavement, sidewalk (except as specified in 603.04), paved ditches, and curb or combination curb and gutter (except as specified in 602.04) outside the limits of any class of excavation will be measured in the original position and paid for as follows:

- (a) Saw Cuts per linear foot when an item is included in the Contract Documents.
- (b) Removal of Existing Pavement, Sidewalk, and Paved Ditches per cubic yard.
- (c) Removal of Existing Curb or Combination Curb and Gutter per linear foot.

When any material included in (b) or (c) is removed but not replaced, backfilling and landscaping as directed by the Engineer will not be included in Contract Unit Price. Payment for this work will be made using the applicable items included in the Contract Documents.

305 MISCELLANEOUS STRUCTURES

305.01 DESCRIPTION

Construct miscellaneous cast in place concrete or masonry drainage structures, furnish and install precast concrete drainage structures, and clean existing drainage structures including but not limited to inlets, manholes, junction boxes and risers.

Apply integral color admixture to concrete structures when specified. Apply sandblast finish to the completed, colored drainage structures.

305.02 MATERIALS

No. 57 Aggregate	901.01
Mortar Sand	901.01
Curing Compound	902.07.03
Portland Cement Concrete	902.10, Mix No. 2, 3, or 6
Mortar	903.06
Grout	902.11
Brick	903.02
Reinforcement Steel	908
Steel	909.02
Castings for Frames, Covers, Gratings and Steps	909.04
Zinc Coating	A 153
Precast Concrete End Walls, Inlets, and Manholes	M 199

305.03 CONSTRUCTION

Refer to Section 420 for Portland cement concrete, Section 463 for brick masonry, and 402.03.01 for excavated material.

305.03.01 Construction Sequence. Complete the underground drainage structures before placing the roadway surfacing. Manholes, catch basins, and inlets shall not be completed to final grade until the grading has been finished and all necessary arrangements have been made to ensure suitable connections and tie ins at proper grade and alignment with pavements, gutters, and curbs.

305.03.02 Castings. Set frames for grates and covers for inlets and manholes, in full beds of mortar and rigidly secure them in place to the specified grade and alignment.

305.03.03 Pipe Connections. Set or cut inlet and outlet pipes flush with the inside face of the structure. Extend them a sufficient distance beyond the outside face of these walls to provide for making proper

connections. Completely and neatly close the joint around the pipe in the structure wall with mortar or other specified materials.

305.03.04 Inverts. When drainage structures contain two or more pipes, construct channeled inverts conforming to the Contract Documents.

305.03.05 Drainage Structures. Provide two blockouts, each at least 8 in. diameter, in inlets and manholes for underdrains. Backfill with No. 57 aggregate for a width of 1.5 ft outside of the structure and extended from the bottom of the structure to the subgrade.

305.03.06 Precast Drainage Structures. For structures not detailed in the Contract Documents, submit working drawings for approval.

Certification. Certification from the manufacturer is required for each shipment of precast units. Provide a copy of the certification to the Engineer, the Laboratory, and the Contractor with each shipment. One copy shall remain at the plant. Include the name and address of the manufacturer, the type of structure, the identification number, the date of manufacture, the date of shipment, a statement indicating conformance with the Specifications, and the signature of the quality control manager. Mark the unit with the station number and designation, the identification number, the name or trademark of the manufacturer, the date manufactured, and stamp indicating conformance with the Specifications.

Do not ship any precast unit without complete documentation showing that all materials meet specifications per 305.02 or the Contract Documents; or without complete identification markings per Sections 440, 905, and 915.

Place and consolidate at least 6 in. of No. 57 aggregate bedding under the unit.

Integral Colored Concrete Structures. Where specified, cast storm water management structures using integral concrete color pigment admixture. Add pigment admixture to the concrete as specified by the manufacturer. Ensure uniform coloration throughout the structure.

Sandblasted Finish. Apply sandblast finish to colored drainage structures. Allow concrete to cure to sufficient strength so that is will not be damaged by blasting but not less than seven days. Apply Class 1 (Brush) finish involving a one pass brush blast which will remove the cement matrix and expose the fine aggregates only. No exposed coarse aggregate is allowed. Meet all local air pollution regulations. Ensure the safety of the workers. Equip each blaster with an air-fed helmet. Ensure that areas immediately adjacent to the sand-blasting operation are cleaned-up.

Sample Panel. Prior to casting drainage structures with integral concrete color pigment admixture, provide a sandblasted 2 ft by 2 ft by 4 in. sample panel at the construction site for color and finish approval. Ensure subsequent structures requiring integral color match the sample panel. Maintain the sample at the construction site as a basis for comparison with the structures.

305.03.07 Clean Existing Drainage Structures. Clean existing drainage structures and dispose of the material. Reset and anchor existing grates as directed.

305.04 MEASUREMENT AND PAYMENT

The payment will be full compensation for all excavation, concrete, masonry, special or precast units, reinforcement, ladder rungs, drip stones, No. 57 aggregate, underdrain stubs, frames, grates and covers, grade and slope adjustments, backfill, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

305.04.01 Standard Inlets and Manholes will be measured and paid for at the Contract unit price per each. When a structure exceeds the standard minimum depth an additional payment will be made for the excess

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

depth at the Contract unit price per linear foot for the pertinent Vertical Depth item.

305.04.02 Standard End Walls, Headwalls, End Sections, and Special Structures will be measured and paid for at the Contract unit price per each.

305.04.03 Nonstandard End Walls and other miscellaneous structures such as steps, spring boxes, and junction boxes, constructed using brick masonry or concrete will be measured and paid for at the Contract unit price per cubic yard, unless otherwise specified.

305.04.04 Stormwater Management Risers will be measured and paid for at the Contract unit price per cubic yard of Concrete Mix 3 which includes gasket, watertight seals, trash racks, orifice plates, low flow and dewatering pipe stubs and safety rails.

305.04.05 No separate or additional measurement will be made for any precast concrete units, metal, or castings used in the construction of any of the items noted above.

305.04.06 Cleaning Existing Drainage Structures will be measured and paid for at the Contract unit price per each, regardless of type, size, or depth of the structure.

305.04.07 When an existing drainage structure is to be removed and replaced with a new drainage structure in the same location, the cost to remove the existing drainage structure and a section of the existing pipe will be incidental to the cost of the new drainage structure.

305.04.08 Integral colored concrete will not be measured but will be incidental to the applicable precast or cast in place concrete item. The payment will include integral concrete color pigment admixture, sandblast finish, clean-up and all material, labor, equipment, tools and incidentals necessary to complete the work.

SPECIAL PROVISIONS

602 – CURB, COMBINATION CURB AND GUTTER, AND MONOLITHIC MEDIAN

**602 CURB, COMBINATION CURB AND GUTTER, AND MONOLITHIC
MEDIAN**

602.01 DESCRIPTION

Construct concrete curb, concrete combination curb and gutter, concrete curb openings, concrete monolithic median, and asphalt curb.

602.02 MATERIALS

Crusher Run Aggregate CR-6	901.01
Aggregate	901.01, Size No. 57
Curing Materials	902.07
Form Release Compound	902.08
Portland Cement Concrete	902.10, Mix No. 3
Asphalt Mix	904
Tack Coat	904.03
Reinforcement Steel	908.01
Joint Sealer	911.01
Preformed Joint Filler	911.02
Borrow Excavation	916.01

602.03 CONSTRUCTION

602.03.01 Concrete Curb, Combination Curb and Gutter, and Monolithic Median

(a) Excavation. Excavate to the specified depth and to the width required to install and brace the forms. Compact the subgrade to 92 percent density per T 180, Method C, and trim to the proper shape and required grade. Remove all soft and unsuitable material and replace with approved material.

(b) Forms

(1) Fixed Form Method. Ensure that all forms are properly designed and acceptable. Use full depth steel forms that are at least 10 ft in length. When installing forms where the radius of the curb face is less than 200 ft, use flexible or curved steel or wooden forms that are no more than 6 ft in length. Securely fasten and brace forms to prevent buckling, warping, or any other movement during the placing of concrete. Place the forms to a tolerance in grade and alignment of 1/4 in. in 10 ft. Thoroughly clean and coat the forms with a form release compound each time they are used.

(2) Slip-Form Method. Refer to 603.03.01(b)(2).

(c) Concreting. Mix according to 915.03.04. Volumetric batching and continuous mixing will be permitted. Before placing concrete, moisten the subgrade with as much water as it can absorb. Consolidate the concrete in the forms by spading or other approved method. Remove curb face forms as soon as the concrete will retain its shape. Keep other forms in place for at least 12 hours.

(d) Depressed Curbs. Construct depressed curbs at entrances and sidewalk ramps.

(e) Openings. Provide an outlet for rainspouts and other drainage by constructing insert openings within the curb.

Construct curb openings as specified.

(f) Finishing. Strike off the concrete to the specified cross section. Finish, float, and apply a broom finish. For matching adjacent concrete surfaces, other methods of finishing may be permitted. Do not use plastering. Use a 1 in. radius edging tool on the face edge of the curb. Finish all other exposed edges with a 1/4 in. edging tool. Limit any deviation from grade and alignment of the face and top surface of curbs and medians to no more than 1/4 in. in 10 ft. Immediately after removal of the forms, repair all honeycombed and damaged areas.

(g) Joints

(1) Fixed Form Method. Use 10 ft spacing between joints, except where a lesser spacing is necessary for closures and for matching expansion and contraction joints in contiguous concrete pavements. Do not use joint spacings less than 4 ft. Form the joints by using plate steel templates 1/8 to 3/16 in. thick that have a width and depth equal to the unit cross section. Do not use intermediate templates or sections of templates. Set the templates perpendicular to the line and grade of the unit. At stationary structures such as bridges and inlets, construct an expansion joint using 1/2 in. preformed expansion joint filler. Construct expansion joints at points of curves, tangents, at locations coinciding with adjoining pavement joints, and as specified or as directed. Extend the expansion joint material to the full depth of the unit cross section. Apply sealer to the entire gutter portion and 1 in. up the face of all joints. In addition, seal the entire expansion joint of monolithic medians.

(2) Slip-Form Method. Refer to 604.03.01(b), except use 602.03.01(g)(1) for joint spacing.

(h) Cold Weather Construction and Curing. Refer to 520.03.02 and .12.

(i) Backfill. After curing for at least 72 hours, use approved material to backfill the front and back of the curb, combination curb and gutter, and median to the required elevations. Complete the backfilling before rolling the adjacent roadway.

602.03.02 Asphalt Curb. Unless otherwise approved, use a self-propelled machine to place Asphalt curb. The machine shall form curbing that is uniform in texture, shape, and density, and to the specified template.

Place the curb on a clean, dry, and stable base. Apply tack coat using asphalt of the type and amount as directed.

When required, backfill the curb after it has sufficiently hardened to prevent damage. Consolidate the backfill by tamping or rolling.

602.04 MEASUREMENT AND PAYMENT

The payment will be full compensation for all concrete, asphalt mixes, forms, excavation, backfill, disposal of excess material, drainage openings, joint sealer, tack coat, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

The removal and disposal of unsuitable material will be measured and paid for at the Contract unit price for Class 2 Excavation, which price includes the cost of using suitable excavation as replacement material. When Borrow or Selected Backfill is authorized as replacement material, payment will be made at the Contract unit price bid for the respective items.

When existing curb or combination curb and gutter is removed and replaced with new curb or combination curb and gutter, the cost of the removal will be incidental to the Contract unit price for the new item.

602.04.01 Curb, Combination Curb and Gutter, and Monolithic Median will be measured and paid for at the Contract unit price per linear foot. Asphalt Curbs, Concrete Curbs, and Concrete Combination Curb and Gutter will be measured along the front face of the curb. Monolithic Concrete Median will be measured along the center line of the finished top of median.

602.04.02 Concrete Curb Opening and Curb Opening for Concrete Combination Curb and Gutter will be measured and paid for at the Contract unit price per each.

603 SIDEWALKS

603.01 DESCRIPTION

Construct asphalt or concrete sidewalks and sidewalk ramps. Ensure that the sidewalks and sidewalk ramps are constructed in accordance with the most recent accessibility guidelines of the Americans with Disabilities Act (ADA).

603.02 MATERIALS

Curing Materials	902.07
Form Release Compound	902.08
Portland Cement Concrete	902.10, Mix No. 3
Asphalt Mix	904
Welded Wire Fabric	908.05
Joint Sealer	911.01
Preformed Joint Fillers	911.02

603.03 CONSTRUCTION

603.03.01 Concrete Sidewalks

(a) **Excavation.** Refer to 602.03.01(a).

(b) **Forms**

(1) **Fixed Form Method.** Use full depth steel or wood forms. Use forms that are straight, free from warp, and of sufficient strength to resist the pressure of the concrete. Brace and stake the forms so that they remain in both horizontal and vertical alignment. Thoroughly clean and coat forms with form release compound each time they are used. Allow the concrete to set for at least 12 hours before removing the forms.

(2) **Slip-Form Method.** Refer to 604.03.01(b), except use 603.03.01(e) for joint construction.

(c) **Concreting.** Before placing concrete, moisten the subgrade with as much water as it can absorb. Mix the concrete according to 915.03.04. Volumetric batching and continuous mixing will be permitted. Deposit the concrete on the prepared subgrade in successive batches to the full width of the sidewalk. Thoroughly spade along the edges and tamp the entire surface area to eliminate voids. Strike off and screed the concrete to the top of the forms.

(d) **Finishing.** Float the surface and apply a broom finish. Do not plaster the surface. Use a 1/4 in. edging tool on all outside edges and all joints.

(e) Joints. Place joints as specified. Tool or saw dummy joints a minimum of 3/4 in. deep. Match adjacent joints in curb or pavement. Place expansion joint material to the full depth of the concrete.

(f) Cold Weather Protection and Curing. Refer to 520.03.02 and .12. Do not allow pedestrian and vehicular traffic during the curing period.

(g) Expansion Joint Sealing. Prior to sealing, clear dirt and other foreign material from the expansion joints. Ensure that joint walls and all surfaces to which the sealing material is to adhere are surface dry for at least three hours prior to sealing. Do not seal the joints until they are acceptable to the Engineer. Ensure that the surface of the sealing compound is not more than 1/8 in. below the sidewalk surface.

603.03.02 Asphalt Sidewalks

(a) Excavation. Complete excavation, subgrade preparation, and form placement when required, as specified in 603.03.01(a) and (b).

(b) Placement. Place asphalt mix as specified in 504.03.06. When the sidewalk is not placed in forms, use acceptable backfill material to form an 18 in. wide shoulder for the sidewalk or as specified.

(c) Compaction. Use an approved roller. In areas inaccessible to a roller, a vibrating plate compactor or hand tamping may be used. In any case, the asphalt mix shall be uniformly compacted. Start compactive effort as soon as the asphalt mix can be compacted without displacement and continue until the material is thoroughly compacted and all marks have been removed.

603.03.03 Backfill. After the forms have been stripped and repairs are satisfactorily completed, backfill the spaces in front and back of the sidewalk to the required elevations using approved material.

603.04 MEASUREMENT AND PAYMENT

The payment will be full compensation for all excavation, backfill, disposal of excess or unsuitable material, forms, reinforcement when specified, joints, sealer, compaction, curing, finishing, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

The removal and disposal of unsuitable material will be measured and paid for at the Contract unit price for Class 2 Excavation, which price includes the cost of using suitable excavation as replacement material. When Borrow or Selected Backfill is authorized as replacement material, payment will be made at the Contract unit price bid for the respective items.

When the existing sidewalk is removed and replaced with a new sidewalk, the cost to remove the existing sidewalk will be incidental to the Contract unit price for sidewalk.

603.04.01 Concrete Sidewalks will be measured and paid for at the Contract unit price per square foot of finished surface including sidewalk ramps.

603.04.02 Asphalt Sidewalks will be measured and paid for at the Contract unit price per ton for the mixture placed.

607 CHAIN LINK FENCE

607.01 DESCRIPTION

Construct chain link fence.

607.02 MATERIALS

Portland Cement Concrete	902.10, Mix No. 2
Fence Fabric	914.01
Tie Wires, Line Post Clips, Tension Wires and Tension Wire Clips	914.02
Posts, Braces, Fittings and Hardware	914.03
Gates	914.04
Barbed Wire	914.05

607.02.01 Type. Install the height and type of fence specified. When the type of fence is not specified, one of the following types may be used:

- (a) Galvanized steel and malleable iron components.
- (b) Galvanized steel fabric utilizing galvanized steel posts or aluminum line posts.
- (c) Aluminum coated steel fabric utilizing galvanized steel line posts.
- (d) Aluminum coated steel fabric utilizing aluminum line posts.
- (e) Bonded vinyl coated fabric utilizing galvanized steel or galvanized bonded vinyl coated steel line posts and fittings.
- (f) Bonded vinyl coated fabric utilizing aluminum line posts.

607.03 CONSTRUCTION

607.03.01 General Requirements. Confine all activities and operations to the area immediately adjacent to the right-of-way lines and within the right-of-way. The Engineer may grant permission to perform normal construction activities through lands owned by or under control of the Administration.

In areas where privately owned fence or other property is within the Administration's right-of-way, remove the items and place them on the owner's property as directed by the Engineer. The Contractor shall be responsible for any damage to privately owned items removed.

Fence lines specified in the Contract Documents are only a guide. The exact location of the fence will be determined in the field by the Engineer.

Install all posts plumb. Maintain, as uniform as practicable, the spacing specified, with a tolerance of minus 2 ft.

Use post lengths that accommodate the fabricated width of the fence fabric without stretching or compressing the fabric and that provide the required spacing below the bottom of the fabric.

Install terminal posts at all ends, abrupt changes in grade, and at changes in horizontal alignment greater than 15 degrees. Install terminal posts at a spacing not exceeding 500 ft.

Install horizontal brace rails with diagonal truss rods and turn buckles at all terminal posts. Supply sufficient braces to provide complete bracing of each terminal post to the adjacent line posts.

Install post caps on all round line, terminal, and corner posts.

Place the bottom of the fabric approximately 1 in. above the groundline. A maximum clearance of 6 in. will be permitted for a maximum horizontal distance of 8 ft, except for special conditions specified in the Contract Documents.

Any excavation or backfill required to comply with the above clearance will require approval. Place fence fabric on the side of the post nearest to the roadway. For stormwater management ponds, place the fabric on the side farthest from the pond. The fence shall be true and taut.

