PROJECT CONSTRUCTION SCHEDULE

PHASE I CONSTRUCTION:

PHASE I CONSTRUCTION WILL BE INCLUDED UNDER "BID ITEM I I".

CONTRACTOR WILL STATE THE DOLLAR AMOUNT TO BE DEDUCTED FOR OMITTING PHASE I CONSTRUCTION SCOPE OF WORK ITEMS.

REFER TO SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.

PHASE I CONSTRUCTION IS FOR NEW PARKING GARAGE STRUCTURE AT LEVEL E ABOVE EXISTING PARKING GARAGE.

THE FIVE MAIN ELEMENTS FOR PHASE I CONSTRUCTION ARE:
1. PROJECT SITE STAGING AND SET-UP
2. CONTRACTOR FIELD DOCUMENTATION OF AS-BUILT CONDITIONS
3. TEMPORARY CONSTRUCTION BARRIERS
4. DEMOLITION WORK
5. SEQUENCE OF NEW CONSTRUCTION WORK

SEQUENCE FOR NEW CONSTRUCTION WORK AT LEVEL E ABOVE EXISTING PARKING GARAGE STRUCTURE. ERECTION OF PRECAST CONCRETE STRUCTURE AT LEVEL E WILL ONLY BE PERMITTED DURING WEEKEND HOURS OF OPERATION. THE EXISTING PARKING GARAGE WILL REMAIN IN USE MONDAY THROUGH FRIDAY FOR THE DURATION OF THE PROJECT. OTHER SELECTED WORK COMPONENTS WILL BE SPECIFIED FOR DEMOLITION AND INSTALLATION DURING WEEKEND HOURS OF OPERATION AS OUTLINED HEREIN.

PROJECT SITE STAGING AND SET-UP

THE FOLLOWING ITEMS AND ACTIVITIES WILL OCCUR PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITIES.
1. TEMPORARY SITE FENCING TO LIMIT UNAUTHORIZED ACCESS.
2. LOCATION OF PROJECT SITE ENTRY/EXIT GATE FOR ALL CONSTRUCTION PERSONNEL, COMPANY TRUCK/VEHICLES AND MATERIAL DELIVERIES AND TRANSPORTATION OF DEMOLITION WORK.
3. SITE STAGING AND SETUP SEQUENCE AS DETAILED ON DRAWING G-00A WILL OCCUR DURING WEEKEND HOURS OF OPERATION.

CONTRACTOR FIELD DOCUMENTATION OF AS-BUILT CONDITIONS

A. CONTRACTOR WILL BE REQUIRED TO VERIFY AND CONFIRM EXISTING PARKING GARAGE LEVEL D 'AS-BUILT' CONDITIONS OF THE FOLLOWING MAIN BUILDING ELEMENTS AND COMPONENTS.THESE FOLLOWING ACTIVITIES WILL BE COMPLETED DURING WEEKEND HOURS OF OPERATION.

1. PRECAST CONCRETE COLUMN SPACING
2. PRECAST CONCRETE SHEAR WALLS
3. PRECAST CONCRETE SPANDREL WALLS
4. OVERALL BUILDING/STRUCTURE DIMENSIONS AND ELEVATIONS
5. FLOOR/ROOF DRAINS ASSEMBLIES AND RELATED PIPING ARRANGEMENT
6. FIRE PROTECTION SYSTEM DRY STANDPIPE RISER AND RELATED PIPING ARRANGEMENT
7. ELECTRICAL LIGHTING SYSTEMS AND RELATED CONDUIT AND POWER WIRING INSTALLATION/CIRCUITING
8. ELECTRICAL POWER OUTLET SYSTEMS AND RELATED CONDUIT AND POWER WIRING INSTALLATION/CIRCUITING
9. ELECTRICAL LIGHTNING PROTECTION SYSTEM INSTALLATION/CIRCUITING
10. ELECTRICAL CONDUIT SYSTEM FOR SECURITY CAMERAS. CONDUIT SYSTEM IS EMPTY. THERE ARE NO CONTROL CABLES OR SECURITY CAMERAS INSTALLED WITHIN THE EXISTING PARKING GARAGE.

