# WAYNE STATE UNIVERSITY

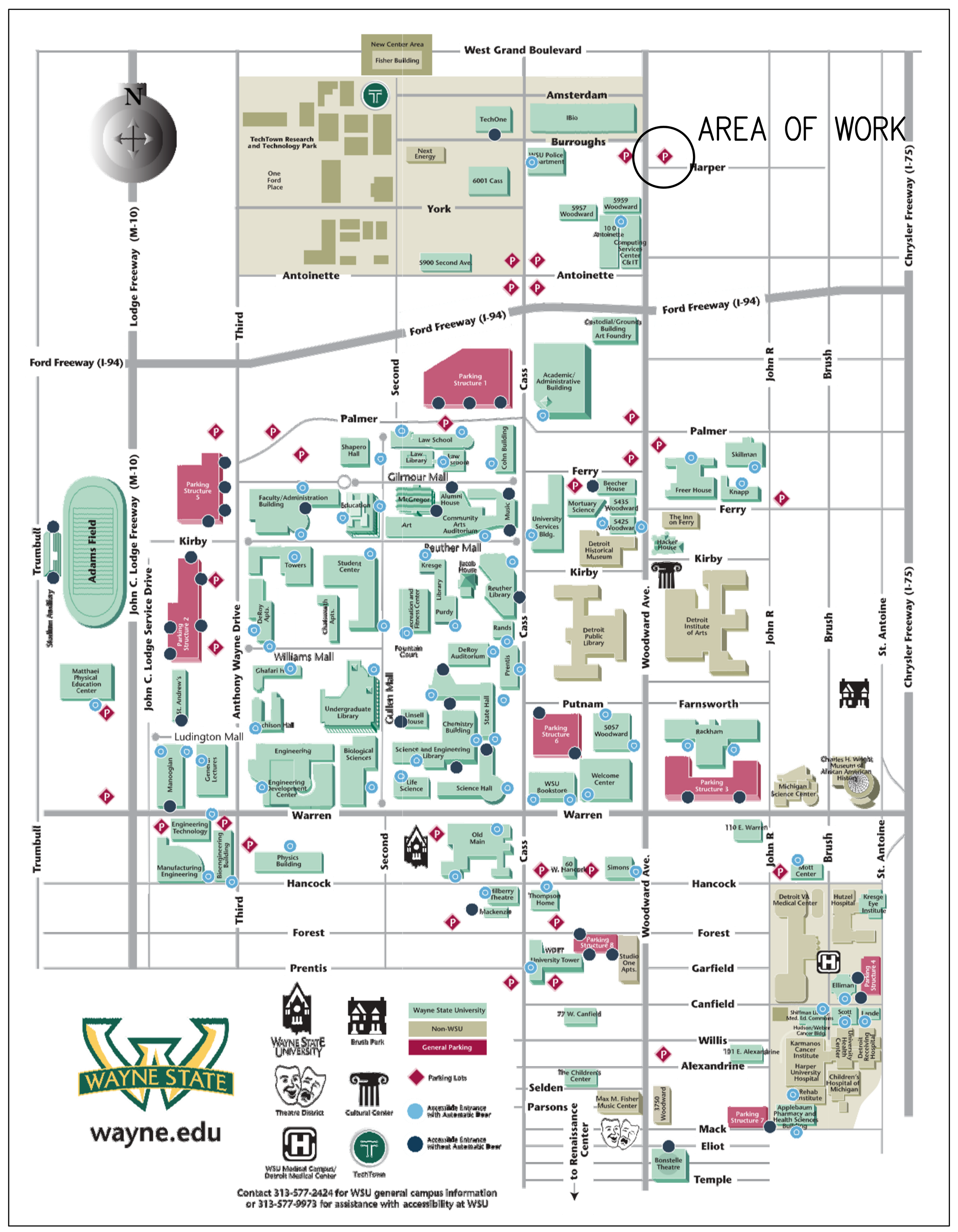
# IBIO
# PARKING LOT 12

6000 WOODWARD AVENUE
DETROIT, MI 48202

# PARKING LOT UPGRADES

WSU Project Number 211–121168
MEP Project Number 1515–1