Run a tension wire continuously between terminal posts near the top and bottom of the fabric. Attach the wire to the fabric with hog ring fasteners at 18 in. intervals.

Tie the fabric to the brace rails at intervals not exceeding 2 ft and to posts at intervals not exceeding 12 in. Attach stretcher bars to terminal posts by connectors equally spaced at not more than 16 in. centers. Place top and bottom connectors as close as possible to the ends of the fabric.

607.03.02 Anchorage for Line Posts and Terminal Posts. Where rock is encountered at a depth less than that specified for the footing, drill a hole 1 in. larger than the greatest dimension of the post to a depth of 12 in. or the planned footing depth, whichever is less. After the post has been set, fill the remainder of the drilled hole with grout composed of one part portland cement and two parts mortar sand by dry loose volume. Fill the space above the rock with concrete. Do not use the drive anchor method in rock areas.

Select the type of anchorage system from the following, except use the concrete method in rock areas.

Concrete Method. Place posts in the center of concrete footings. Thoroughly compact the concrete around the post by rodding or vibrating. Trowel the top surface to a smooth finish slightly above the groundline and uniformly sloped to drain away from the post. Do not disturb the post within the 72 hours after the individual post footing is completed.

Do not use hand mixed concrete unless approved. When permitted, limit the size of the hand mixed batch to 1/2 yd³.

Drive Anchor Blade Method. A drive anchor blade unit consists of two steel blades driven diagonally through galvanized steel fittings attached to opposite sides of the post. The drive anchor unit shall hold the post rigidly upright. Ensure that the spread of the blades at their full depth is approximately 39 in. Install the device so that its top is at least 3 in. below the finished grade. The anchor unit device and procedure shall be as approved.

Anchor each line post using one of these units. Anchor each terminal post using two units spaced approximately 6 in. apart. At terminal posts, drive each anchor blade unit in the direction that offsets the stresses caused by the tension of the fence.

607.04 MEASUREMENT AND PAYMENT

The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work. The removal of privately owned fence or other property from within the Administration's right-of-way will not be measured but the cost will be incidental to the Contract lump sum price for Clearing and Grubbing.

When an item for Clearing and Grubbing is not specified in the Contract Documents, clearing and grubbing will not be measured but the cost will be incidental to the Contract unit price for the pertinent Chain Link Fence item.

607.04.01 Chain Link Fence will be measured and paid for at the Contract unit price per linear foot for the actual number of linear feet measured to centers of end posts.

607.04.02 Terminal Posts (End, Pull, and Corner Post) will be measured and paid for at the Contract unit price per each for the size and type specified.

607.04.03. Gates will be measured and paid for at the Contract unit price per each as complete units of the size and type specified.

611 DETECTABLE WARNING SURFACE

611.01 DESCRIPTION

Furnish and install detectable warning surfaces. Ensure that the detectable warning surface is in accordance with the most recent accessibility guidelines of the Americans with Disabilities Act (ADA).

611.02 MATERIALS

Detectable Warning Surfaces 925

Select the detectable warning surface from the Qualified Product List (QPL) maintained by the Office of Materials Technology. Ensure that detectable warning surface materials meet certification requirements prior to use. Submit the proposed source of supply and the specific product for approval.

611.03 CONSTRUCTION

The detectable warning system may be either surface applied or cast in place. However, use only Type I, III, or IV detectable warning systems for new or replacement concrete installations. Install the system according to the manufacturer's recommendations. Unless specifically addressed in the manufacturer's recommendations, remove the existing surface texturing by grinding or other means. At a minimum, prepare the concrete surface in accordance with SSPC-SP 13. Remove all old adhesives and sealants.

The detectable warning surface shall be 24 in. wide in the direction of pedestrian travel and installed for the full width of the curb ramp, landing, or blended transition. Do not bridge or overhang cracks or expansion joints.

Ensure that the vertical edges of the installed system are not more than 0.50 in. above the adjacent surfaces. Place a 2:1 or flatter bevel on edges that are more than 0.25 in. above the adjacent surface. The same edge requirements apply to cut material.

611.04 MEASUREMENT AND PAYMENT

Detectable Warning Surfaces will be measured and paid for at the Contract unit price per square foot. The payment will be full compensation for removal and disposal of old treatments, including adhesives and sealants, reapplying, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

The sidewalk on which the detectable warning surface is placed will be measured and paid for at the Contract price for the pertinent Sidewalk item.

SPECIAL PROVISIONS
701 – SUBSOIL AND TOPSOIL

CATEGORY 700 - LANDSCAPING

701 SUBSOIL AND TOPSOIL

701.01 DESCRIPTION

Prepare existing topsoil; or salvage and place subsoil and topsoil; or furnish and place subsoil and topsoil in preparation for vegetation establishment. Refer to Section 704 and provide short-term, long-term or permanent stabilization as necessary for soil erosion protection. Performance of Subsoil and Topsoil as specified herein complies with all requirements of the Maryland Department of the Environment for handling and placing soils.

701.02 MATERIALS

Existing Topsoil	920.01.01
Salvaged Topsoil	920.01.01
Furnished Topsoil	920.01.02
Salvaged Subsoil	920.01.03
Furnished Subsoil	920.01.04
Limestone	920.02.01
Sulfur	920.02.02
Gypsum	920.02.04
Compost, Type A or Type B	920.02.05
Water	920.09.01
Pesticides	920.09.03

701.03 CONSTRUCTION

701.03.01 General

(a) Schedule. Perform subsoil and topsoil operations when soil moisture and weather conditions are suitable. Cease operations when soil is muddy, frozen, or otherwise unsuitable.

SPECIAL PROVISIONS

701 – SUBSOIL AND TOPSOIL

(b) Pesticide Application. For any work involving existing or salvaged soils, the Contractor shall possess a Maryland Department of Agriculture Commercial Pesticide Business License and a Pesticide Applicator Certificate for the pertinent pesticide application Category: (2) Forest; (3-A) Ornamental Plant Exterior; (3-C) Turf; (5) Aquatic; (6) Right-of-Way and Weed.

Apply pesticides in conformance with the Maryland Pesticide Applicator’s Law, OSHA and MOSH regulations, and the manufacturer’s label and Safety Data Sheets (SDS).

Ensure that pesticides are applied by a Maryland Certified Pesticide Applicator, or by a Registered Pesticide Applicator under the supervision of a Certified Pesticide Applicator.

(c) Prohibited Weeds. Refer to 920.01.01. Areas of existing topsoil, and areas of topsoil and subsoil to be salvaged and their stockpiles, will be inspected and shall be free of prohibited weeds. Control prohibited weeds as needed and as directed.

(d) Herbicide. To control prohibited weeds, and to remove vegetation when preparing existing topsoil, apply glyphosate 3 percent solution in water or submit a written request to use another herbicide or application rate.

(e) Pesticide Application Reporting. Record the location and details of pesticide applications on the Pesticide Application Reporting Form. Submit the Form within 24 hours after applying pesticides.

(f) Nutrient Management Plan (NMP). The Administration will develop a NMP based upon soil tests. The NMP application rates for soil amendments and fertilizer will be within the ranges shown in the pertinent table of application rates.

Conform to the application rates of the NMP. Do not apply soil amendments when no NMP has been developed. Do not apply soil amendments to subsoil or to furnished topsoil.

(g) Nutrient Management Reporting. Record the location and details of soil amendment and fertilizer applications on the Nutrient Management Reporting Form. Submit the Form within 24 hours after applying soil amendments and fertilizer.

701.03.02 Existing Topsoil. Refer to 920.01.01.

(a) Vegetation Removal. Refer to 701.03.01(d). Cut brush and groundcover vegetation, remove debris, and apply herbicide as necessary to prepare areas for seeding or other specified vegetation installation. Do not injure trees, shrubs and other plants to remain.

(b) Compost and Tilling. Refer to 701.03.01(f) and Table 1. Spread Type B Compost over the soil surface as specified in the NMP and lightly till soil to prepare soil and incorporate compost. Immediately install seeding or other vegetation as specified in the Contract documents.

SUBSOIL AND TOPSOIL		
TABLE 1 - SOIL AMENDMENT APPLICATION RATES & MIXING		
SOIL AMENDMENT & MIXING	APPLICATION RATE^a	
Compost - Existing Topsoil	Up to 0.25 in. depth compost spread over	Up to 34 yd ³ compost per acre of existing topsoil

Spread Type B Compost over surface of existing topsoil and lightly till into soil.	surface of existing topsoil	
Compost - Salvaged Topsoil Thoroughly mix Type A or Type B Compost into salvaged topsoil before placing topsoil.	Up to 1.0 yd ³ compost per 6.0 yd ³ of salvaged topsoil	Up to 0.17 yd ³ of compost per 1.0 yd ³ of salvaged topsoil
Gypsum Spread gypsum over surface of existing topsoil, or over surface of placed salvaged topsoil, and till to mix gypsum into upper 2 in. of topsoil.	Up to 0.721 lb of gypsum per yd ² of existing topsoil or placed salvaged topsoil	Up to 3500 lb of gypsum per acre of existing topsoil or placed salvaged topsoil
Limestone Spread limestone over surface of existing topsoil, or over surface of placed salvaged topsoil, and till to mix limestone into upper 2 in. of topsoil.	Up to 1.446 lb limestone per yd ² of existing topsoil or placed salvaged topsoil	Up to 7000 lb of limestone per acre of existing topsoil or placed salvaged topsoil
Sulfur Spread sulfur over surface of existing topsoil, or over surface of placed salvaged topsoil, and till to mix sulfur into upper 2 in. of topsoil.	Up to 0.165 lb sulfur per yd ² of existing topsoil or placed salvaged topsoil	Up to 800 lb Sulfur per acre of existing topsoil or placed salvaged topsoil
^a Note: For existing topsoil and salvaged topsoil, the application rates will be specified in the Nutrient Management Plan (NMP) included in the Contract documents. Do not apply soil amendments except as specified in the NMP. Do not apply soil amendments to subsoil or to furnished topsoil.		

701.03.03 Salvaging Soils

(a) **Vegetation Removal.** Remove vegetation, brush, and other debris from areas where topsoil and subsoil will be salvaged.

(b) **Soil Removal.** Remove topsoil and subsoil to the depths as specified or as directed. Transport salvaged topsoil and subsoil separately, and keep them apart from other materials.

(c) **Stockpiles.** Construct stockpiles on well drained land, away from streams, drainage areas and floodplains as specified in Section 308. Maintain stockpiles of salvaged topsoil and salvaged subsoil away from other materials, and separate from each other.

Refer to Section 704 and apply Temporary Mulch or other stabilization as necessary for soil erosion protection immediately after constructing stockpiles. Refer to 308.03.20 and install perimeter sediment controls.

Maintain stabilization and sediment controls. Refer to 701.03.01(c) and control prohibited weeds as needed and as directed.

(d) **Weed Inspection.** Refer to 701.03.01(c) and ensure that inspection is completed and that prohibited weeds are controlled before removing vegetation, preparing soil, or transporting soil from stockpiles.

(e) Soil Preparation and Transportation

Subsoil. Transport and place salvaged subsoil per 701.03.04 when directed.

SPECIAL PROVISIONS

701 – SUBSOIL AND TOPSOIL

Topsoil. Refer to Table 1. Mix compost in conformance with the Nutrient Management Plan and transport and place prepared salvaged topsoil per 701.03.05 when directed.

701.03.04 Placing Subsoil

- (a) **Site Preparation.** Ensure the site where subsoil will be spread is uniformly graded true to line and cross section.
- (b) **Spreading.** Spread and compact subsoil in layers up to 8 in. thickness to provide a firm and uniform subsoil base. Ensure that subsoil is spread to the specified depth.
- (c) **Tracking.** Track subsoil on slopes 4:1 and steeper with cleated track equipment operated perpendicular to the slope. Check subsoil thickness, lines, grades, and elevations to ensure the completed work is as specified.
- (d) **Debris.** Remove stones and other debris with a length or width greater than 4 in. from the surface of the subsoil.
- (e) **Topsoil and Stabilization.** Refer to 701.03.05 and immediately place topsoil over subsoil, or refer to Section 704 and provide stabilization as necessary for soil erosion protection.

701.03.05 Placing Topsoil

- (a) **Site Preparation.** Ensure the site where topsoil will be spread is uniformly graded true to line and cross section, and that the surface of the subsoil base is loose and able to provide a suitable bond for the topsoil layer to be spread. If the subsoil base is crusted or excessively compacted, then roughen and loosen the surface of the subsoil base with approved machinery before spreading topsoil.
- (b) **Spreading.** Spread topsoil over the designated areas and lightly firm the topsoil to ensure uniform thickness of the specified depth, and to meet the required grades.
- (c) **Tracking.** Track topsoil on slopes 4:1 and steeper with cleated track equipment operated perpendicular to the slope.
- (d) **Grading Adjustment.** When placing topsoil for grading adjustment, the minimum thickness shall be 1/2 in. and the maximum thickness shall be 8 in.
- (e) **Firming.** Ensure that topsoil is uniformly firmed near sidewalks, structures and pavement edges, and that the topsoil surface is without gaps, mounds, depressions, soft spots, or areas that may impair surface drainage or future maintenance. Check topsoil thickness, lines, grades, and elevations to ensure the completed work is as specified.
- (f) **Soil Amendments.** Refer to 701.03.01(f) and Table 1. Apply soil amendments to topsoil in conformance with the Nutrient Management Plan.
- (g) **Tilling.** Refer to Table 1 and till topsoil to incorporate soil amendments and prepare areas for seeding or installation of other specified vegetation.
- (h) **Debris.** In areas within 10 ft of the pavement edge and near commercial and residential

SPECIAL PROVISIONS

701 – SUBSOIL AND TOPSOIL

property, remove stones, wood, metal, and other debris with a length or width greater than 2 in. from the topsoil surface when spreading is completed. In all other areas, remove debris with a length or width greater than 4 in., or as directed.

(i) Stabilization. Immediately perform Turfgrass Establishment, or install other permanent vegetation as specified in the Contract documents, or refer to Section 704 and install Temporary Mulch or Temporary Seed for soil erosion protection.

701.03.06 Inspection and Acceptance. Submit a request for Acceptance when operations are completed. Inspection will be conducted to verify that operations were completed as specified. Acceptance will be granted at that time.

701.04 MEASUREMENT AND PAYMENT

Subsoil and topsoil will be measured and paid for at the Contract unit price for one or more of the specified items. The payment will be full compensation for all material, labor, equipment, tools, disposal fees and incidentals necessary to complete the work.

701.04.01 Existing Topsoil will not be measured and paid for. The cost of preparing existing topsoil, and any cost required for applying soil amendments in conformance with the Nutrient Management Plan, shall be incidental to the pertinent Contract unit price of the specified vegetation establishment.

701.04.02 Salvaging Subsoil and Salvaging Topsoil will not be measured but the cost shall be incidental to the Contract unit price for Class 1 Excavation.

701.04.03 Placing Salvaged Subsoil and Topsoil will be measured and paid for at the pertinent Contract unit price for the specified depth per square yard, or per cubic yard. Any cost required for applying soil amendments in conformance with the Nutrient Management Plan shall be incidental to the pertinent Contract unit price of the specified vegetation establishment.

701.04.04 Placing Furnished Subsoil and Topsoil will be measured and paid for at the pertinent Contract unit price for the specified depth per square yard, or per cubic yard.

701.04.05 Placing Topsoil for Grading Adjustment will be measured and paid for at the pertinent Contract unit price per square yard, or per cubic yard. No payment will be made for topsoil placed less than 1/2 inch depth. Any cost required for applying soil amendments to salvaged soil in conformance with the Nutrient Management Plan shall be incidental to the pertinent Contract unit price of the specified vegetation establishment.

701.04.06 Temporary Mulch, Temporary Seed, Turfgrass Establishment and other permanent vegetation establishment will be measured and paid for at the pertinent Contract unit price per square yard.

SPECIAL PROVISIONS

708 – TURFGRASS SOD ESTABLISHMENT

708 TURFGRASS SOD ESTABLISHMENT

708.01 DESCRIPTION

Establish turfgrass sod on topsoil or other specified soil substrate to provide permanent vegetation groundcover. When it is not possible to perform Turfgrass Sod Establishment, refer to Section 704 and perform Temporary Mulch, or as directed. Performance of Turfgrass Sod Establishment as specified herein complies with all requirements of the Maryland Department of the Environment for permanent vegetation groundcover.

708.02 MATERIALS

Fertilizer	920.03.01
Turfgrass Sod	920.06.03
Fasteners	920.05.02
Water	920.09.01

708.03 CONSTRUCTION

708.03.01 General

(a) **Regions.** Refer to 705.03.01(a).

(b) **Installation Season and Species.** Perform operations when soil moisture and weather conditions are suitable. Cease operations when sod or soil is frozen, or conditions are unsuitable.

Tall Fescue Sod. Install from August 15 to May 31 in Region 1, Region 2, and Region 3 unless another species of sod is specified. Approval is required for installation from November 16 to February 29 when fertilizer may not be applied.

Zoysiagrass Sod. Install in specified areas of Region 2 and Region 3 from March 1 to June 15, and from August 1 to September 15.

Bermudagrass Sod. Install in specified areas of Region 3 from March 1 to June 15, and from August 1 to September 15.

(c) **Nutrient Management Plan (NMP).** Soil testing will be performed and a NMP will be developed by the Administration. Conform to the application rates of the NMP and replace application rates of Table 2 in 705.03.03 as required by the NMP.

When no NMP has been developed, apply 200 lb per acre of 20-16-12 (83 percent UF with MAP & SOP) fertilizer as the NMP rate for Turfgrass Sod Establishment.

(d) **Nutrient Management Reporting.** Record the location and details of soil amendment and fertilizer applications on the Nutrient Management Reporting Form. Submit the Form within 24 hours after applying soil amendments and fertilizer.