TEMPORARY CONSTRUCTION BARRIERS

THE FOLLOWING TEMPORARY BARRIERS WILL BE PROVIDED AT EXISTING PARKING LEVEL D.

A. EXISTING STAIRWAY 2 TEMPORARY BARRIERS:

1. PROVIDE TEMPORARY BARRIER AT EXISTING STAIRWAY 2.
2. THIS TEMPORARY BARRIER WILL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION PROJECT.
3. THE TEMPORARY ENCLOSURE WILL BE SPECIFIED WITH WALLS AND OVERHEAD ROOF STRUCTURE TO PROVIDE PEDESTRIAN SAFETY DURING CONSTRUCTION ACTIVITIES. WALLS AND ROOF DECK OF ENCLOSURE WILL BE DESIGNED TO CONTROL WATER INFILTRATION.
4. CONSTRUCT FIRE RATED PLYWOOD ENCLOSURE AT EXISTING STAIRWAY 2 EGRESS PATH.
5. PROVISIONS FOR TEMPORARY EXIT SIGNAGE, LIGHTING, EMERGENCY LIGHTING AND EMERGENCY CALL STATION WILL BE PROVIDED.
6. THE TEMPORARY ENCLOSURE WILL BE PROVIDED WITH A WALL OPENING TO COMPLY WITH CODE REQUIRED EGRESS WIDTH. NO DOOR AND FRAME UNIT WILL BE SPECIFIED.

B. EXISTING PARKING LEVEL D TEMPORARY BARRIERS:

1. PROVIDE TEMPORARY BARRIERS ALONG EXISTING PARKING LEVEL D FOR THE ENTIRE LENGTH OF THE PARKING STRUCTURE ONLY DURING WEEKEND OPERATIONS.
2. THIS TEMPORARY BARRIER WILL BE SPECIFIED TO BE INSTALLED SATURDAY 6:00 AM AND TO BE REMOVED BY SUNDAY AT 6:00 PM.
3. THIS BARRIER WOULD BE A SHELF SUPPORTED CHAIN LINK FENCE TYPE SYSTEM TO LIMIT PEDESTRIAN UNAUTHORIZED ACCESS BELOW WORK ZONE.
4. TO REOPEN EXISTING LEVEL D FOR VEHICLE PARKING THE TEMPORARY FENCING WILL NEED TO BE REMOVED AND STORED DURING THESE TIME PERIODS.
5. LOCATION FOR THE STORAGE/STACKING WILL BE DISCUSSED WITH THE VA/COR.

C. EXISTING PARKING LEVEL C TEMPORARY BARRIERS:

THE FOLLOWING TEMPORARY BARRIERS WILL BE PROVIDED AT EXISTING PARKING LEVEL C:
1. PROVIDED FOR THE RECONFIGURATION OF THE EXISTING SANITARY (SS) PIPING SYSTEM.
2. PROVIDED FOR THE RECONFIGURATION OF THE EXISTING STORM (ST) PIPING SYSTEM.
3. PROVIDED FOR THE RECONFIGURATION OF THE FIRE PROTECTION DRY STANDPIPE (DS) SYSTEM.

DEMOLITION WORK

A. PRIOR TO THE ERECTION OF THE NEW STRUCTURAL FRAMING SYSTEM THE FOLLOWING DEMOLITION AND PREPARATION WORK AT EXISTING PARKING LEVEL D WILL NEED TO BE PERFORMED:

1. EXISTING PRECAST CONCRETE COLUMNS PREPARED TO RECEIVE NEW COLUMN EXTENSIONS.
2. EXISTING PRECAST CONCRETE SHEAR WALLS PREPARED TO RECEIVE NEW SHEAR WALL EXTENSIONS.
3. REMOVAL OF ALL ELECTRICAL LIGHTING AND POWER SYSTEMS.
4. REMOVAL OF SELECTED LIGHTNING PROTECTION SYSTEM.
5. THE ROOF DRAINS WILL REMAIN IN PLACE AND ACTIVE DURING CONSTRUCTION ACTIVITIES.
6. NOTATIONS WILL BE INCORPORATED FOR CONTRACTOR TO KEEP ROOF DRAINS CLEAR OF ALL CONSTRUCTION DEBRIS.
7. THE EXISTING FIRE PROTECTION DRY STANDPIPE RISER AND RELATED HOSE CONNECTION WILL BE REQUIRED TO REMAIN ACTIVE. TEMPORARY PROTECTION BARRIER WILL BE PROVIDED.
8. THE EXTERIOR PRECAST CONCRETE SPANDREL WALL PANELS AND ASSOCIATED ALUMINUM RAILING SYSTEM WILL REMAIN IN PLACE.
9. THE REMOVAL OF EXISTING WAY FINDING SIGNAGE AND PROVISIONS FOR TEMPORARY WAY FINDING WILL BE PROVIDED.
10. NEED TO REVIEW EXISTING PARKING SPACE/STA[illegible] THE TEMPORARY MARKINGS AS REQUIRED.

CONSTRUCTION WORK

A. AFTER THE DEMOLITION ACTIVITIES OUTLINED ABOVE HAVE BEEN COMPLETED THE STRUCTURAL FRAMING SYSTEM AND ASSOCIATED WORK CAN BE CONSTRUCTED.

1. PRECAST CONCRETE COLUMNS
2. PRECAST CONCRETE BEAMS/GIRDERS
3. PRECAST CONCRETE SHEAR WALLS
4. PRECAST CONCRETE SPANDREL WALL PANELS
5. PRECAST CONCRETE DOUBLE TEE MEMBERS
6. CONCRETE TOPPING OVER DOUBLE TEE MEMBERS.
7. PRECAST CONCRETE STAIRWAY UNIT AND RELATED IRON PIPE RAILING SYSTEMS
8. STAIRWAY ENCLOSURE STRUCTURE AT PARKING DECK LEVEL E, INCLUDING STRUCTURAL STEEL FRAMING, ALUMINUM STOREFRONT SYSTEM, DOOR, FRAME AND HARDWARE UNIT
9. STEEL PIPE BOLLARDS
10. STORM (ST) PIPING SYSTEMS FOR THE NEW ROOF DRAINS AT NEW PARKING DECK LEVEL E
11. SANITARY (SS) PIPING SYSTEMS FOR THE FLOOR DRAINS AT EXISTING PARKING DECK LEVEL D. THE EXISTING ROOF DRAINS WILL NEW BE REQUIRED TO CONNECT IN TO THE SANITARY PIPING SYSTEM.
12. DRY STANDPIPE (DS) PIPING SYSTEMS FOR THE FIRE PROTECTION
13. TEMPORARY LIGHTING SYSTEM FOR EXISTING PARKING DECK LEVEL D
14. TEMPORARY EXIT SIGNAGE FOR EXISTING PARKING DECK LEVEL D
15. TEMPORARY WAY-FINDING SIGNAGE FOR EXISTING PARKING DECK LEVEL D
16. NEW ELECTRICAL LIGHTING AND POWER OUTLET SYSTEMS AT PARKING DECK LEVEL E
17. NEW LIGHTNING PROTECTION SYSTEM AT PARKING DECK LEVEL E
18. NEW SECURITY CAMERA AND EMERGENCY COMMUNICATION SYSTEM CONDUIT AND CONTROL CABLING SYSTEMS
19. MASONRY SYSTEM AT PRECAST CONCRETE COLUMNS. FINAL CLEANING OF MASONRY SYSTEMS
20. ALUMINUM RAILING SYSTEM
21. ELECTRICAL CONDUIT AND POWER WIRING SCHEDULED TO BE ROUTED FROM EXISTING ELECTRIC SERVICE ROOM AT EXISTING PARKING DECK LEVEL B.
22. OTHER BUILDING COMPONENTS SUCH AS PAVEMENT MARKINGS, WAY-FINDING SIGNAGE, FIRE EXTINGUISHERS AND OTHER MISCELLANEOUS ITEMS

PHASE II CONSTRUCTION:

PHASE II CONSTRUCTION WILL BE INCLUDED UNDER "BID ITEM I".
"BID ITEM I" WILL INCLUDE ALL COST FOR PHASE I AND PHASE II CONSTRUCTION WORK.