708.03.02 Grade Repair. 705.03.04.

708.03.03 Preparing Soil. 705.03.05.

708.03.04 Application Rates. Apply materials according to Table 1.

TURFGRASS SOD ESTABLISHMENT		
TABLE 1 - APPLICATION RATES		
MATERIAL	LB PER yd²	LB PER ACRE
INITIAL FERTILIZER per Nutrient Management Plan ^{a, b}		
20-16-12 (83% UF with MAP & SOP)	0 to 0.041	0 to 200
or one or more of the following ^c		
38-0-0 (UF)	0 to 0.021	0 to 100
11-52-0 (MAP)	0 to 0.036	0 to 175
0-0-50 (SOP)	0 to 0.041	0 to 200
SEED MIXES; select one		
SHA Turfgrass Seed Mix, applied to roadsides, facilities, and other designated areas	0.041	200
Or		
SHA Special Purpose Seed Mix, applied to slopes 4:1 and steeper within four miles of a State airport, and other designated areas.	0.041	200
ADDITIVE SEED; when required per Table 1		
SHA Temporary Seed Mix	0.006	25
STRAW MULCH	0.826	4000
WOOD CELLULOSE FIBER to secure straw mulch	0.155	750
REFERTILIZING^d		
37-0-0 Sulfur Coated Urea (SCU)	0.021	100
Notes:		
^a For existing topsoil and salvaged topsoil, the application rates will be included in the Contract documents. For furnished topsoil, the application rates will be developed for the approved source of supply.		
^b When no NMP has been developed, apply 200 lb per acre of 20-16-12 initial fertilizer.		
^c UF = Ureaform; MAP = Monoammonium Phosphate; SOP = Sulfate of Potash. When application rate of 20-16-12 fertilizer is below 200 lb per acre, apply UF, MAP, and SOP per NMP.		
^d Refer to 705.03.06(d) and 705.03.09(c). Apply Refertilizing when included in the Contract documents.		

SPECIAL PROVISIONS

708 – TURFGRASS SOD ESTABLISHMENT

708.03.05 Initial Fertilizer. Apply initial fertilizer after preparing soil, or after installing sod, per Table 1. When sodding from November 16 to February 29, apply initial fertilizer during March, and apply refertilizing in conformance with 708.03.12 during April.

Use spreaders, drills, or other approved machinery. Machinery shall be capable of uniformly placing fertilizer at the specified rate. Calibrate equipment before application. Apply materials accurately and uniformly to avoid misses and overlaps. Do not operate machinery during windy weather that may interfere with uniform application.

708.03.06 Transporting and Handling Sod. Transport and install turfgrass sod within 48 hours after harvest. Handle sod without excessive breaking, tearing, or loss of soil.

708.03.07 Placing Sod. Place sod neatly over the soil surface. Ensure that sod edges are tightly abutted. Do not overlap edges of sod, or leave gaps between strips of sod.

708.03.08 Securing. Install fasteners in locations where sod may be dislodged by water flow. Secure turfgrass sod to the soil of ditches and slopes with at least two fasteners per strip spaced no more than 2 ft apart. Drive the fasteners through the sod and firmly into the soil, so there is no gap at the top of the fastener.

708.03.09 Firming. Tamp or roll turfgrass sod after installation and securing sod to close press the sod firmly into the soil. Hand tampers shall weigh approximately 15 lb with a flat surface of approximately 100 in². Rollers shall weigh approximately 40 lb per ft of width.

708.03.10 Initial Watering. Gently apply water with a sprinkler or water-breaker nozzle over the surface of the sod. Do not allow water to cause erosion or to displace the sod. Perform the first watering within 4 hours after placing sod. Wet the soil to a depth at least 2 in. below the sod.

708.03.11 Installation Acceptance. Submit a request for Installation Phase Acceptance when operations are completed. Inspection will be conducted to verify completion. Installation Phase Acceptance will be granted at that time.

708.03.12 Establishment Phase. The Establishment Phase will begin upon Installation Phase Acceptance. Perform the following during the Establishment Phase.

(a) Period of Maintenance. Maintain areas of sod until Final Acceptance.

(b) Required Maintenance. Perform the following during the Establishment Phase.

Watering. Apply water to ensure survival of sod in good condition. Apply water with approved machinery. Do not allow water to cause erosion, or to displace the sod.

Reset Sod. When sod is not firmly fastened to the soil, repair the unsecured areas using fasteners as needed or as directed.

Sod Replacement. When sod does not meet acceptance standards, remove the unacceptable sod and install new sod as needed or as directed.

Mowing. Mow sod before it grows to a height of 8 in. Use approved machinery to cut to a height of 3 to 5 in.

SPECIAL PROVISIONS

708 – TURFGRASS SOD ESTABLISHMENT

(c) **Refertilizing.** Refer to 708.03.05 and apply 37-0-0 SCU Refertilizing as specified in Table 1 at least 1 month after initial fertilizer was applied. Do not apply Refertilizing from November 15 thru March 1.

708.03.13 Final Acceptance. The Engineer and the Landscape Operations Division will complete an Inspection Report of sod height, color, and percent groundcover. When it is not possible to perform the Inspection, Final Acceptance will be delayed until Inspection is possible. The Inspection Report will be included in the Punch List requirements for the project. Complete the Punch List requirements as directed.

Final Acceptance will be granted after all operations have been completed, and when the turfgrass sod has grown at least 4 in. tall, exhibits dark green color, is firmly rooted into the soil, and is at least 99 percent groundcover.

708.04 MEASUREMENT AND PAYMENT

Turfgrass Sod Establishment will be measured and paid for at the Contract unit price for one or more of the specified items. The payment will be full compensation for all material, labor, equipment, tools, disposal fees and incidentals necessary to complete the work.

(a) **Payment Schedule.** Payments will be made according to Table 2 when construction requirements are met.

TURFGRASS ESTABLISHMENT		
TABLE 3 - PAYMENT SCHEDULE		
CONSTRUCTION REQUIREMENTS	PERCENT OF TOTAL CONTRACT PRICE	PAYMENT FOR COMPLETED WORK
708.03.01 thru .11	80	At Installation Phase Acceptance
708.03.12 (a) and (b) and 705.03.13	20	At Final Acceptance
Total Payment	100%	

(b) **Forfeiture.** Failure to complete operations as required in conformance with the Payment Schedule will result in forfeiture of that percentage of payment.

708.04.01 Turfgrass Sod Establishment, including grade repair, preparing soil, applying soil amendments and initial fertilizer in conformance with the Nutrient Management Plan, sod, fasteners, watering, resetting sod, sod replacement, and mowing will be measured and paid for at the Contract unit price per square yard.

708.04.02 Zoysiagrass Sod Establishment, including grade repair, preparing soil, applying soil amendments and initial fertilizer in conformance with the Nutrient Management Plan, sod, fasteners, watering, resetting sod, sod replacement, and mowing will be measured and paid for at the Contract unit price per square yard.

SPECIAL PROVISIONS

708 – TURFGRASS SOD ESTABLISHMENT

708.04.03 Bermudagrass Sod Establishment, including grade repair, preparing soil, applying soil amendments and initial fertilizer in conformance with the Nutrient Management Plan, sod, fasteners, watering, resetting sod, sod replacement, and mowing will be measured and paid for at the Contract unit price per square yard.

708.04.04 Refertilizing will be measured and paid for at the Contract unit price per square yard.

708.04.05 Temporary Mulch will be measured and paid for at the Contract unit price.

SPECIAL PROVISIONS

800 - STREETLIGHT

800 - STREETLIGHT

This is in addition to the MDSHA 2018 Standard Specifications and Montgomery County Department of Transportation Division of Traffic Engineering & Operations Streetlights: Specifications.

Streetlight Post specifications to follow Montgomery County Department of Transportation Division of Traffic Engineering & Operations Streetlight Post: Decorative Cast Pole.

See the following attachments in Addendum 1:

- Holophane Washington Globe Full Cover
- Holophane Columbia Cast Iron and Steel Pole

806 LUMINAIRES

806.02 Materials

Luminaires shall have a color temperature of 3000k. The luminaire for pedestrian lighting application shall be equivalent to Holophane Acrylic Washington Postlite LED Series Luminaire: AWDE2-P20-30K-AS-A-BK-3-F-S-BK. All luminaires that are placed in front of a house must have a house-side shield.

808 LIGHTING STRUCTURES

808.02 Materials

The Lighting Structure for pedestrian lighting application shall be equivalent to the Holophane Columbia Cast Iron and Steel Pole: CL-A-12-L5J-17-P07-ABG-BK-0R144C. If substitute is proposed, contractor to verify pole complies with Montgomery County wind load ratings.

Contractor is to provide a 1-gallon can of touch-up paint per 50 structures installed in each neighborhood. The touch-up paint is to be purchased from the pole manufacturer, and be identical in type, finish, and color to the structures installed at each neighborhood. Cost of the touch-up paint to be incidental to the cost of the lighting structures.

LUMINAIRE AND POLE DETAILS

Ø17.25"
43" NOMINAL HEIGHT

Maximum weight - 37 lbs
Maximum effective projected area - 2.19 sq. ft.

FINIAL (OPTIONAL)
ACRYLIC TOP COVER REFLECTOR
PRISMATIC ACRYLIC REFLECTOR
CAST ALUMINUM RIBS (OPTIONAL)
PRISMATIC ACRYLIC REFRACTER
LUMINAIRE HOUSING
SET SCREWS
SLIP FITTER FOR 3" Ø TENON
OPTIONAL NEMA LABEL

Acrylic Washington Postlite® LED Series Luminaire
Prismatic Style: Acrylic Washington
Housing Size: Standard

AWDE2 **P20** **40K** **AS** **F** **BK** **3** **F** **B** **BK**

ORDERING INFORMATION:

HOUSING
AWDE2 = ACRYLIC WASHINGTON POSTLITE STANDARD

LED PERFORMANCE PACKAGE
(SEE PERFORMANCE TABLE FOR DETAILS)
P10 = AS=26W / AH=33W
P20 = AS=38W / AH=49W
P30 = AS=50W / AH=69W
P40 = AS=81W / AH=90W

COLOR TEMPERATURE
30K = 3000 K CCT
40K = 4000 K CCT
50K = 5000 K CCT

VOLTAGE
AS = AUTO-SENSING VOLTAGE (120 THRU 277 V)
AH¹ = AUTO-SENSING VOLTAGE (347 THRU 480 V)

HOUSING
A = ARCADIAN STYLE CASTING FOR USE WITH 7" POST CAPITAL
C = CONVEX STYLE CASTING FOR USE WITH 7" POST CAPITAL
F = FLUTED STYLE CASTING FOR USE WITH 7" POST CAPITAL
L = LEAF STYLE CASTING FOR USE WITH 3 1/2" TENON
S = SIMPLE STYLE CASTING FOR USE WITH 3 1/2" TENON

HOUSING COLORS
BK = BLACK
BZ = BRONZE
GH = GRAPHITE
GN = GREEN
GR = GREY
PP = PRIME PAINT
WH = WHITE
CMC = CUSTOM MATCH COLOR
TDC = TIGER DRYLAC COLOR (RALxxx)
XX = STD FINISH, TBD

OPTICS
(PREFER TO OPTICS TABLE FOR RESTRICTIONS)
3 = IES TYPE III DISTRIBUTION
5 = IES TYPE V DISTRIBUTION
6 = IES TYPE III LUNAR OPTIC
8 = IES TYPE V LUNAR OPTIC

FINIAL
B = BALL
C = CLEAR
E = EAGLE
F = FLOWER
K = KNURLED CAP
P = PAWN
R = CROSS
S = STANDARD
T = ROM CROSS

TRIM/FINIAL COLORS
BK = BLACK
BZ = BRONZE
GL = GOLD
GH = GRAPHITE
GN = GREEN
GR = GREY
PP = PRIME PAINT
WH = WHITE
CMC = CUSTOM MATCH COLOR
TDC = TIGER DRYLAC COLOR (RALxxx)
XX = STD FINISH, TBD
L¹ = NO TRIM & CLEAR FINIAL

DECORATIVE OUTDOOR

HOLOPLANE®
LEADER IN LIGHTING SOLUTIONS
An Acuity Brands Company
© 2009 Acuity Brands Lighting, Inc., All Rights Reserved

OPTIONS

CONTROL OPTIONS
AQ² = FIELD ADJUSTABLE OUTPUT
FPDxx³ = FACTORY PROGRAMMED DRIVER (xx = % OF LUMENS OR WATTS)
PND12⁴ = 0-10V PART-NIGHT DIMMING, INCLUDES BLC2 & 120V BUTTON PHOTOCONTROL
PND202427⁴ = 0-10V PART-NIGHT DIMMING, INCLUDES BLC2 & 208 - 277V BUTTON PHOTOCONTROL

OPTIC OPTIONS
TB¹ = BLACK TOP REFLECTOR AND CAP

NEMA WATTAGE LABEL OPTIONS
NL1X1 = 1 X 1 NEMA LABEL NL2X2 = 2 X 2 NEMA LABEL

PREWIRE LEAD OPTIONS
L1H = 1.5 FEET OF PREWIRED LEADS L20 = 20 FEET OF PREWIRED LEADS
L03 = 3 FEET OF PREWIRED LEADS L25 = 25 FEET OF PREWIRED LEADS
L10 = 10 FEET OF PREWIRED LEADS L30 = 30 FEET OF PREWIRED LEADS

SHIPPING OPTIONS
UA = OPTIC AND HOUSING SHIPS ATTACHED IN ONE CARTON

ACCESSORIES

DECORATIVE BAND OPTIONS
RBMX = RIBS AND BAND KIT, FIELD INSTALLED (INSERT TRIM FINISH FOR X)

HOUSE SIDE SHIELD OPTIONS
GVDHSS0⁵ = HOUSE SIDE SHIELD SOLID 90 DEGREE
GVDHSS12⁵ = HOUSE SIDE SHIELD SOLID 120 DEGREE
GVDHSS18⁵ = HOUSE SIDE SHIELD SOLID 180 DEGREE
GVDHSL90⁵ = HOUSE SIDE SHIELD SOLID 90 DEGREE (LUNAR)
GVDHSL12⁵ = HOUSE SIDE SHIELD SOLID 120 DEGREE (LUNAR)
GVDHSL18⁵ = HOUSE SIDE SHIELD SOLID 180 DEGREE (LUNAR)

PHOTOCONTROL OPTIONS
GVD12X⁶ = BUTTON STYLE PHOTOCONTROL KIT WITH 120V DTL PHOTOCELL (INSERT FINISH FOR X)
GVD27X⁶ = BUTTON STYLE PHOTOCONTROL KIT WITH 208 - 277V DTL PHOTOCELL (INSERT FINISH FOR X)
GVD34X⁶ = BUTTON STYLE PHOTOCONTROL KIT WITH 347V PHOTOCELL (INSERT FINISH FOR X)

DECORATIVE ADAPTER OPTIONS
GV1473X¹ = 3" TO 7" POST CAPITAL. CONVERTS 3" POST TENON TO FLARED 7" POST CAPITAL. FIELD INSTALLED (INSERT FINISH FOR X)

GVDHSS12

NOTES ARE LOCATED ON PAGE 3

ORDER #: _____
TYPE: RAF
DRAWN: 04-03-2017
DATE: _____
DWG #: LUM_AWDE2S

1 of 4

Performance Data

AS Voltage Option Data

LED Package	Distribution	System Watts	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P10	3	26	3,261	125	1	4	2	3,429	132	1	4	2	3,429	132	1	4	2
	5	26	3,348	129	2	3	2	3,520	135	2	3	2	3,520	135	2	3	2
P20	3	39	4,911	126	2	4	3	5,164	132	2	4	3	5,164	132	2	4	3
	5	39	5,042	129	3	4	3	5,302	136	3	4	3	5,302	136	3	4	3
P30	3	60	6,915	115	2	5	3	7,271	121	2	5	3	7,271	121	2	5	3
	5	60	7,099	118	3	4	3	7,465	124	3	4	3	7,465	124	3	4	3
P40	3	81	8,693	107	3	5	3	9,140	113	3	5	3	9,140	113	3	5	3
	5	81	8,925	110	3	5	3	9,384	116	4	5	3	9,384	116	4	5	3
P50	3	100	10,171	102	3	5	4	10,694	107	3	5	4	10,694	107	3	5	4
	5	100	10,442	104	4	5	3	10,980	110	4	5	4	10,980	110	4	5	4

AH Voltage Option Data

LED Package	Distribution	System Watts	30K (3000K, 70 CRI)					40K (4000K, 70 CRI)					50K (5000K, 70 CRI)				
			Lumens	LPW	B	U	G	Lumens	LPW	B	U	G	Lumens	LPW	B	U	G
P10	3	33	3,261	99	1	4	2	3,429	104	1	4	2	3,429	104	1	4	2
	5	33	3,348	101	2	3	2	3,520	107	2	3	2	3,520	107	2	3	2
P20	3	49	4,911	100	2	4	3	5,164	105	2	4	3	5,164	105	2	4	3
	5	49	5,042	103	3	4	3	5,302	108	3	4	3	5,302	108	3	4	3
P30	3	68	6,915	102	2	5	3	7,271	107	2	5	3	7,271	107	2	5	3
	5	68	7,099	104	3	4	3	7,465	110	3	4	3	7,465	110	3	4	3
P40	3	90	8,693	97	3	5	3	9,140	102	3	5	3	9,140	102	3	5	3
	5	90	8,925	99	3	5	3	9,384	104	4	5	3	9,384	104	4	5	3
P50	3	100	10,171	102	3	5	4	10,694	107	3	5	4	10,694	107	3	5	4
	5	100	10,442	104	4	5	3	10,980	110	4	5	4	10,980	110	4	5	4

FPDxx Data Table (Only Available With AS Option)

FPDxx setting		P10 30K		P10 40K		P10 50K	
		Not Available		Not Available		Not Available	
		P20 30K		P20 40K		P20 50K	
FPDxx setting	AS Wattage	3	5	3	5	3	5
Standard	39	4,911	5,042	5,164	5,302	5,164	5,302
FPD95	38	4,695	4,820	4,937	5,068	4,937	5,068
FPD90	36	4,474	4,594	4,705	4,831	4,705	4,831
FPD85	34	4,252	4,365	4,471	4,590	4,471	4,590
FPD80	32	4,026	4,133	4,233	4,347	4,233	4,347
FPD75	30	3,797	3,898	3,993	4,099	3,993	4,099
		P30 30K		P30 40K		P30 50K	
FPDxx setting	AS Wattage	3	5	3	5	3	5
Standard	60	6,915	7,099	7,271	7,465	7,271	7,465
FPD95	57	6,740	6,919	7,087	7,276	7,087	7,276
FPD90	54	6,543	6,717	6,880	7,064	6,880	7,064
FPD85	51	6,325	6,494	6,651	6,828	6,651	6,828
FPD80	48	6,087	6,249	6,400	6,571	6,400	6,571
FPD75	45	5,829	5,984	6,129	6,292	6,129	6,292
		P40 30K		P40 40K		P40 50K	
FPDxx setting	AS Wattage	3	5	3	5	3	5
Standard	81	8,693	8,925	9,140	9,384	9,140	9,384
FPD95	76	8,400	8,624	8,832	9,068	8,832	9,068
FPD90	72	8,090	8,305	8,505	8,733	8,505	8,733
FPD85	68	7,762	7,969	8,161	8,379	8,161	8,379
FPD80	64	7,418	7,616	7,799	8,007	7,799	8,007
		P50 30K		P50 40K		P50 50K	
FPDxx setting	AS Wattage	3	5	3	5	3	5
Standard	100	10,171	10,442	10,694	10,980	10,694	10,980
FPD95	95	9,913	10,178	10,423	10,702	10,423	10,702
FPD90	90	9,624	9,881	10,119	10,390	10,119	10,390
FPD85	85	9,304	9,552	9,782	10,044	9,782	10,044

Acrylic Washington Postlite® LED Series Luminaire
Prismatic Style: Acrylic Washington
Housing Size: Standard

DECORATIVE OUTDOOR



THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE. HOLOPHANE SHALL BE RESPONSIBLE FOR THE MATERIAL TO BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER. NO WRITING OR PHOTOGRAPHS ARE TO BE TAKEN FROM THIS DRAWING. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS TO BE RETURNED TO HOLOPHANE IMMEDIATELY UPON COMPLETION. IT WILL NOT BE USED DIRECTLY OR INDIRECTLY IN ANY WAY DETRIMENTAL TO OUR INTERESTS, AND ONLY IN CONNECTION WITH MATERIALS FURNISHED BY HOLOPHANE.

ORDER #: _____
TYPE: _____
DRAWN: RAF
DATE: 04-03-2017
DWG #: LUM_AWDEZS

NOTES

1. Not available with "AO", "FPDXX" or "PND".
2. Only use if "N" for Trim and "C" for Finial is selected.
3. Not available with "AH" or "PND". Refer to instructions on website for details.
4. Refer to the FPDxx Data Table for lumens and wattages options.
5. "AS" (120V) only. Not available with accessory "GVD12X".
6. "AS" (208 - 277V) only. Not available with accessory "GVD27X".
7. Not available with Full Cover Trim.
8. Field installed, for use with Optic "3" or "5" only.
9. Field installed, for use with Optic "6" or "8" only.
10. For "A", "C" or "F" casting, requires the use of GV1A73X.
11. Not available with "L" or "S" housing.

Acrylic Washington Postlite® LED Series Luminaire
Prismatic Style: Acrylic Washington
Housing Size: Standard

DECORATIVE OUTDOOR



THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE SUPPLIER, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING ON POLYGRAPHIC ANCHORS TO WHICH THIS WILL BE REFERRED. THIS PRINT IS THE PROPERTY OF HOLOPHANE AND IS TO BE RETURNED TO HOLOPHANE UPON COMPLETION OF THE PROJECT. ANY REUSE OR REPRODUCTION OF THIS DRAWING WITHOUT THE WRITTEN CONSENT OF HOLOPHANE IS STRICTLY PROHIBITED. ANY WAY DETRIMENTAL TO OUR INTERESTS AND ONLY IN CONNECTION WITH MATERIALS SUPPLIED BY HOLOPHANE.

Product Compatibility Table

LUMINAIRE, HOUSING & LED PACKAGE CONFIGURATIONS			
LUMINAIRE	HOUSING		LED PACKAGE
AWDE2	A	Arcadian	P10, P20, P30, P40
	C	Convex	
	F	Fluted	
	L	Leaf Style - Standard	
	S	Simple	

WATTAGE TABLE		
LED PACKAGE	AS	AH
P10	26W	33W
P20	39W	49W
P30	60W	68W
P40	81W	90W
P50	100W	100W

OPTICS/HOUSING/LED CONFIGURATION		
OPTICS	HOUSING	LED PACKAGE
3	A, C, F, L, S, M, T	P10, P20, P30, P40, P50
5		
6	A, C, F, L, S, M, T	P10, P20, P30, P40
8		

Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Average Lumen Ambient Temperature (LAT) Multipliers			
°C	°F	Lumen Multiplier	LED Packages
0	32	1.06	P10, P20, P30, P40, P50
5	41	1.05	
10	50	1.04	
15	59	1.03	
20	68	1.01	
25	77	1.00	
30	86	0.99	
35	95	0.97	
40	104	0.96	

Projected LED Lumen Maintenance




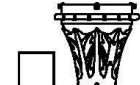
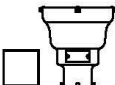
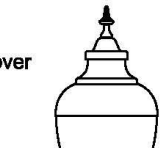
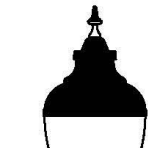

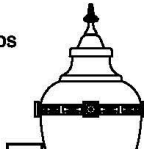

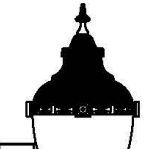











Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11). To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Lumen Maintenance - LLD (same for all LED packages)							
Hours	0	25,000	36,000	50,000	60,000	75,000	100,000
Factor	1	0.93	0.93	0.92	0.91	0.9	0.89

The italicized data is extrapolated beyond the TM-21 standard.

$E = (LM) \times (CU) \times (LAT) \times (LLD)$
LM and CU are obtained from published photometry.

ORDER #:
TYPE:
DRAWN: RAF
DATE: 04-03-2017
DWG #: LUM_AWDE2S

Mark Appropriate Box for Trim Option		Acrylic Washington Postlite® LED Series Luminaire Prismatic Style: Acrylic Washington Housing Size: Standard
Housing <input type="checkbox"/>  Arcadian (A) <input type="checkbox"/>  Convex (C) <input type="checkbox"/>  Fluted (F) <input type="checkbox"/>  Leaf (L) <input type="checkbox"/>  Simple (S)		
Cover <input type="checkbox"/>  No Cover (N) <input type="checkbox"/>  Full Cover (F) <input type="checkbox"/>  Top Black (TB)		
Ribs <input type="checkbox"/>  Medallions and Band (M) <input type="checkbox"/>  Ribs and Band (RBMX) <input type="checkbox"/>  Medallions, Band, and Full Cover (D) <input type="checkbox"/>  Ribs, Band, and Full Cover (F & RBMX) <input type="checkbox"/>  Ribs, Band, and Top Black (TB & RBMX)		
Finial <input type="checkbox"/>  BALL (B) <input type="checkbox"/>  CLEAR (C) <input type="checkbox"/>  EAGLE (E) <input type="checkbox"/>  FLOWER (F) <input type="checkbox"/>  PAWN (P) <input type="checkbox"/>  CROSS (R) <input type="checkbox"/>  STANDARD (S) <input type="checkbox"/>  ROMAN CROSS (T)		
Specifications GENERAL DESCRIPTION The Acrylic Washington Postlite II LED Standard is designed for use with traditional applications fitting a 3" tenon or 7" crown post. The large acorn shaped luminaire, while reminiscent of the 1920's, contains a precision optical system that maximizes post spacings while maintaining uniform illumination. OPTICAL SYSTEM The optical system consists of a precisely molded thermal resistant acrylic plastic refractor and top reflector mounted within the decorative aluminum ribs and banding. The top reflector redirects over 50% of the upward light into the controlling refractor while allowing a soft upright component to define the traditional acorn shape of the luminaire. The lower refractor uses precisely molded prisms to maximize pole spacings while maintaining uniform illuminance. Two distributions are available, designed for asymmetric and symmetric patterns. LUMINAIRE HOUSING The luminaire housing, cast of aluminum, provides an enclosure for the electrical module. Four uniquely designed stainless steel spring clips enclosed in a clear polyvinyl chloride sleeve and adjusted by hex head 1/4-20 bolts securely cradle the prismatic acrylic refractor. The same 1/4-20 bolts support the decorative rib and banding assembly. The slipfitter will accept a 3" by 2-7/8" to 3-1/8" O.D. tenon. ELECTRICAL MODULE The electrical components are mounted on a aluminum plate that is removable with minimum use of tools. A matching conductor plug connects to the receptacle in the luminaire housing to complete the wiring. DRIVER AS drivers are programmable dimmable drivers, with 0-10V control leads and AH drivers are dimmable (0-10V) drivers. FINISH The luminaire is finished with polyester powder paint to insure maximum durability. WARRANTY Limited warranty located at http://www.acuitybrands.com/resources/terms-and-conditions NOTE Fixture is CSA listed for Wet Locations. Specification subject to change without notice.		 HOLOPHANE® LEADER IN LIGHTING SOLUTIONS An Acuity Brands Company © 2009 Acuity Brands Lighting, Inc. All Rights Reserved
ORDER #: _____ TYPE: _____ DRAWN: RAF DATE: 04-03-2017 DWG #: LUM_AWDEDS		DECORATIVE OUTDOOR
4 of 4		

COLUMBIA™
Cast Iron & Cast Iron Steel Pole

Architectural Outdoor

ORDERING INFORMATION:

CL	S	12	FTB
Post	Material	Height	Shaft Style
CL = Columbia	C = Cast Iron S = Cast Iron & Steel	17" Base FTN 06 = 5'-8" 07 = 6'-8" 09 = 9'-2" 12 = 11'-8" 20" & 24" Base FTN 10 = 9'-6" 12 = 12'-0" 13 = 13'-2" 15 = 14'-8"	17" Base FTB 12 = 11'-8" 13 = 12'-10" 14 = 14'-2" 17 = 16'-8" 20" & 24" Base FTB 12 = 12'-0" 13 = 13'-2" 15 = 14'-8" 17 = 17'-0" 20 = 20'-0" 22 = 21'-10" FTB = Fluted Tapered (Steel), .1196 Wall FTN = Fluted Tapered (Cast Iron), .375 Wall
17	P07	ABG	BK
Base	Tenon	Mounting	Finish
17 = 17" Round (TMP-42) 20 = 20" Round (TMP-89) 24 = 24" Round (TMP-102)	P05 = 3" O.D. X 4" LG. P07 = 3" O.D. X 3" LG. P08 = 3" O.D. X 5" LG. P09 = 3" O.D. X 6" LG. P10 = 3" O.D. X 9" LG. <small>(3" O.D. = ACTUAL SIZE IS 2.86" O.D.)</small>	ABG = Anchor Bolts Galvanized Steel LAB = Less Anchor Bolts DBB = Direct Burial Base Galvanized Steel (17" Base = ADDB1RB) (20" Base = ADBB1RB)	BK = Black BD = Dark Blue BZ = Bronze GH = Graphite GN = Green GR = Gray PP = Prime Painted SL = Silver WH = White

SPECIFICATIONS

DESCRIPTION
The lighting post shall be all cast iron & steel or cast iron construction, massively tapered with a deep fluted pattern on the shaft & base.

MATERIALS
The base and FTN shaft material shall be ASTM A48, Class 30 cast iron, formed true to the pattern with complete detail. The FTB shaft shall be tapered and fluted steel with an integral steel tenon and steel bottom cap. All exposed hardware shall be tamper resistant stainless steel. Anchor bolts to be completely hot dip galvanized. Partially galvanized bolts are not acceptable.

DIMENSIONS
The post shall be X'- XX" in height with a 17", 20" or 24" diameter base. The shaft shall taper from a Ø7" at the top of the base to Ø4.5" at the top mounting. An integral tenon shall be provided at the top for luminaire mounting. The post top shall include a transitional donut between the fluted shaft and the tenon.

INSTALLATION
The post shall be provided with four 3/4" DIA, hot dip galvanized L-type anchor bolts. A door shall be provided in the base for anchorage and wiring access. A grounding screw shall be provided inside the base opposite the door.

² - Replace "XXX" with height from grade (inches), can be up to 3 digits. Must use whole numbers. Leading zeros are not used. Replace Y with orientation from hand hole (A=0, B=90, C=180, D=270). Add multiple provisions as necessary to cover each location. Must validate EPA restrictions for banners.

Options

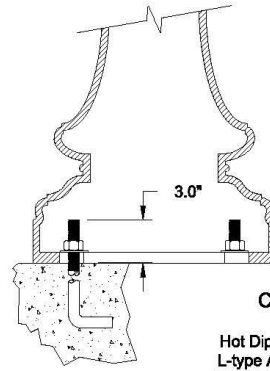
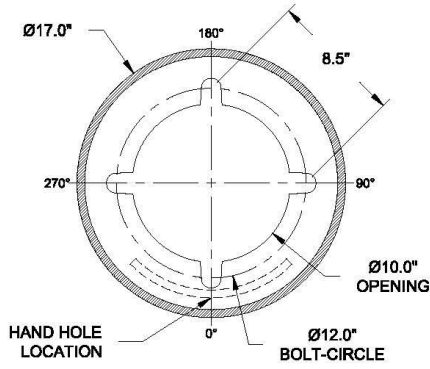
EXXXY² = Provision for eye bolt.
LXXXY² = Large provision.
RXXXY² = Receptacle provision.
SXXXY² = Small provision.

HOLOPHANE®
LEADER IN LIGHTING SOLUTIONS
 An Acuity Brands Company
© 2010 Acuity Brands Lighting, Inc., All Rights Reserved

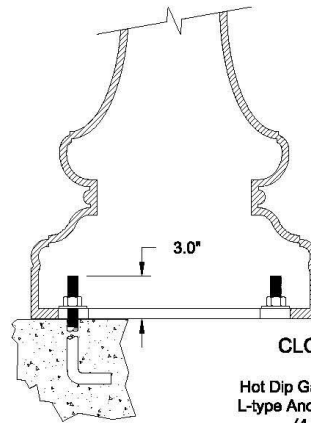
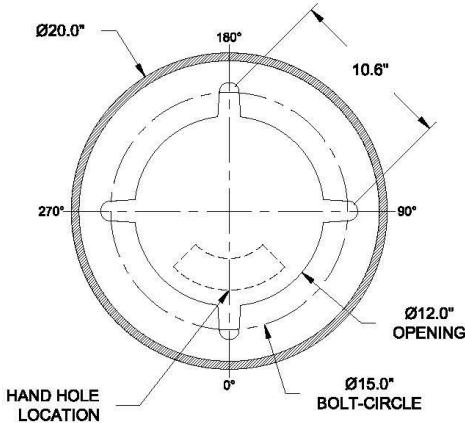
THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL TO BE FURNISHED BY HOLOPHANE CORPORATION. THE MATERIAL SHALL BE SUPPLIED BY HOLOPHANE CORPORATION, BUT ONLY AFTER APPROVAL BY THE CUSTOMER IN WRITING. HOLOPHANE SHALL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS IN THIS DRAWING. THE PRINT IS THE PROPERTY OF HOLOPHANE AND IS TO BE RETURNED TO HOLOPHANE UPON COMPLETION OF THE PROJECT. ANY REPRODUCTION, TO OUR KNOWLEDGE AND ONLY IN CONNECTION WITH THIS PROJECT, IS PROHIBITED BY HOLOPHANE.

ORDER #:	TYPE:	DRAWN: ACH	DATE: 03/22/11
		DWG #:	POL_CLC_S

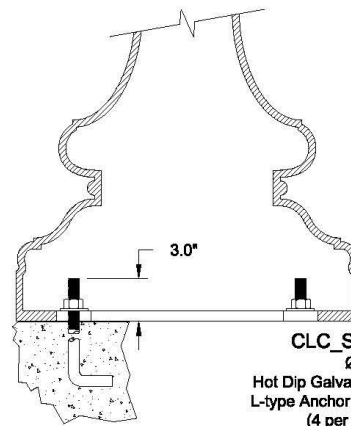
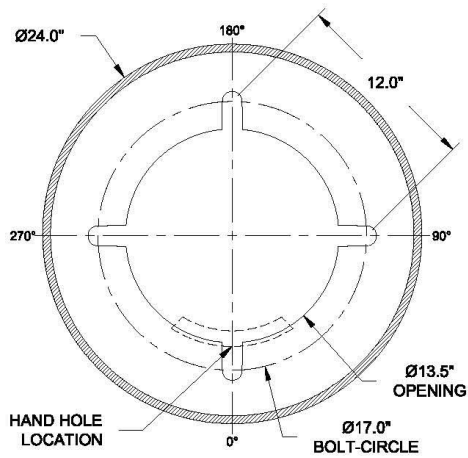
ANCHORAGE GUIDE



CLC_S 17"
Ø 3/4"
Hot Dip Galvanized
L-type Anchor Bolts
(4 per Post)



CLC_S 20"
Ø 3/4"
Hot Dip Galvanized
L-type Anchor Bolts
(4 per Post)



CLC_S 24"
Ø 3/4"
Hot Dip Galvanized
L-type Anchor Bolts
(4 per Post)

COLUMBIATM
Cast Iron & Cast Iron Steel Pole

Architectural
Outdoor

HOLOPHANE[®]
LEADER IN LIGHTING SOLUTIONS
An Acuity Brands Company
© 2010 Acuity Brands Lighting, Inc. All Rights Reserved

THIS DRAWING, WHEN APPROVED, SHALL BECOME THE COMPLETE SPECIFICATION FOR THE MATERIAL. TO BE FURNISHED BY HOLOPHANE OR ITS SUPPLIER. IT SHALL BE THE RESPONSIBILITY OF THE SUPPLIER TO BE SUPPLIED, BUT ONLY AFTER APPROVAL BY THE CUSTOMER. IN NO EVENT SHALL HOLOPHANE OR ITS SUPPLIER BE RESPONSIBLE FOR THE WEAR, DAMAGE OR FAILURE OF ANY ANCHOR BOLTS OR FASTENERS. HOLOPHANE SHALL PROVIDE THE POINT IS THE PROPERTY OF HOLOPHANE AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF HOLOPHANE. THIS DRAWING IS THE PROPERTY OF HOLOPHANE AND IS NOT TO BE USED DIRECTLY OR INDIRECTLY IN CONNECTION WITH ANY OTHER PROJECTS OR PRODUCTS.

ORDER #:
TYPE:
DRAWN: ACH
DATE: 03/22/11
DWG #: POL_CLC_S
2 of 3

SPECIAL PROVISIONS
813 - SIGNS

813 SIGNS

813.01 DESCRIPTION

Furnish and install signs as specified. Refer to Sections 802, 803, and 812 for sign supports.