REFER TO SPECIFICATION SECTION 01 00 00 GENERAL REQUIREMENTS.

THE PHASE II CONSTRUCTION WILL CONSIST OF THE CONSTRUCTION OF THE NEW PARKING GARAGE STRUCTURE.
1. SITE STAGING AND SET-UP
2. CONTRACTOR FIELD DOCUMENTATION OF AS-BUILT CONDITIONS
3. TEMPORARY CONSTRUCTION BARRIERS
4. DEMOLITION WORK
5. SEQUENCE OF NEW CONSTRUCTION WORK

SELECTED WORK COMPONENTS WILL BE SPECIFIED FOR DEMOLITION AND INSTALLATION DURING WEEKEND HOURS OF OPERATION.

PROJECT SITE STAGING AND SET-UP

REFER TO PHASE I CONSTRUCTION SCHEDULE FOR 'PROJECT SITE STAGING AND SET-UP' REQUIREMENTS.

CONTRACTOR FIELD DOCUMENTATION OF AS-BUILT CONDITIONS

A. CONTRACTOR WILL BE REQUIRED TO VERIFY AND CONFIRM EXISTING PARKING LEVELS A, B, C AND D 'AS-BUILT' CONDITIONS OF THE FOLLOWING MAIN BUILDING ELEMENTS AND COMPONENTS:

1. PRECAST CONCRETE COLUMN SPACING
2. PRECAST CONCRETE SHEAR WALLS
3. PRECAST CONCRETE SPANDREL WALLS
4. OVERALL BUILDING / STRUCTURE DIMENSIONS AND ELEVATIONS
5. EXISTING 12" STORM (ST) PIPING STUB LOCATION AND RELATED INVERT ELEVATION
6. EXISTING UNDERGROUND WATER SERVICE PIPING AND FIRE HYDRANT LOCATION
7. EXISTING OIL/WATER SEPARATOR UNIT AND RELATED PIPING INVERT ELEVATIONS
8. ELECTRICAL LIGHTING SYSTEMS AND RELATED CONDUIT AND POWER WIRING INSTALLATION/CIRCUITING
9. ELECTRICAL POWER OUTLET SYSTEMS AND RELATED CONDUIT AND POWER WIRING INSTALLATION/CIRCUITING
10. ELECTRICAL LIGHTNING PROTECTION SYSTEM INSTALLATION/CIRCUITING

TEMPORARY CONSTRUCTION BARRIERS

A. THE FOLLOWING TEMPORARY BARRIERS WILL BE PROVIDED AT EXISTING PARKING LEVEL A, B, C AND D.

1. TEMPORARY BARRIERS WILL REMAIN IN PLACE FOR THE DURATION OF THE CONSTRUCTION PROJECT
2. REFER TO DETAIL DRAWING AD-103 FOR ALL DETAILS NOTES AND REQUIREMENTS.

DEMOLITION WORK

A. PRIOR TO ERECTION OF THE NEW STRUCTURAL CONCRETE FRAMING SYSTEM THE FOLLOWING DEMOLITION AND PREPARATION WORK AT EXISTING PARKING LEVEL A, B, C AND D WILL NEED TO BE PERFORMED:

1. SELECTED EXISTING EXTERIOR PRECAST CONCRETE SPANDREL WALL PANELS AND ASSOCIATED ALUMINUM RAILING SYSTEMS LOCATED AT EXISTING NORTH WALL ELEVATION.

CONSTRUCTION WORK

A. AFTER THE DEMOLITION ACTIVITIES OUTLINED ABOVE HAVE BEEN COMPLETED THE BUILDING SYSTEMS AND ASSOCIATED WORK CAN BE CONSTRUCTED.