813.02 MATERIALS

Sign Panel Supports and Hardware	909.07, 921.05, 921.06, 950.04, A 123, A 153 and A 709
Reflective and Nonreflective Sheeting	950.03
Sign Materials	950.08

Provide all hardware not provided by the Administration. Hardware shall be stainless steel. The Administration will supply traffic signal related signs and their mounting hardware for span wire, mast arm, and signal pole mounted applications.

Furnish and install, or install, vandalism installation date (VID) stickers to the back lower right hand corner of all installed signs. The Administration will supply VID stickers with all Administration supplied signs. Supply VID stickers with all non-Administration supplied signs.

813.03 CONSTRUCTION

Use demountable copy or direct applied copy on extruded aluminum. Use direct applied or silk screen copy on sheet aluminum.

The signs will be inspected after sign installation is complete. If specular reflection is apparent on any sign, reposition the sign as directed.

Inspect each new sign location to determine if clearing is required to provide for good sight distance. Complete all clearing and disposal as specified in Section 101. Remove any tree limbs protruding within the limits of clearing as specified in Section 712. The limits of clearing for each location will be as specified.

Use the following minimum thickness for fabricated sheet aluminum signs.

Longest Dimension of Sheet Sign	Minimum Thickness
in.	in.
≤ 12	0.040
12+ to 24	0.063
24+ to 36	0.080
36+ to 48	0.100
> 48	0.125

Install sheeting in accordance with manufacturer's recommendations. Repair/replace defects in workmanship per manufacturer's recommendation.

813.04 MEASUREMENT AND PAYMENT

813.04.01 Signs will be measured and paid for at the Contract unit price per square foot of area of the vertical front face of the completed sign with no deduction for required shaping. The payment will be full compensation for all material, labor, equipment, tools, and incidentals necessary to complete the work.

813.04.02 Administration furnished signs and mounting hardware will be measured and paid for at the Contract unit price per square foot for the completed sign installed. The payment will be full compensation for all transportation, drilling holes as specified, installation, and for all material, labor, equipment, tools, and incidentals necessary to complete the work.

813.04.03 Clearing for signing will not be measured but the cost will be incidental to the Contract unit price for furnishing and installing the signs.

813.04.04 Furnish and Install or Install Vandalism Installation Date stickers will not be measured, but the cost will be incidental to the Contract unit price furnishing and installing the signs.

END OF SECTION 800

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

SECTION 902 — PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

902.01 STORAGE.

Storage of materials shall conform to the Contract Documents and as directed by the Engineer.

902.02 CERTIFICATION OF PORTLAND CEMENT AND BLENDED HYDRAULIC CEMENT.

The manufacturer shall furnish certification as specified in TC-1.02. The certification shall also include:

- (a) The mill shall report its quality control procedures, and submit a new report whenever there is a procedural change.
- (b) The mill's control laboratory shall be inspected by the Cement and Concrete Reference Laboratory of the National Institute of Standards and Technology on their regularly scheduled visits. The Engineer shall be provided with copies of the reports of these inspections along with an account of the action taken to correct cited deficiencies.
- (c) Records of data accumulated by the quality control procedures shall be produced upon request.
- (d) A certified document shall accompany each shipment stating that the contents conform to all applicable requirements. Additionally, the document shall show the producer's name, mill location, carrier number, date loaded, weight contained in carrier, silo number, consignee, destination, Contract number, and type of cement. The signature and title of the signer shall be shown on the document.
- (e) The mill shall, upon request, supply certified chemical and physical test values that can be associated with any sample representing cement drawn from a particular silo on a given date.
- (f) Acceptance of cement by certification will be terminated if test results differ from mill results by more than the precision limits given in the test method. The acceptance procedure will then revert to storage testing and approval prior to shipment.

902.03 HYDRAULIC CEMENT.

902.03.01 Portland Cement. M 85, with the fineness and the time of setting determined using T 153 and T 131, respectively.

902.03.02 Ground Iron Blast Furnace Slag. M 302, Grade 100 or 120. The Contractor may request to substitute a maximum of 50 percent of the weight of cement with ground iron blast furnace slag. When ground iron blast furnace slag is used, the minimum cement factor and water/cement ratio will be determined on the basis of the combined weight of the portland cement and ground iron blast furnace slag. When ground iron blast furnace slag is used to control alkali silica reactivity, see Table 902 B for percentage.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

902.04 BLENDED HYDRAULIC CEMENT.

M 240 Type IP containing 15 to 25 percent Fly Ash by weight of cement or Type 1S containing 25 to 50 percent slag cement by weight of cement. Maximum loss on ignition is 3.0 percent. The requirement for a manufacturer's written statement of the chemical composition is waived.

902.05 MASONRY CEMENT.

C 91, except the water retention and staining tests are waived.

902.06 CONCRETE ADMIXTURES.

Do not use concrete admixtures that contribute more than 200 ppm of chlorides based on the cement content when tested per MSMT 610. Use only prequalified admixtures.

902.06.01 Air Entraining Admixtures. M 154.

902.06.02 Chemical Admixtures. M 194, Type A, D, or nonchloride C.

902.06.03 High Range Water Reducing Admixtures. M 194, except that it shall be a liquid, the water content shall be a maximum of 85 percent of that of the control, and the durability factor shall be a minimum of 90. Use Type F for early strength, which shall produce a minimum compressive strength in 12 hours of 180 percent of that of the control. Use Type G when early strength is not specified. The manufacturer shall furnish certification as specified in TC-1.03. The certification shall include curves indicating the fluid ounces of admixture per 100 lb of cement as related to water reduction and strength gain for 12 hours when used with a minimum cement factor of 700 lb.

902.06.04 Pozzolans. When a pozzolan is used, determine the minimum cement factor and water/cement ratio on the basis of the combined weight cement and pozzolan. Do not use pozzolan and Blended Hydraulic Cement in the same mix.

(a) **Fly Ash.** M 295, pozzolan Class C or F, except that the maximum permissible moisture content shall be 1.0 percent, and when used in concrete Mix Nos. 3 and 6 the maximum loss on ignition 3.0 percent. Fly Ash may be substituted up to a maximum of 25 percent of the weight of the cement.

(b) **Microsilica.** C 1240, except that the oversize requirement is waived. Microsilica may be substituted up to a maximum of 7 percent of the weight of cement.

902.06.05 Corrosion Inhibitors. Corrosion inhibitors shall be calcium nitrite based and contain a minimum of 30 percent active ingredients by mass. The gallonage of corrosion inhibitor used in the concrete mixture shall be included as water when determining the water/cementitious materials ratio.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

902.07 PORTLAND CEMENT CONCRETE CURING MATERIALS.

Use burlap cloth, sheet materials, liquid membrane forming compounds, or cotton mats.

902.07.01 Burlap. M 182, Class 1, 2, or 3.

902.07.02 Sheet Materials. M 171 with the following exceptions:

(a) **White Opaque Burlap Polyethylene Sheeting.** Tensile strength and elongation requirements are waived. Use sheeting having a finished product weight of not less than 10 oz/yd².

(b) **White Opaque Polyethylene Backed Nonwoven Fabric.** 902.07.02(a), with the thickness requirement waived. Use material having a finished product weight of not less than 5 oz/yd².

(c) **White Opaque Polyethylene Film.** Tensile strength and elongation requirements are waived.

902.07.03 Liquid Membrane. C 309. Field control testing of the white pigmented curing compounds is on the basis of weight per gallon. The samples shall not deviate more than ± 0.3 lb/gal from the original source sample.

902.07.04 Cotton Mats. Cotton mats consist of a filling material of cotton bats or bats covered with unsized cloth and tufted or stitched to maintain the shape and stability of the unit under job conditions of handling.

Use coverings of either cotton cloth, burlap or jute having the following properties:

(a) Cotton cloth covering shall weigh not less than 6.0 oz/yd² and have an average of not less than 32 threads/in. of warp and not less than 28 threads/in. of filling. Use raw cotton, cotton comber waste, cotton card strip waste, or combinations thereof as the raw material used in the manufacture of the cotton cloth.

(b) Burlap or jute covering for cotton mats shall weigh not less than 6.4 oz/yd² and shall have not less than 8 threads/in. of warp and not less than 8 threads/in. of filling. Use the grade known commercially as "firsts" and they shall be free from avoidable imperfections in manufacture and from defects or blemishes affecting the serviceability.

902.08 FORM RELEASE COMPOUNDS.

Use form release compounds that effectively prevent the bond of the concrete to the forms. Form release compounds shall not cause discoloration of the concrete or adversely affect the quality or rate of hardening at the interface of the forms.

The flash point of the form release compound shall not be less than 100 F when tested per D 93.

902.09 PARAFFIN WAX.

Use clear paraffin wax for use as a bond breaker for concrete. The flash point shall not be less than 380 F when tested under D 92.

902.10 PORTLAND CEMENT CONCRETE.

Section 915 and as specified herein.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

902.10.01 Proportioning. Prior to the start of construction, submit to the Area Materials Engineer (AME) the source and proportions of materials to be used for each concrete mix. The mixture shall meet 902.10.03. The concrete, with the exception of water and chemical admixtures, shall be proportioned by weight. Water and chemical admixtures may be proportioned by volume or weight. The mix shall be uniform and workable.

902.10.02 Materials.

Coarse Aggregate	901.01
Fine Aggregate	901.01
Hydraulic and Blended Hydraulic Cement	902.03 and 902.04
Concrete Admixtures	902.06
Synthetic Fibers	902.15
Water	921.01

902.10.03 Portland Cement Concrete Mixtures.

The concrete mixes shall conform to the following:

TABLE 902 A

PORTLAND CEMENT CONCRETE MIXTURES										
MIX NO.	SPECIFIED COMPRESSIVE STRENGTH psi	COMPREHENSIVE STRENGTH ACCEPTANCE days	STANDARD DEVIATION psi	CRITICAL VALUE psi	MIN CEMENT FACTOR lb/yd³	COARSE AGGREGATE SIZE M 43 / M 195	MAX WATER/CEMENT RATIO by wt	SLUMP RANGE in.	TOTAL AIR CONTENT %	CONCRETE TEMPERATURE F
1	2500	28	375	2430	455	57, 67	0.55	2 — 5	5 — 8	50 - 95
2	3000	28	450	3010	530	57, 67	0.50	2 — 5	5 — 8	50 - 95
3	3500	28	525	3600	580	57, 67	0.50	2 — 5	5 — 8	50 - 95
4	3500	28	525	3600	615	57, 67	0.55	4 — 8	N/A	50 - 95
5	3500	28	525	3600	580	7	0.50	2 — 5	5 — 8	50 - 95
6	4500	28	675	4770	615	57, 67	0.45	2 — 5	5 — 8	50 - 80

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

7	4200	28	630	4420	580	57	0.50	1½ — 3	5 — 8	50 - 95
8	4000	28	600	4180	750	7	0.42	2 — 5	5 — 8	50 - 80
9	3000	(a)	N/A	N/A	800	57, 67	0.45	4 — 8	5 — 8	60 - 100
10	4500	28	675	4770	700	¾" – No. 4	0.45	2 — 5	6 — 9	50 - 80
11	4200	28	630	4420	—	57, 67	0.45	2 — 5	5 — 8	50 - 80
12	4200	28	630	4420	—	¾" – No. 4	0.45	2 — 5	6 — 9	50 - 80
HE	3000	(b)	N/A	N/A	N/A	N/A	N/A	3 — 9	5 — 8	60 - 100
PC (c)	N/A	N/A	N/A	N/A	450	7, 8	0.45	N/A	15 - 25	N/A
WT	2500	(d)	N/A	N/A	650	57	0.45	5 max	5 — 8	50 - 95

Note 1: When concrete is exposed to water exceeding 15,000 ppm sodium chloride content, Type II cement shall be used. In lieu of Type II cement, a Type I cement may be used in combined form with an amount of up to 50 percent replacement with slag cement, or an amount of up to 25 percent replacement with Class F fly ash. The Contractor shall submit to the Engineer the proposed mix proportions and satisfactory test results per C 1012 showing a sulfate resistance expansion not exceeding 0.10 percent at 180 days

Note 2: The temperature of Mix No. 6 when used for other than superstructure work as defined in TC-1.03 shall be 50 - 95 F.

Note 3: Type A or D admixture shall be added to bridge, box culvert, and retaining wall concrete.

Note 4: Nonchloride Type C admixtures may be used when approved by the Engineer.

Note 5: Other Slump Requirements:

When a high range water reducing admixture Type F or Type G is specified, the slump shall be 4 to 8 in.

When synthetic fibers are specified, the slump shall be 5 in. maximum.

When concrete is to be placed by the slip form method, the slump shall be 2-1/2 in. maximum.

When the absorption of the coarse aggregate is greater than 10 percent, the slump shall be 3 in. maximum.

Note 6: Mix 9 shall contain a Type F high range water reducing admixture.

Note 7: Mix 10 and 12 shall be proportioned as specified in 211.2 of the ACI's Recommended Practices for Selection Proportions for. Structural Lightweight Concrete. The maximum

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

average Density of Cured Concrete shall be 118 lb/ft³. Control testing for Density of Cured

Concrete shall be two companion cylinders for each 100 yd³, or fraction thereof, as specified in M 195.

Note 8: Mix 11 and 12 shall also conform to all requirements as specified in Table 902 C.

Note 9: Add Polyolefin Macro Fibers to Mix No. 8, Mix No. 9 and High Early Strength Patch Mix (HE). The dosage rate shall be per the manufacturer’s recommendations.

(a) Mix No. 9 is for concrete pavement repair only. Match cure of the samples is permissible in accordance with AASHTO PP 54. Strength tests shall be scheduled accordingly on weekdays and acceptance will be based on a minimum compressive strength of 3000 psi in 24 hours or 3600 psi in 3 days. Acceptance testing shall conform to 902.10.08 except that cylinders shall be field cured and remain in the molds until tests are conducted. Mix No. 9 when specified for incidental work and not requiring traffic control in conformance with 522.03.15 will not require the addition of fibers.

(b) Match cure the samples in accordance with AASHTO PP 54. Design approval will be given based on trial batch obtaining a minimum compressive strength of 2500 psi in 6 hours. Strength tests shall be scheduled accordingly on weekdays and acceptance will be based on a minimum compressive strength of 3000 psi in 24 hours or 3600 psi in 3 days. Acceptance testing shall conform to 902.10.08 except that cylinders shall be field cured and remain in the molds until tests are conducted.

(c) Pervious Concrete (PC) shall be proportioned as specified in 522R of the ACI’s Recommended Practices for Pervious Concrete Mixture Proportions. Acceptance of freshly mixed Pervious Concrete shall be made based on Density and Total Void Content. Density and Total Air Voids of Freshly Mixed Pervious Concrete shall be performed per C 1688

(d) Whitetopping (WT) mix shall contain a high range water reducing admixture, macro-fibers at 3 lbs/yd³ Max, and acceptance will be on a minimum compressive strength of 2500 psi in 24 hours.

Preventive Measures for Aggregate Alkali-Silica Reactivity (ASR). All aggregate, both coarse and fine, intended for use in concrete shall be tested for ASR in accordance with C 1260. Testing shall be performed by an accredited laboratory. Coarse and fine aggregate from the same source shall be tested separately. Testing shall be performed once every 3 years.

The following limitations apply for C 1260 results:

EXPANSION @ 14 DAYS	CLASS AND REACTIVITY STATUS	MITIGATION NOTE
≤0.10%	R0 – Innocuous	No mitigation required
>0.10 but ≤0.20%	R1 – Potentially Reactive	Mitigation Required*
>0.20 but ≤0.30%	R2 – Reactive	Mitigation Required*
>0.30%	Highly Reactive	Shall not be used in PCC

*See Table 902 B for the minimum Supplementary Cementitious Material (SCM) replacement levels for ASR mitigation

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

Optional C 1293 Concrete Prism Testing. Testing in accordance with C 1293 is nonmandatory but recommended. The test may be used to verify the ASR class status of aggregate having C 1260 result greater than 0.10 percent expansion. If C 1293 testing is not performed, then compliance is assessed based entirely on the C 1260 result.

The requirements for compliance when using C 1293 are as follows;

- (a) Test frequency is once every 3 years.
- (b) The Administration will not perform this test. Testing must be performed by an accredited laboratory.
- (c) Coarse and Fine aggregate from the same source shall be tested separately.
- (d) Each sample shall be split and tested in accordance with both C 1260 and C 1293. This is required to provide comparable data for future reference. Scheduling of the testing is at the producer’s discretion, but both results must be submitted together for approval review. (e) The C 1293 result will supersede the C 1260 result for compliance status.

The following limitations apply for C 1293 results:

EXPANSION AT 1 YEAR	CLASS AND REACTIVITY STATUS	MITIGATION NOTE
≤0.04%	R0 – Innocuous	No mitigation required
>0.04 but ≤0.12%	R1 – Potentially Reactive	Mitigation Required*
>0.12 but ≤0.24%	R2 – Reactive	Mitigation Required* No structural uses allowed.
>0.24%	Highly Reactive	May not be used in PCC

*See Table 902 B for the minimum Supplementary Cementitious Material (SCM) replacement levels for ASR mitigation

TABLE 902 B

MINIMUM MITIGATION REQUIREMENTS				
SCM Type	Low Alkali Cement (≤0.7% Na ₂ O equiv.) R1	Normal Alkali Cement (≤1.0% Na ₂ O equiv.) R1	Low Alkali Cement (≤0.7% Na ₂ O equiv.) R2	Normal Alkali Cement (≤1.0% Na ₂ O equiv.) R2
Class F Fly Ash	20%	25%	25%	25%
Slag (GGBFS)	35%	50%	50%	50%
Ternary Blends	Approval Required	Approval Required	Approval Required	Approval Required

Ternary blends using two SCM’s will require C 1567 testing by an accredited laboratory. The expansion test results shall not be greater than 0.10 percent to be considered acceptable. Changes to the SCM blend percentages will require retesting.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

TABLE 902 C

MIX PHYSICAL PROPERTIES		
TEST PROPERTY	TEST METHOD	SPECIFICATION LIMITS
Minimum Cementitious Materials Factor, lb/yd ³	-	580
Maximum Content of Portland Cement, lb/yd ³	-	550
Water/Cementitious Materials Ratio by Wt.	-	0.45
Corrosion Inhibitor, gal/yd ³	902.06.05	2.0
Synthetic Fibers, lb/yd ³	902.15	1.5
Permeability of Field Concrete, moving average of three tests, coulombs max	T 277	2500
Permeability of Field Concrete, individual test, coulombs max	T 277	3000
Shrinkage at 28 days, microstrains	C 157	400

Note 1: Only Type I or II Portland cement shall be used.