1. SITE WORK - PREP
a. CLEARING OF TREES, AND OTHER ITEMS
b. EXCAVATION FOR FOUNDATION WALL SYSTEMS
c. POURED IN-PLACE CONCRETE SIDEWALKS AND PLATFORMS
d. FINAL GRADING AROUND PERIMETER OF SITE
e. FINAL LANDSCAPING

2. CONCRETE WORK:
a. CONCRETE AUGER PILES AND CAPS
b. DEWATER ACTIVITIES WHEN DRILLING AUGER PILES
c. CONCRETE FOOTINGS AND FOUNDATION WALLS
d. CONCRETE FOOTINGS FOR PRECAST CONCRETE COLUMNS AND PRECAST CONCRETE SHEAR WALLS

3. STRUCTURAL WORK:
a. PRECAST CONCRETE COLUMNS
b. PRECAST CONCRETE SHEAR WALLS
c. PRECAST CONCRETE BEAMS/GIRDERS
d. PRECAST CONCRETE SPANDREL WALL PANELS
e. PRECAST CONCRETE DOUBLE TEE MEMBERS
f. PRECAST CONCRETE STAIRWAY UNITS
g. FLOOR DECK EXPANSION JOINT SYSTEM
h. CONCRETE TOPPING AND JOINT SEALANT SYSTEMS AT PARKING DECK LEVELS
i. POURED IN-PLACE CONCRETE SLABS
j. STRUCTURAL STEEL FRAMING FOR STAIRWAY ENCLOSURE AT PARKING DECK LEVEL EE
k. STEEL PIPE BOLLARDS
l. IRON PIPE RAILING SYSTEMS AT STAIRWAY UNITS
m. MISCELLANEOUS STEEL PROTECTION GUARDS AT EXPOSED PIPING SYSTEMS

4. ARCHITECTURAL WORK:
a. MASONRY WORK AT PRECAST CONCRETE COLUMNS AND FINAL CLEANING OF MASONRY
b. ALUMINUM STOREFRONT AND ROOFING SYSTEM AT STAIRWAY ENCLOSURE AT PARKING DECK LEVEL EE
c. ALUMINUM RAILING SYSTEMS
d. DOOR, FRAME AND HARDWARE
e. PAVEMENT MARKINGS
f. WAY-FINDING SIGNAGE
g. FIRE EXTINGUISHER CABINETS
h. WATER REPELLENT SYSTEM
i. TRAFFIC COATING SYSTEM

5. FIRE PROTECTION WORK:
a. FIRE DEPARTMENT WALL CONNECTION UNIT
b. DRY STANDPIPE RISERS AND RELATED PIPING SYSTEM
c. FIRE HOSE CONNECTION UNITS
d. INTERCONNECTION TO EXISTING FIRE PROTECTION DRY STANDPIPE SYSTEMS AT EXISTING PARKING DECK LEVEL B
e. SEALANT SYSTEM AT DECK OPENINGS
f. MISCELLANEOUS FIRE DEPARTMENT SIGNAGE SYSTEMS

6. PLUMBING WORK:
a. UNDERGROUND SANITARY (SS) PIPING SYSTEMS
b. UNDERGROUND STORM (ST) PIPING SYSTEMS
c. ROUGH-IN OF FLOOR DRAINS AND ASSOCIATED PIPING SYSTEMS
d. ROUGH-IN OF ROOF DRAINS AND ASSOCIATED PIPING SYSTEMS
e. SANITARY (SS) PIPING SYSTEMS FOR THE FLOOR DRAINS
f. STORM (ST) PIPING SYSTEMS FOR ROOF DRAINS
g. SANITARY BASIN AT PARKING DECK LEVEL AA
h. UNDERGROUND SANITARY (SS) PIPING SYSTEM FOR SANITARY BASIN TO NEW EXTERIOR OIL/WATER SEPARATOR UNIT
i. UNDERGROUND SANITARY (SS) PIPING FROM NEW OIL/WATER SEPARATOR TO EXISTING OIL/WATER SEPARATOR SYSTEM. NEED TO REVIEW THIS DESIGN.
j. SEALANT SYSTEM AND DECK OPENINGS.

7. ELECTRICAL WORK:
a. CONDUIT AND POWER WIRING FOR LIGHTING AND POWER SYSTEM
b. CONDUIT AND POWER WIRING FOR EXIT SIGNAGE SYSTEMS
c. CONDUIT AND POWER WIRING FOR SANITARY BASIN PUMPS. DUAL PUMPS WILL BE PROVIDED.
d. LIGHTNING PROTECTION SYSTEM AT PARKING DECK LEVEL EE.
e. CONDUIT AND WIRING FOR FIRE ALARM SYSTEM
f. CONDUIT AND WIRING FOR SECURITY CAMERA SYSTEM
g. CONDUIT AND CONTROL WIRING FOR EMERGENCY CALL STATION SYSTEM
h. SEALANT SYSTEM AT DECK OPENINGS.

8. SITE WORK
a. FINAL GRADING
b. SEEDING AND PLANTINGS

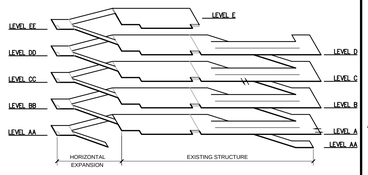
WINTER WORK:

1. WHERE THE COMPLETION OF WORK IN THIS CONTRACT MAKES NECESSARY THE PERFORMANCE OF ALL OR ANY PART OF THE CONTRACT WORK UNDER WINTER CONDITIONS, THEN, EXCEPTING AS SPECIFICALLY OTHERWISE PROVIDED IN THE CONTRACT, THE CONTRACTOR SHALL DO ALL THINGS NECESSARY FOR THE PERFORMANCE AND PROTECTION OF SUCH WINTER WORK WITHOUT ADDITIONAL COMPENSATION OR CLAIM THEREFORE.

2. CONTRACTOR WILL INCLUDE IN THEIR BASE BID PROPOSAL THE COSTS FOR PROVIDING TEMPORARY BARRIERS TO ENCLOSE THE NEW PARKING GARAGE STRUCTURE FOR ANY CONSTRUCTION ACTIVITY REQUIRING A HEATED SPACE, SUCH AS CONCRETE INSTALLATION.

3. CONTRACTOR WILL COMPLY WITH MICHIGAN DEPARTMENT OF TRANSPORTATION AND WASHTENAW COUNTY SEASONAL WEIGHT RESTRICTIONS RULES AND REQUIREMENTS RELATED TO REDUCED LOADING PROVISIONS FOR HEAVY VEHICLES.

4. CONTRACTOR WILL INCLUDE ALL COST ASSOCIATED WITH THE ABOVE WINTER WORK WITHIN THEIR BASE BID PROPOSAL/BID. THERE WILL BE NO CLAIMS APPROVED BY THE VA FOR ADDITIONAL DOLLARS RELATED TO THE WINTER WORK REQUIREMENTS NOTED HEREIN.



BUILDING ISOMETRIC

Revisions:	Date
100% FINAL BID DOCUMENTS	08-18-2017
100% BID DOCUMENTS-NOT FOR CONSTRUCTION	07-24-2017
95% CONSTRUCTION DOCUMENTS SUBMISSION	06-15-2017
65% DESIGN DEVELOPMENT SUBMISSION	04-19-2017
35% SCHEMATIC DESIGN SUBMISSION	03-06-2017

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VA CONTRACT NO. VA250-17-C-0008

Drawing Title: PROJECT CONSTRUCTION SCHEDULE

Approved: Project Director

Project Title: CONSTRUCT NORTH PARKING STRUCTURE

Location: ANN ARBOR, MICHIGAN

Date: 08-18-2017 | Checked: EM | Drawn: AG

Project Number: 506-331

Building Number: 29

Drawing Number: G-004

Office of Construction and Facilities Management

Department of Veterans Affairs

VA FORM 08-6231

100% FINAL BID DOCUMENTS

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