Note 2: Mixes shall contain slag cement, fly ash or microsilica.

Note 3: The water to cement ratio shall be based upon the total water to cementitious materials ratio. The gallonage of the corrosion inhibitor shall be included in the water/cementitious materials ratio.

Note 4: The permeability test value of field concrete shall be the average of two test specimens representing production concrete. Test specimens shall be molded on the project site in 4 x 8 in. molds conforming to M 205. Test specimens shall be handled in accordance with T 277 - Accelerated Moist Curing. Test for the geometry of test specimens will be waived.

Note 5: Shrinkage tests will be performed on trial mixes only.

Note 6: High range water reducing admixture may be used except the water reducing requirements will be waived.

Note 7: A sealer conforming to 902.12 shall be used on the finished surface.

902.10.04 Trial Batch. A trial batch shall be prepared to certify that each mix meets 902.10.05 and 902.10.06 except for Mix No. 9. Approval will be given when the test results meets the minimum required average strength. Mix No. 9 design approval will be given based on trial batch obtaining a minimum compressive strength of 2500 psi in 12 hours.

Make arrangements with the AME at least two weeks in advance, to have an authorized representative present during the batching and testing. Each trial batch shall consist of at least 3 yd³ of concrete. Laboratory testing in lieu of plant trial batches may be conducted when approved by the AME. Supply all

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

equipment, and labor required to produce the trial batches and conduct the required tests at no additional cost to the Administration.

The AME may waive the requirement for a trial batch when past performance records show that the required average strength requirement has been met.

902.10.05 Design Required Average Strength

Specified compressive strength, f_c' , psi	Required average compressive strength, f_{cr}' , psi
$f_c' \leq 5000$	Use the larger value computed From Eq. (A-1) and (A-2) $f_{cr}' = f_c' + 1.34s$ (A-1) $f_{cr}' = f_c' + 2.33s - 500$ (A-2)
Over 5000	Use the larger value computed From Eq. (A-1) and (A-3) $f_{cr}' = f_c' + 1.34s$ (A-1) $f_{cr}' = 0.90 f_c' + 2.33s - 500$ (A-3)

where:

f_c' = the 28 day specified compressive strength.

S = the standard deviation as specified in 902.10.06.

A test is defined as the average strength of two companion cylinders.

902.10.06 Standard Deviation

(a) When past performance records are available, a standard deviation will be established from documented performance records of the producer consisting of a minimum of 15 consecutive 28-day compressive strength tests obtained within the last 12 months.

The standard deviation will be established as the product of the calculated standard deviation and multiplier.

NUMBER OF TESTS	MULTIPLIER FOR STANDARD DEVIATION
15	1.16
20	1.08
25	1.03

30 or more	1.00
------------	------

Interpolate for intermediate number of tests.

(b) When past performance records are not available, the required average strength shall meet to the following:

Specified compressive strength, f_c' , psi	Required average compressive strength, f_{cr}' , psi
$f_c' < 3000$	$f_{cr}' = f_c' + 1000$
$3000 \leq f_c' \leq 5000$	$f_{cr}' = f_c' + 1200$
$f_c' > 5000$	$f_{cr}' = 1.10 f_c' + 700$

902.10.07 Standard of Control. The average of all sets of three consecutive strength tests shall equal or exceed the critical value as specified in 902.10.03 which shall be computed using the following formula:

$$\text{Critical Value} = f_c' + (1.14 \times S) - 500$$

Failure to conform to this criterion shall be cause for immediate investigation and remedial action up to and including suspension of production. A design standard deviation equal to 15 percent of the specified strength shall be used for calculation until a

minimum of 15 test results are obtained. The actual average strength and standard deviation shall be computed upon the availability of 28 day strength data comprising a minimum of 15 tests. Should this determination indicate an excessive margin of safety, the concrete mix may be modified to produce lower average strength as approved by the Engineer. If these calculations indicate a coefficient of variation greater than 15, the quality of the concrete and testing will be evaluated.

902.10.08 Testing. Sampling per R 60. Testing as follows:

TEST	METHOD	MINIMUM TEST FREQUENCY	RESPONSIBILITY
Temperature (e)	T 309	1 per 50 yd ³ (or fraction thereof)	Project Engineer
Slump (a)(e)	T 119	1 per 50 yd ³ (or fraction thereof)	Project Engineer
Air Content (a)(e)	T 152 T 196	1 per 50 yd ³ (or fraction thereof)	Project Engineer
Compression (b)(c)(d)	T 23	1 per 50 yd ³ (or fraction thereof)	Project Engineer

Compression (b)(c)(d)	T 23	3 per Day	Project Engineer
Mix No. 7 Only			

(a) A second test will be made when the first slump or air content test fails. Acceptance or rejection will be based on the results of the second test.

(b) Compressive strength tests are defined as the average of two companion cylinders.

(c) The Contractor shall be responsible for the making of all early break cylinders and furnishing the molds, stripping, curing/delivery of all cylinders, including 28 day cylinders, to the testing laboratory.

(d) The Project Engineer will be responsible for making, numbering and signing the 28 day cylinders.

(e) When constructing plain and reinforced concrete pavements, the testing frequency for slump, air content, and temperature shall be 1 per 100 yd3 or fraction thereof.

902.10.09 Acceptance. Concrete will be acceptable if both of the following requirements are met:

(a) The average of all sets of three consecutive strength tests equal or exceed the specified design strength.

(b) No individual strength test (average of two companion cylinders) falls below the specified design strength by more than 500 psi.

902.10.10 Price Adjustment. A price adjustment will be based on the Contract unit price per cubic yard of concrete. If the unit is a lump sum item, the price per cubic yard for the concrete will be determined by dividing the cubic yards into the Contract lump sum price.

(a) **Test Results More Than 500 psi Below the Specified Design Strength.** Failing strength tests will be considered individually with a price adjustment being applied on the percentage basis as shown below.

(Price per yd3) X (quantity of yd3 represented by the failing concrete strength) X (percent of failure).

Example:

$$\$400.00 \text{ per yd3 } \times 50 \text{ yd3 } \times [1 - (3600 / 4500 \text{ psi})] = \$4000.00$$

No payment will be allowed when the test results fall below 50 percent of the specified design strength for structural concrete or 40 percent for incidental concrete.

The Engineer will determine when the strength of the concrete represented by the failing tests is sufficient to remain in place or whether it must be removed and replaced with Specification concrete.

(b) **Test Results 500 psi or Less than the Specified Design Strength.** Strength failures 500 psi or less than the specified design strength will be averaged with the next two consecutive tests. If those two tests include a failure greater than 500 psi, those tests will be evaluated as in 902.10.10(a) and replaced with the next consecutive test. If the resulting average falls below the specified design strength, a price adjustment will be applied as specified in the table below. Any failure will only be included in one grouping.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

STRENGTH BELOW THE SPECIFIED (avg of 3 tests) DESIGN LEVEL, psi	ADJUSTMENT FACTOR
MIX NO. 1 THRU MIX NO. 12 EXCLUDING MIX NO. 9	
1 – 100	0.005
101 – 200	0.01
201 – 300	0.02
301 – 400	0.04
401 – 500	0.08

Adjustment price equals (price per yd³) X (quantity of yd³ represented by the failing cylinders) X (the adjustment factor).

Example:

$$\$400.00 \text{ per yd}^3 \times 50 \text{ yd}^3 \times 0.01 = \$200.00$$

902.11 MORTAR FOR GROUT

Mortar used for grouting anchor bolts, pipe, handrail posts, and miscellaneous items shall be composed in accordance with one of the following:

- (a) One part Portland cement or blended hydraulic cement and one part mortar sand by dry loose volume.
- (b) Prepared bag mixes consisting of Portland cement or blended hydraulic cement and mortar sand. The prepared mixes shall produce a mortar meeting the strength requirements specified in the Contract Documents.
- (c) Use nonshrink grout when specified. The grout shall have a minimum compressive strength of 5000 psi in seven days when tested as specified per T 106, except that the cube molds shall remain intact with a top firmly attached throughout the curing period. The nonshrink grout shall have a minimum expansion of 0.0 percent after seven days when tested as specified per T 160.
- (d) Epoxy grout shall consist of sand and epoxy mixed by volume in per the manufacturer's recommendations. The grout shall be capable of developing a minimum compressive strength of 6500 psi in 72 hours when tested per MSMT 501. Sand for epoxy grout as specified in 901.01.
- (e) An epoxy or polyester anchoring system may be used when approved by the Engineer in accordance with the manufacturer's recommendations. Strength values shall be as specified in the Contract Documents.

902.12 LINSEED OIL.

Shall consist of a 50-50 mixture (by volume) of boiled linseed oil meeting Federal Specification TT-L-190 and kerosene per D 3699.

SPECIAL PROVISIONS

902 - PORTLAND CEMENT CONCRETE AND RELATED PRODUCTS

902.13 LATEX MODIFIED CONCRETE.

Portland cement concrete containing prequalified Laboratory approved styrene butadiene latex emulsion is defined as Latex Modified Concrete (LMC).

Latex emulsion shall have a minimum of 90 percent of the nonvolatiles as styrene butadiene polymers. The latex emulsion as specified in Table 902.13 A. The material shall be stored in suitable containers and be protected from freezing and exposure to temperatures in excess of 85 F.

LMC shall be proportioned using volumetric mixing and designed as follows:

LATEX MODIFIED CONCRETE	
MATERIAL	SPECIFICATION LIMITS
Portland Cement, CWT/yd ³ , min	6.6
Latex Emulsion/Cement Ratio	0.31 – 0.34
Water/Cement Ratio, max	0.22
Entrained Air, %	6.0 ± 3
Slump, in.	5 ± 1

The physical properties of LMC shall conform to Table 902.13 B. The Contractor shall furnish the necessary 3 X 6 in. molds per M 205 to be used for the fabrication of compressive strength cylinders.

Control and Acceptance Sampling.

- (a) Submit a two qt minimum sample, of the styrene butadiene latex emulsion to the AME daily for each lot of material used in a day's production.
- (b) A batch for LMC is defined as the capacity of the equipment being used on the project. Slump and air samples will be taken and tested before the placement of a batch is permitted. The slump shall be measured four to five minutes after discharge from the mixer. The test material shall be deposited off the deck and not be disturbed during this waiting period. One additional sample for slump and air will be taken randomly during the placement of each batch. For seven day compressive strength, two tests each per batch are required. A test is defined as consisting of two companion cylinders. The samples for these tests will be taken at random while the placement is in progress.

TABLE 902.13 A

REQUIREMENTS FOR CHEMICAL PROPERTIES OF LATEX EMULSION MATERIALS				
PROPERTY	SPECIFICATIONS		QUALITY ASSURANCE TESTS	
	LIMITS	TOLERANCE	PREQUALIFICATION TESTS	CONTROL AND ACCEPTANCE
Color	White	—	X	X
pH	9.0 – 11.0	—	X	X
Weight, lb/gal	8.40 – 8.47	—	X	X
Solids Content, %	46 – 53	—	X	X
*Butadiene Content, % of polymer	30 – 40	—	—	—
Viscosity @ 10 rpm-cps	Match Original	± 20	X	X
*Surface Tension, dynes/cm max	50	—	—	—
*Mean Particle Size, polymer – Å	1400 – 2500	—	—	—
Coagulum, % max	0.10	—	X	X
*Freeze-Thaw Stability, coagulum, % max	0.10	—	X	X
Infrared Spectra of Latex Film	Match Original	—	X	X
Infrared of Alcohol, Soluble Portion of Latex	Match Original	—	X	X
Shelf Life, min	1 yr	—	X	—

Note 1: Quality assurance tests shall be conducted as specified in MSMT 612 except those denoted by an * shall be conducted as specified in FHWA RD – 78-35.

Note 2: The original or prequalification sample shall be accompanied by the producer's certification on all of the tests and properties noted above and as specified in TC-1.02. The certification shall contain actual test values of the product and the infrared spectrograph.

Note 3: A separate certification is required for each lot of material. The certification shall note the date of manufacture, lot size, and whether or not the material is identical to the formulation of the original sample.

TABLE 902.13 B

LATEX MODIFIED CONCRETE PHYSICAL PROPERTIES			
TEST PROPERTY	TEST VALUES	QUALITY ASSURANCE TESTS	
		PREQUALIFIED TESTS	CONTROL AND ACCEPTANCE
7 Day Compressive Strength, psi min	3000	X	X
28 Day Compressive Strength, psi min	3500	X	—
42 Day Compressive Strength, psi min	3500	X	—
7 Day Flexural Strength, psi min	550	X	—
28 Day Flexural Strength, psi min	650	X	—
42 Day Shear Bond Strength, psi min	2000	X	—
Durability Factor, 300 cycles, % min	85	X	—
Chloride Permeability, Ppm max	510	X	—
Scaling Resistance, 50 cycles, max	3	X	—

Note 1: Quality assurance tests shall be conducted as specified in MSMT 721.

Note 2: Seven Day Compressive Strength Test will be used for Control & Acceptance of the material. The minimum specified design strength is 3000 psi at seven days. The mix design approval and acceptance will be based on a coefficient of variation of 10 percent with a probability of 1 in 10 tests falling below the specified strength. Only test values 80% or greater than the specified strength will be accepted.

**902.14 RAPID HARDENING CEMENTITIOUS MATERIALS FOR CONCRETE
PAVEMENT REPAIRS.**

Materials shall be a dry, packaged cementitious mortar having less than 5 percent by weight of aggregate retained on the 3/8 in. sieve and meet the following requirements:

Classification.

- Class I — For use at ambient temperatures below 50 F.
- Class II — For use at ambient temperatures of 50 to 90 F.
- Class III — For use at ambient temperatures above 90 F.

Chemical Requirements. C 928 except that no organic compounds such as epoxy resins or polyesters as the principal binder.

Physical Requirements. Meet the following when tested per MSMT 725:

COMPRESSIVE STRENGTH, psi min				
CLASSIFICATION	< 2 hr	2-6 hr	6 hr	28 days
Type I — Slow	—	—	2000	4500
Type II — Rapid	—	2000	—	4500
Type III — Very Rapid	2500	—	—	4500

TEST RESULTS	
TEST PROPERTY	LIMITS
Bond Strength, 7 days, psi min	2000
Length Change, increase after 28 days in water, based on length at 3 hr, % max	+ 0.15
Length Change, decrease after 28 days, % max	- 0.15
Freeze Thaw, loss after 25 cycles in 10% CaCl ₂ solution, % max	8
Initial Setting Time, minutes min	10

Marking. All packages delivered to the project shall be marked with the following information:

- (a) Date material was packaged.
- (b) Approximate setting time.
- (c) Recommended dosage of water or liquid component.
- (d) Mixing instructions.
- (e) Class or temperature range.

Certification. The manufacturer shall furnish certification as specified in TC-1.02 showing the actual test results for each class and type of material submitted to the Laboratory.

902.15 SYNTHETIC FIBERS.

When synthetic fibers are specified in the Contract Documents, the fibers shall be 1/2 to 1-1/2 in. long and conform to C 1116, Type III. The manufacturer shall furnish certification as specified in TC-1.02. The quantity of fibers used and their point of introduction into the mix shall conform to the fiber manufacturer's recommendations.

902.16 CONTROLLED LOW STRENGTH MATERIAL.

902.16.01 Usage. Controlled Low Strength Material (CLSM) shall consist of the types described below:

TYPE A – Used where future excavation of the CLSM may be necessary (e.g. utility trenches, pipe trenches, bridge abutments, and around box culverts).

TYPE B – Used where future excavation of the CLSM is not anticipated (e.g. filling abandoned conduits, pipes, tunnels, mines, etc. and replacing unsuitable soils below roadway and structure foundations where extra strength is required).

902.16.02 Materials.

Coarse Aggregate	901.01*
Fine Aggregate	901.01
Hydraulic and Blended Hydraulic Cement	902.03 and 902.04
Concrete Admixtures	902.06
Fly Ash	902.06.04
Water	921.01

*maximum size of 3/4 in.

Produce CLSM in conformance with the applicable portions of Section 915 and the following:

902.16.03 Proportioning. Submit the sources and proportions of materials, and certified test data as specified in TC-1.03 for each CLSM mixture prior to construction. CLSM shall be proportioned, on the basis of field experience and/or laboratory trial mixtures, to produce a flowable and self-compacting mixture meeting the requirements of 902.16.04.

CLSM shall be proportioned by weight; with the exception of water and chemical admixtures. Water and chemical admixtures may be proportioned by volume or weight.

902.16.04 CLSM Mixtures. Proportion CLSM with sufficient amounts of Portland cement, fly ash, or slag cement; individually or in combination, to produce a cohesive, non-segregating mixture that conforms to the physical properties in the following table:

CLSM Mix	28 Day Compressive Strength, (psi) D4832	Flow Consistency, (in.) D6103
Type A	50 – 200	8 min.
Type B	500 min.	8 min.

902.17 SELF CONSOLIDATING CONCRETE (SCC).

The SCC mixture must meet the following requirements.

SELF-CONSOLIDATING CONCRETE PROPERTIES		
	PRESTRESS BEAMS	PRECAST
Compressive Strength C1758/T 23	As per Contract Documents	As per Contract Documents
Min Cement Factor lbs./yd ³	700	615
W/C ratio	.32 - .45	.32 - .50

Total Air Content	5.5 +/- 1.5	6.5 +/- 1.5
Concrete Temperature F	65 +/- 15	70 +/- 20
Slump Flow c 1611	22 – 28 in.	22 – 28 in.
Visual Stability Index (VSI)	0 to 1	0 to 1
T20 (T50)	2 – 10 sec.	2 – 10 sec.
J-Ring C 1621	+/- 2 in. design slump flow	+/- 2 in. design slump flow
Column Segregatuib C 1610	12% maximum	-
Rapid Chloride Permeability	Coulombs maximum 2500	-
Freeze Thaw C 666	Maximum durability factor 80	-
Shrinkage at 28 Days C 157	400	-

Note 1: Column Segregation (C 1610), Rapid Chloride Permeability (T 277), Freeze Thaw (C 666), and Shrinkage at 28 Days (C 157) are required only at time of trial batch for mix approval or any time there is a change in materials.

Note 2: Report water/cement ratio, aggregate moistures and cement temperature on each batch ticket.

Note 3: Mold a minimum of one set of Compressive Strength Test Cylinders for each trial batch and for each day's production or each 50 yd3 lot. Take the temperature of the mix once for each day's production or each 50 yd3 lot. Slump Flow, T 20 and VSI testing shall be performed at trial batch and at the beginning of each day's production or each 50 yd3 lot. Conduct J-Ring testing during each trial batch or on the next batch following a failure of either the spread or VSI test.

Note 4: For ASR Mitigation see 902.10.03 - Preventive Measures for Aggregate AlkaliSilica Reactivity

Note 5: High Range Water Reducing admixtures must be Type F or Type G and meet M 194.

Note 6: Viscosity modifying admixtures may be used only with prior approval by the Administration.

902.18 CONCRETE STAIN

The material shall conform to the following requirements:

TEST PROPERTY	TEST METHOD	SPECIFICATION LIMITS
Accelerated Weathering	G7	Passing results
Mildew Resistance/fungus growth	Fed. Test Method STD. 141, Method 6271	Resistance
Weatherometer, 1000 Hours minimum	ASTM G26	No crazing, cracking, chipping or flaking. Light chalk and color change. No other deterioration

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

Total Non Volatile Vehicle, %	D2369	Mfr. Stated Value +/- 2%
Viscosity, Krebs Units, 77 deg. F	D562	Mfr. Stated Value +/- 10 KU
Drying time (to touch)	D1640	1 hour minimum
Recoat dry time	D1640	Able to recoat within 24 hours
Infrared Spectogram	D2621	n/a
Color	AMS-STD-595A	As specified in contract documents
Weight.gallon, lb. gal	D1475	Mfr. State Value +/- 0.3 lb./gal
Shelf life		6 months minimum

Material more than six months old shall be retested. Material must be VOC compliant for Maryland.

914 CHAIN LINK FENCE

914.00 CERTIFICATION

The manufacturer shall furnish certification as specified in TC-1.03. A sample of the fence fabric shall be submitted with the fabric certification.

914.01 CHAIN LINK FENCING FABRIC

Fabric shall be 2 in. mesh woven from coated No. 6 gauge wire for 6 ft and 8 ft fence and No. 9 gauge wire for 5 ft fence unless otherwise specified. The ends shall have a knuckled selvage at the bottom and a barbed selvage at the top. The fabric shall conform to M 181. Type I fabric shall meet Class D coating. Vinyl coated steel shall meet F 668, Class 2B thermally fused. Vinyl color shall be warm gray or black as specified.

914.01.01 Fence Fabric for Super Silt Fence. Galvanized fabric for super silt fence shall meet 914.01, except that it shall be woven from No. 9 gauge wire having a Class C coating. The fabric shall be 42 in. high.

914.02 TIE WIRES, LINE POST CLIPS, TENSION WIRES, AND TENSION WIRE CLIPS

M 181. The galvanized coating shall have a minimum weight of 1.2 oz/ft². When used with aluminum coated steel fabric; these items shall be coated with aluminum at a minimum weight of 0.40 oz/ft². The tension wire used with polyvinyl chloride (PVC) coated steel fabric shall have the same coating thickness and color requirements as the fence fabric.

914.03 POSTS, BRACES, FITTINGS, AND HARDWARE

M 181. When PVC coating is specified, PVC shall be thermally fused and bonded. The PVC thickness shall be 10 to 15 mil except that bolts, nuts, and washers shall be metallic coated steel. Polyester powder coating material for galvanized metal meeting 465.03.02(b) may be used in lieu of PVC. Round posts shall meet industry standards for Class 1 or 2.

914.04 GATES

The fabric used for gates shall be identical to the fencing fabric. The gate frame and other hardware shall meet 914.02 and 914.03. When the gate frame is PVC coated, movable fittings shall be field coated with a PVC coating specifically prepared for this purpose.

914.05 BARBED WIRE

A 121. The barbed wire shall be 12-1/2 gauge with four point round barbs at 5 in. spacing and Class 3 coating.

925 DETECTABLE WARNING SURFACES

925.01 GENERAL

Detectable warning surfaces shall conform to the current accessibility guidelines of the Americans with Disabilities Act (ADA). The Office of Materials Technology (OMT) maintains a Qualified Products List (QPL). Manufacturers seeking inclusion of their product on the QPL shall submit certified test results showing conformance to the properties in 925.07, as well as installation instructions and the types of adhesives and sealants required.

925.02 COMPOSITION

Warning surfaces shall be either flexible or rigid. If there is a change in the composition of a qualified product, the manufacturer shall notify OMT and submit new test results showing conformance with 925.07.

925.02.01 Pavers. Type III Brick Pavers shall conform to the requirements of C 902, Class SX, Type 1, and Application PX. The pavers shall be 2-1/4 in. x 4 in. x 8 in. with square edges and a surface meeting 925.03.

925.03 CONFIGURATION AND DIMENSIONS

The warning surface shall consist of a system of truncated domes having a base diameter of 0.9 in. to 1.4 in., a top diameter 50 to 65 percent of the base diameter, and a height of 0.2 in. The domes shall be arranged in a square grid with center to center spacing of 1.66 in. to 2.35 in.

925.04 COLOR

The color shall be homogeneous across the surface of the material and contrast with adjoining surfaces.

925.05 IDENTIFICATION

The top surface shall have an identifier that uniquely distinguishes the manufacturer. Brick pavers are excluded.

925.06 REQUIREMENTS

TYPE	DESCRIPTION	PHYSICAL TEST REQUIREMENTS
Type I	Cast in Place	A, B, C, D, E, G
Type IIa	Surface Mount, Rigid	A, B, C, D, E, G
Type IIb	Surface Mount, Flexible	A, B, C, D, F, G
Type III	Brick Pavers	925.02.01
Type IV	Prefilled Pavers	A, B, C, D, G

925.07 PHYSICAL PROPERTIES

	PROPERTY	TEST METHOD	SPECIFICATION LIMIT
A	Slip Resistance Coefficient	C 1028 (dry method)	0.80 minimum
B	Abrasive Wear, index	C 501	150 minimum
C	Fade (UV) Resistance/Color Retention	D 4587	Fade or Change in color after 2000 hours less than $\Delta E = 5^*$
D	Freeze/Thaw Resistance	C 1026	No disintegration
E	Adhesion/Bond Strength, pull off	C 482/C 882(as appropriate)	No adhesion failure
F	Adhesion/Bond Strength, peel	D 903/D 429 (modified as appropriate)	No adhesion failure
G	Contrast	Contrast percentage formula** using E 1349 to determine cap Y brightness/light reflectance values (LRV)	Current ADA requirement***

*Chromaticity coordinates (L*a*b* system) checked in conformance with D 2244, before and after test.

**Contrast % = $[(B1 - B2)/B1] \times 100$,

where B1 = (LRV) of the lighter area, and B2 = (LRV) of the darker area

***For the purpose of determining whether a material meets acceptable contrast criteria, use actual cap Y brightness of detectable warning surface, and assume a value of 15 for the cap Y brightness of cured concrete, or a value of 3 for asphalt wearing surfaces to determine percentage difference. Detectable warning surfaces to be installed on other materials are required to undergo additional testing.

END OF SECTION 900

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

BID

AND

SCHEDULE

OF

PRICES

***NOTICE: FROM THIS POINT FORWARD, ALL PAGES
ARE PRINTED ON ONE SIDE***

INVITATION FOR BIDS TO MONTGOMERY COUNTY

Made this _____ day of _____ 2020

By Name of Contractor _____

Business Address _____

The bidder declares that the only person, firm or corporation, or persons, firms or corporations, that has or have any interest in this Bid or in the contract or contracts proposed to be taken, is or are the undersigned; that this Bid is made without any connection or collusion with any person, firm or corporation making a Bid for the same work, that the attached Special Provisions, Specifications and form of contract and the drawings herein referred to have been carefully examined and are understood, that as careful examination has been made as is necessary to become informed as to the character and extent of the work required; and that it is proposed and agreed if the Bid is accepted, to contract to do the required work in the manner set forth in the Special Provisions, Specifications and as shown on the drawings.

The unit prices on the attached and signed Bid are to include and cover the furnishing of all materials and labor requisite and proper and providing of all necessary machinery, tools apparatus and means of performing the work and the doing of all the above mentioned work in the manner set forth, described and shown in the Special Provisions, Specifications and on the contract drawings within the prescribed number of consecutive working or calendar days after service of written notice from the Engineer to proceed with the work. If this Bid is accepted and the undersigned shall refuse or neglect, within ten (10) days after receiving the contract for execution, to execute the same then it shall be determined that the bidder has abandoned the contract, and therefore the Bid and the acceptance thereof shall be null and void and the deposit accompanying the Bid shall be forfeited.

(The names and addresses of all members of a firm, or the names, addresses and titles of every officer of a corporation, as the case may be, must be given here by the member of the firm or by the Officer or agent of the corporation who signs the Bid).

It is further proposed:

To do all extra work that may be required to complete the work contemplated at unit prices or lump sums to be agreed upon in writing prior to starting such extra work, or if such prices of sums cannot be agreed upon, to perform such work on a "Force Account" basis, as described in Section TC-7.03 FORCE ACCOUNT WORK, in the MSHA Standard Specifications for Construction and Materials, July 2018.

To execute the form of Contract and begin work within ten (10) days of the date of the Notice to Proceed, and to prosecute said work so as to complete the construction in **TWO HUNDRED (200) WORKING DAYS.**

To furnish contract bonds in the full amount of the contract award, as security for the construction and completion of the work, in accordance with the plans, specifications and contract and as security for payment of labor and materials.

To guarantee all the work performed under this contract to be done in accordance with the Special Provisions, Specifications and Contract Drawings in a good workmanlike manner, and to renew or repair any work which may be rejected due to defective materials or workmanship, prior to final completion and acceptance of the construction.

Enclosed herewith find certified check or bid bond made payable to Montgomery County, Maryland as a proposal guarantee, which it is understood will be forfeited in the event the Form of Contract is not executed, if awarded to the undersigned, in the amount of _____ (\$ _____) for 5% of the Total Base Bid.

Receipt is acknowledged of addenda and such is included in this proposal as follows:

No. _____ Date: _____

No. _____ Date: _____

Respectfully submitted, signed (Authorized Signature) _____

Signatures of offerors and contractors must be in their correct legal form and must not be abbreviated to common usage or trade name form. All signatures must be made by an authorized officer, partner, manager, member or employee. The signing of an offer or a contract is a representation by the person signing that the person signing is authorized to do so on behalf of the offeror or contractor. Contracts that are not signed in compliance with these requirements are voidable at the option of the County.

SCHEDULE OF PRICES – TOTAL BASE BID

NOTE: Award of a contract will be made to the lowest responsive and responsible bidder as determined by the Director, Department of General Services. The lowest bidder is determined by the total amount of the Unit Prices extended by the quantities set forth on the Schedule of Prices, and shall include all necessary costs as required to perform the work specified in the technical specifications. The Total Base Bid is inclusive of all contingent items.

The Base Bid is the sum for which the bidder offers to perform the work specified in the technical specification, not including that work for which alternate bids are also submitted. Alternate Bids will include items and prices which may be added to or subtracted from the base bid price if alternate methods and materials are chosen.

Dollar total in numerals (Base Bid)

Dollar total in written words (Base Bid)

SIGNATURE: _____

I have read and understand all the clauses and requirements contained herein and any amendment thereto and the prices quote reflect the conditions stated:

NAME OF FIRM: _____

ADDRESS: _____

TELEPHONE: _____

FAX NUMBER: _____

E-MAIL ADDRESS: _____

NAME: _____

TITLE: _____

AUTHORIZED SIGNATURE: _____

NOTE: NO BIDS WILL BE ACCEPTED UNLESS SUBMITTED IN INK OR TYPEWRITTEN. All signatures on bids, amendments, or related documents or correspondence must be by persons who are authorized to contractually bind the Offerors.

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

DEMOLITION

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE		
					Dollars	Cts	Dollars	Cts	
1	128	EA		Removal and Disposal of Existing Lighting Structure & Luminaire	\$_____		\$_____		
2	231	LF		Removal and Disposal of Existing Fence	\$_____		\$_____		
3	2	EA		Removal and Disposal of Electrical Service Panel	\$_____		\$_____		
					\$_____		\$_____		
					\$_____		\$_____		
TOTAL DEMOLITION COSTS								\$_____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

EXCAVATION

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE		
					Dollars	Cts	Dollars	Cts	
4	155	CY		Class 2 Excavation	\$ _____		\$ _____		
5	125	CY		Furnish and Install Common Borrow	\$ _____		\$ _____		
					\$ _____		\$ _____		
					\$ _____		\$ _____		
TOTAL EXCAVATION COSTS								\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

DRAINAGE – STORMWATER MANAGEMENT FACILITY

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
					Dollars	Cts	Dollars	Cts
6	1	TN		Furnish & Install No. 2 Aggregate Stone for Stormwater Management Facilities	\$ _____		\$ _____	
7	45	SY		Furnish & Install Non-Woven Geotextile, Class PE	\$ _____		\$ _____	
8	1	EA		Furnish & Install Standard 10' COG Inlet Minimum Depth (SHA Standard MD 374.31)	\$ _____		\$ _____	
9	12	CY		Furnish & Install No. 57 Aggregate for Stormwater Management Facilities	\$ _____		\$ _____	
10	12	CY		Furnish & Install Coarse Sand for Stormwater Management Facilities	\$ _____		\$ _____	
11	18	CY		Furnish & Install Bioretention Soil Mix (BSM)	\$ _____		\$ _____	
12	1	LS		Stormwater Management Facility, As-Built Certification	\$ _____		\$ _____	
					\$ _____		\$ _____	
TOTAL DRAINAGE COSTS							\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

CONCRETE AND ASPHALT CONSTRUCTION

ITEM	APPROXIMATE QUANTITY		DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
				Dollars	Cts	Dollars	Cts
13	2.7	SY	Furnish & Install Superpave Asphalt Mix, 25.0mm For Full-Depth Patch, PG 64S-22, Level 2	\$ _____		\$ _____	
14	4256	SF	Furnish & Install 5” Concrete Sidewalk	\$ _____		\$ _____	
15	35	SF	Furnish & Install Detectable Warning Surface For Curb Ramps	\$ _____		\$ _____	
16	70	LF	Furnish & Install Type A Combination Curb and 12” Gutter (MDSHA Standard MD. 620.02)	\$ _____		\$ _____	
17	105	LF	Furnish & Install 5 Inch White Pavement Marking Paint Line (For Crosswalk)	\$ _____		\$ _____	
				\$ _____		\$ _____	
				\$ _____		\$ _____	
				\$ _____		\$ _____	
TOTAL CONCRETE AND ASPHALT CONSTRUCTION COSTS						\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

FENCING

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
					Dollars	Cts	Dollars	Cts
18	515	LF		Furnish and Install 6 Foot Galvanized Chain Link Fence with Black Bonded Vinyl Coating	\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
TOTAL FENCE COSTS							\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

ELECTRICAL

ITEM	APPROXIMATE QUANTITY		DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
				Dollars	Cts	Dollars	Cts
19	156	EA	Furnish and Install 12' Decorative Light Pole	\$ _____		\$ _____	
20	202.8	CY	Furnish and Install Concrete for Light Foundation	\$ _____		\$ _____	
21	156	EA	Furnish and Install LED Roadway Luminaire (30 W LED)	\$ _____		\$ _____	
22	63	EA	Furnish and Install Junction Box	\$ _____		\$ _____	
23	23,250	LF	Furnish and Install Duct Cable – 2 Conductor, No 6 AWG, 600V	\$ _____		\$ _____	
24	4,230	LF	Furnish and Install Cable – 1 Conductor, No. 6 AWG Use 600V	\$ _____		\$ _____	
25	27,200	LF	Furnish and Install No. 6 AWG Stranded Bare Copper Ground Wire	\$ _____		\$ _____	
26	112	EA	Furnish and Install Connector Kit – Type I	\$ _____		\$ _____	
27	126	EA	Furnish and Install Connector Kit – Type II	\$ _____		\$ _____	
28	186	EA	Furnish and Install Connector Kit – Type III	\$ _____		\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1- 46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

ELECTRICAL (con't)

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
					Dollars	Cts	Dollars	Cts
29	106	EA		Furnish and Install Connector Kit – Type VI	\$ _____		\$ _____	
30	156	EA		Furnish and Install Ground Rod – ¾ Inch Diameter x 10 Foot Length	\$ _____		\$ _____	
31	2	EA		Furnish and Install Remote Lighting Cabinet 60 AMP	\$ _____		\$ _____	
32	1435	LF		Furnish and Install 2 Inch Schedule 80 Rigid PVC Conduit	\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
					\$ _____		\$ _____	
TOTAL ELECTRICAL COSTS								

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1- 46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

LANDSCAPING

ITEM	APPROXIMATE QUANTITY		DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE	
				Dollars	Cts	Dollars	Cts
33	615	SY	Furnish & Install 4 Inch Depth Topsoil	\$ _____		\$ _____	
34	615	SY	Furnish & Install Turfgrass Establishment	\$ _____		\$ _____	
35	1	EA	Furnish & Install CERCIS CANADENSIS ‘FOREST PANSY’, 2” Cal. B&B/ #20 Cont.	\$ _____		\$ _____	
36	17	EA	Furnish & Install CORNUS SERICEA ‘FARROW’ ARCTIC FIRE, 18” HT. #3 Cont.	\$ _____		\$ _____	
37	13	EA	Furnish & Install ILEX GLABRA ‘SHAMROCK’, 24” HT., #3 Cont.	\$ _____		\$ _____	
38	156	EA	Furnish & Install ECHINACEA PURPUREA, #SP4, Cont.	\$ _____		\$ _____	
39	87	EA	Furnish & Install PANICUM VIRGATUM ‘SHENANDOAH’, #1 Cont.	\$ _____		\$ _____	
40	53	SY	Furnish & Install 3” Depth Shredded Hardwood Bark Mulch (SHB)	\$ _____		\$ _____	
TOTAL LANDSCAPING COSTS						\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

MISCELLANEOUS

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE		
					Dollars	Cts	Dollars	Cts	
41	1.15	LS		Construction Stakeout	\$ _____		\$ _____		
42	1.15	LS		Mobilization	\$ _____		\$ _____		
*43	40	EA		Test Pit Excavation & Backfilling (Contingent)	\$ _____		\$ _____		
44	1	LS		Permit Acquisition (Electrical Permit)	\$ _____		\$ _____		
45	12	SF		Furnish & Install Sheet Aluminum Signs	\$ _____		\$ _____		
46	1	EA		Furnish, Set, & Reset Type III Barricade for Maintenance of Pedestrian Traffic	\$ _____		\$ _____		
					\$ _____		\$ _____		
					\$ _____		\$ _____		
TOTAL MISCELLANEOUS COSTS								\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (1-46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

SUMMARY

ITEM	DESCRIPTION OF ITEMS	EXTENDED PRICE	
		Dollars	Cts
1 - 3	TOTAL DEMOLITION COST	\$ _____	
4 - 5	TOTAL EXCAVATION COST	\$ _____	
6 - 12	TOTAL DRAINAGE COST	\$ _____	
13 - 17	TOTAL CONCRETE AND ASPHALT COST	\$ _____	
18	TOTAL FENCING COST	\$ _____	
19 - 32	TOTAL ELECTRICAL COST	\$ _____	
33 - 40	TOTAL LANDSCAPING COST	\$ _____	
41 - 46	TOTAL MISCELLANEOUS COST	\$ _____	
TOTAL BASE BID – HOA ITEMS		\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT
NON HOA

PLEASE NOTE: The items listed as “NH” have the same descriptions listed with the corresponding number in Part 2 – Items.

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (NH 13 – NH 46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

NON HOA – SHEET 1

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE		
					Dollars	Cts	Dollars	Cts	
NH - 13	15.8	SY		Furnish & Install Superpave Asphalt Mix, 25.0mm For Full-Depth Patch, PG 64S-22, Level 2	\$ _____		\$ _____		
NH - 14	200	SF		Furnish & Install 5” Concrete Sidewalk	\$ _____		\$ _____		
NH - 15	35	SF		Furnish & Install Detectable Warning Surface for Curb Ramps	\$ _____		\$ _____		
NH - 16	70	SF		Furnish & Install Type A Combination Curb and 12” Gutter (MDSHA Standard MD. 620.02)	\$ _____		\$ _____		
NH - 17	105	LF		Furnish & Install 5 Inch White Pavement Marking Paint Line	\$ _____		\$ _____		
NH - 18	10	LF		Furnish and Install 6 Foot Galvanized Chain Link Fence with Black Bonded Vinyl Coating	\$ _____		\$ _____		
					\$ _____		\$ _____		
					\$ _____		\$ _____		
TOTAL NON HOA COSTS (SHEET 1)								\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT
NON HOA

PLEASE NOTE: The items listed as “NH” have the same descriptions listed with the corresponding number in Part 2 – Items.

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (NH 13 – NH 46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

NON HOA – SHEET 2

ITEM	APPROXIMATE QUANTITY			DESCRIPTION OF ITEMS	UNIT PRICE		EXTENDED PRICE		
					Dollars	Cts	Dollars	Cts	
NH - 33	25	SY		Furnish & Install 4 Inch Depth Topsoil	\$ _____		\$ _____		
NH - 34	25	SY		Furnish & Install Turfgrass Establishment	\$ _____		\$ _____		
NH - 41	1.15	LS		Construction Stakeout	\$ _____		\$ _____		
NH - 42	1.15	LS		Mobilization	\$ _____		\$ _____		
NH - 45	9	SF		Furnish & Install Sheet Aluminum Signs	\$ _____		\$ _____		
NH - 46	3	EA		Furnish, Set, & Reset Type III Barricade for Maintenance of Pedestrian Traffic	\$ _____		\$ _____		
					\$ _____		\$ _____		
					\$ _____		\$ _____		
TOTAL NON HOA COSTS (SHEET 2)								\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT
NON HOA

PLEASE NOTE: The items listed as “NH” have the same descriptions listed with the corresponding number in Part 2 – Items.

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (NH 13 – NH 46) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

NON HOA SUMMARY

ITEMS	DESCRIPTION OF ITEMS	EXTENDED PRICE	
		Dollars	Cts
NH 13 - 18	TOTAL NON HOA COSTS (SHEET 1)	\$ _____	
NH 33, 34, 41, 42, 45 & NH 46	TOTAL NON HOA COSTS (SHEET 2)	\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
	TOTAL BASE BID NON HOA	\$ _____	

MONTGOMERY VILLAGE AND SOUTH VILLAGE HOMES LIGHTING AND SITE IMPROVEMENTS PROJECT

Notice to Bidders: This proposal shall be filled by the bidder, with the prices written in numerals, and the extensions shall be made by the bidder. In the event of a discrepancy between the unit prices and the extensions (product of the quantity and unit price), the unit price will govern. This applies to all items (**1- 46 AND NH 13 – NH 46**) in this schedule of prices. For complete information concerning these items, see Specifications, General and Specific Provisions and Contract Forms. Contingent items will be denoted with an asterisk (*).

TOTAL PROJECT SUMMARY

ITEMS	DESCRIPTION OF ITEMS	EXTENDED PRICE	
		Dollars	Cts
1 - 46	TOTAL BASE BID HOA	\$ _____	
NH 13 – NH 46	TOTAL BASE BID NON HOA	\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
		\$ _____	
	TOTAL BASE BID HOA AND NON HOA	\$ _____	

**MONTGOMERY COUNTY, MARYLAND
DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS**

EXPERIENCE AND EQUIPMENT CERTIFICATION

Contract No. 1113990

I. GENERAL

(a.) Legal Title and Address of Organization

(b.) Maryland Representative's Name, Title, and Address

(c.) Check One: Corporation _____ Co-Partnership _____ Individual _____

Other (describe) _____

(d.) Name and Title of Officers, Managers, Partners, etc Authorized to sign Contract Documents, Change and Field Orders, Estimates, and other pertinent Contract Forms. Please be advised that it will be necessary to inform the County of any changes in the above authorization.

<u>NAME</u>	<u>TITLE</u>
_____	_____
_____	_____
_____	_____
_____	_____

II EXPERIENCE

(a) Indicate the type of contracting undertaken by your organization and year's experience.

General _____ Sub _____ Type of Work: _____
Years years

(b) State construction experience of principal members of your organization:

<u>Name</u>	<u>Title</u> <u>Pres., Mgr.,</u> <u>etc.</u>	<u>Construction</u> <u>Experience</u> <u>Years</u>	<u>Type of Work</u> <u>(Hwy.,</u> <u>Bridges,</u> <u>Paving, etc.)</u>	<u>In What</u> <u>Capacity?</u> <u>(Supt.,</u> <u>Foreman, etc.)</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

(c) Give any special qualifications of firm members (Registered Engineer, Surveyors, etc.)

III EQUIPMENT

- (a) What equipment do you own, rent, or intend to buy for use on this project. (Please include any attachments.)

<u>Quantity</u>	<u>Item</u>	<u>Description, Capacity, Size, etc.</u>	<u>Condition</u>	<u>Years of Service</u>	<u>Present Location</u>	<u>Date Available for this Project</u>
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____

IV AWARD OF CONTRACT

- (a) If awarded this contract, do you intend to sublet any portion of this work? _____ If so, list as follows. You may use a separate sheet of paper if needed.

Name	Address	Applicable Certification	Years of Experience	Projects Completed
Landscape Subcontractor				
Arborist				
Other				
Other				

(b) Work presently under contract to, or pending award to, your organization. (Please include any attachments.)

<u>Contract No. or Description</u>	<u>Total cost of Project</u>	<u>Amount of Work Completed</u>	<u>Amount to be Completed</u>	<u>Probable Date of Completion</u>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

(c) List some principal projects completed by your organization. (Please include any attachments.)

<u>Description of Work</u>	<u>General or Sub (If Sub, what type of work)</u>	<u>Your Contract Amount</u>	<u>Year</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- (d) Have you ever performed work for the U. S. Government? _____ Any State government? _____ Any County or City government? _____ If yes to any of these, please list which agency, references, phone numbers, and contact persons.

- (e) Have you ever failed to complete any work awarded to you? _____ If so, where and why.

- (f) Has any officer or partner of your organization ever been an officer or partner of some other organization that failed to complete a construction contract? If so, state name of individual, other organization and reason therefore.

- (g) Has any officer or partner of your organization ever failed to complete a construction contract handled in his own name? _____ If so, state name of individual, name of owner and reason therefore.

V. BIDDER CERTIFICATION

The above statements are certified to be true and accurate and we have the equipment, labor, supervision, and financial capacity to perform this Contract, either with our organization, or with subcontractors.

Dated at _____

this _____ day of _____ 2020.

By: _____

(Title of Person Signing)

(Name of Organization)

State of _____

County of _____

_____ Being duly sworn states that he is _____

_____ of _____, and that
(Title) (Name of Organization)

the answers to the foregoing questions and all statements therein contained are true and accurate.

Sworn to before me this _____ day of _____, 2020.

Notary Public

My commission expires _____

THIS
PAGE
INTENTIONALLY
LEFT
BLANK

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South
Village Homes Lighting and Site
Improvements

CONTRACT

AND

BONDS

MONTGOMERY COUNTY, MARYLAND

STANDARD FORM OF AGREEMENT BETWEEN

MONTGOMERY COUNTY and CONTRACTOR
where the basis of payment is a

UNIT PRICE

AGREEMENT

made this _____ day of _____ in the year of Two Thousand and Nineteen

BETWEEN

MONTGOMERY COUNTY, MARYLAND

the Owner and

the Contractor

The Owner and the Contractor agree as set forth below.

IFB No. #1113990
MCDHCA Project No. 761100
Montgomery Village and South Village Homes Lighting and Site Improvments Project

TERMS AND CONDITIONS OF AGREEMENT BETWEEN OWNER AND CONTRACTOR

ARTICLE 1

THE CONTRACT DOCUMENTS

The Contract Documents consist of Invitation For Bid, Instructions to Bidders or Bidders Information, Bid, Schedule of Prices, Bid Bond, this Agreement, Conditions and Provisions of the Contract (General, Supplementary, Special and other Conditions or Provisions), Drawings (except boring logs and appurtenant data), Specifications, all Addenda issued prior to execution of this Agreement and all Modifications issued subsequent thereto, and Notice-to-Proceed. These form the Contract, and all are as fully a part of the Contract as if attached to this Agreement or repeated herein.

"COUNTY CODE and PROCUREMENT REGULATIONS" – The requirements of the Montgomery County County Code and the County's Procurement Regulations are incorporated by reference and made a part of this contract. In case of any inconsistency between this contract and the Procurement Regulations, the Procurement Regulations shall govern. By signing this contract and/or performing work under this contract, the Contractor certifies that it will comply with all requirements of the Montgomery County Code and the County's Procurement Regulations.

ARTICLE 2

THE WORK

Work shall be understood to mean the furnishing of all labor, materials equipment and other incidentals necessary to the successful completion of the project and the carrying out of all the duties and obligations imposed by the Contract Documents.

ARTICLE 3

ARCHITECT/ENGINEER

The Architect/Engineer for this Project is as defined in the General Provisions – Section 1.

ARTICLE 4

TIME OF COMMENCEMENT AND COMPLETION

The work to be performed under this Contract shall be commenced at a time established in the written Notice-to-Proceed. The Contractor agrees that all the work included in this Contract shall be completed in its entirety in **200 WORKING DAYS**. Each project shall be completed within 120 days. In the event the Contractor shall fail to complete his/her work in its entirety within the time stated herein, the Contractor acknowledges and agrees that the Owner will deduct and retain from any monies due the Contractor Liquidated Damages (not as penalty) in the amount of **\$600.00** per working day that extends beyond the 200 working day contract period, as specified in the Contract Documents.

ARTICLE 5

CONTRACT AMOUNT

The Owner shall pay the Contractor an estimated amount of _____
_____ (\$_____)

for the performance of the Work set forth in the Contract Documents subject to additions and deductions, by Change Orders, as defined in the General Conditions. The actual compensation to be paid shall be in accordance with the "Schedule of Prices" attached to the "Bid to Montgomery County" which is the basis of the Contractor's bid. It is understood that the approximate quantities shown in the "Schedule of Prices" are solely for the purpose of facilitating the comparison of Bids, and that the Contractor's compensation will be computed upon the basis of the actual quantities in the completed work, whether they be more or less than the quantities shown in the "Schedule of Prices".

Contractor's Name: _____

Contract No.: 1113990

SIGNATURES

MONTGOMERY COUNTY, MARYLAND

By: _____
Avinash G. Shetty, Director
Office of Procurement

By: _____

Date: _____

Typed: _____

Title: _____

Date: _____

RECOMMENDED

By: _____
Aseem K. Nigam, Director
Department of Housing and
Community Affairs

Date: _____

I hereby affirm that the above named person
is a corporate officer and empowered to
sign contractual agreements for the
corporation

Signed: _____

Typed: _____

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENT, THAT _____

hereinafter called the CONTRACTOR, and _____

_____ a corporation incorporated under the laws of the State of _____ hereinafter

called the SURETY, are held and firmly bound unto Montgomery County, Maryland, in the full
just sum of _____

_____ (\$ _____),
(95% of the TOTAL BASE BID PRICE) lawful money of the United States of America, to be paid
to the said Montgomery County, to which payment well and truly to be made and done, we bind
ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these
present.

Sealed with our respective seals and dated this _____ day of _____, 2020

Whereas, the above bonded CONTRACTOR has entered into a contract with the said
Montgomery County, Maryland, bearing even date herewith for _____

Montgomery County, Maryland being approximately _____
(_____) feet in length, for approximately the sum of _____

_____ (\$ _____),

the said project being situated _____

_____ and,

NOW THEREFORE, the condition of this obligation is such that if the above bonded Contractor shall in all respects comply with the terms and conditions of this contract and fully meet and perform his/her, their or its obligations thereunder, including the plans, specifications and special provisions therein referred to, and made a part thereof, and such alterations as may be made in said plans and specifications as therein provided for, and shall well and truly and in a manner satisfactory to the Chief Administrative Officer for Montgomery County complete the work contracted for, and shall save harmless Montgomery County from any expense incurred through the failure of said Contractor to complete the work as specified, or from any damages growing out of the negligence of the said Contractor, or his, their or its agents and employees or any liability for the payment of any wages due or materials furnished in connection with said contract; and shall well and truly pay all just debts incurred for labor and materials entering into the work covered by said contract, through sub-contract or in any other manner, by or on behalf of the Contractor.

AND also shall save and keep harmless the said Montgomery County against and from all losses to it from any cause whatever, including costs of transportation by water, rail or otherwise, and patent trademark and copyright infringements, but without limiting the foregoing, in the manner of constructing said improvement, then this obligation to be void or otherwise to be and remain in full force and virtue.

Witness:

By: _____ (SEAL)

Title: _____ By: _____ (SEAL)

_____ (SEAL)

_____ (SEAL)

Surety Company

BY: _____

Witness:

TITLE: _____

BY: _____

TITLE: _____

LABOR AND MATERIAL PAYMENT BOND

This bond is issued simultaneously with performance bond in favor of the owner conditioned for the full and faithful performance of the contract.

KNOW ALL MEN BY THESE PRESENTS: that _____
(Here insert full name and

address of legal title of Contractor)

as Principal, hereinafter called Contractor, and _____
(Here insert full

_____, a corporation created
name and address of legal title of Surety)

existing under the laws of the State of Maryland, hereinafter called Surety, are held and firmly bound unto MONTGOMERY COUNTY, MARYLAND as Obligee, hereinafter called Owner, for the use and benefit of claimants as hereinbelow defined, in the amount of

(Here insert a sum equal to 100% of the TOTAL BASE BID PRICE

Dollars(\$),

in written words)

for the payment where of Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS _____

Principal has by written agreement dated _____ 2020,
entered into a contract with owner for

for approximately the sum of _____

which contract is by reference made a part hereof, and is herein-after referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if, Contractor shall promptly make payment to all claimants as hereinafter defined, for all labor and material used or reasonably required for use in the performance of the Contract, then this obligation shall be void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A claimant is defined as one having a direct contract with the Contractor or with a Subcontractor of the Contractor for labor, material, or both, used or reasonably required for use in the performance of the Contract, labor and material being constructed to include that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental of equipment directly applicable to the Contract.
2. The above named Contractor and Surety hereby jointly and severally agree with the Owner that every claimant as herein defined, who has not been paid in full before the expiration of a period of ninety (90) days after the date on which the last of such claimant's work or labor was done or performed, or materials were furnished by such claimant, may sue on this bond for the use of such claimant, prosecute the suit to final judgment for such sum or sums as may be justly due claimant, and have execution thereon. The Owner shall not be liable for the payment of any costs or expenses of any such suit.
3. No suit or action shall be commenced hereunder by any claimant:
 - a) Unless claimant, other than one having a direct contract with the Contractor, shall have given written notice to any two of the following: the Contractor, the Owner or the Surety above named, within ninety (90) days after such claimant did or performed the last of the work or labor, or furnished the last of the materials for which said claim is made, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were furnished, or for whom the work or labor was done or performed. Such notice shall be served by mailing the same by registered mail or certified mail, postage prepaid, in an envelope addressed to the Contractor, Owner or Surety, at any place where an office is regularly maintained for the transaction of business, or served in any manner in which legal process may be served in the state in which the aforesaid project is located, save that such service need not be made by a public officer.
 - b) After the expiration of one (1) year following the date on which Contractor ceased work on said Contract, it being understood, however, that if any limitation embodied in this bond is prohibited by any law controlling the construction hereof such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law.
 - c) Other than in a state court of competent jurisdiction in and for the County of other political subdivision of the state in which the Project, or any part thereof, is situated, or in the United States District Court for the district in which the Project, or any part thereof, is situated and not elsewhere.

4. The amount of this bond shall be reduced by and to the extent of any payment or payments made in good faith hereunder, inclusive of the payment by Surety of mechanics' liens which may be filed of record against said improvement, whether or not claim for the amount of such lien be presented under and against this bond.

Signed and sealed this _____ day of _____ A.D. 2020

IN THE PRESENCE OF:

_____	_____
(Witness)	(Principal) (Seal)
	(
	(By)

	(
	(

	(Title)

_____	_____
(Witness)	(Surety) (Seal)
	(
	(By)

	(
	(

	(Title)