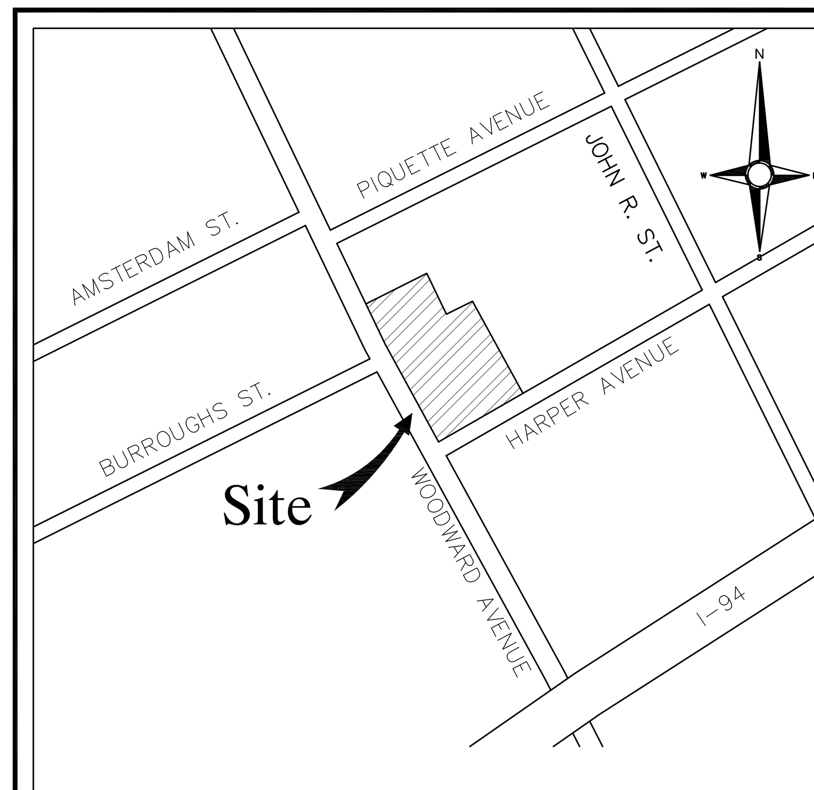
ADDENDUM NO. 1
SEPTEMBER 4, 2015



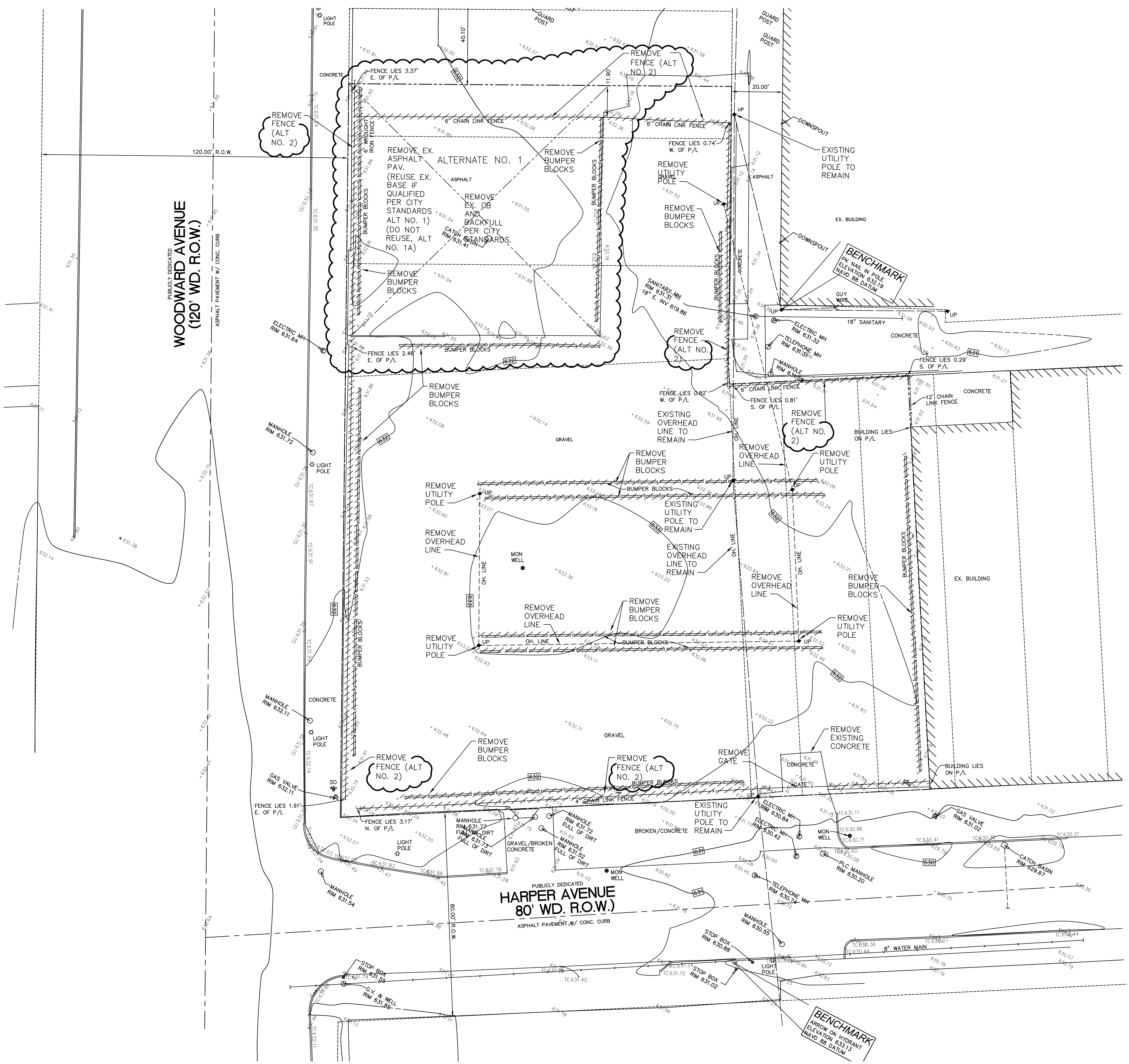

Campus Site Map
N.T.S.

| SHEET No. | SHEET NAME | OWNER REVIEW 08/17/2015 | BID 08/25/2015 | ADDENDUM NO. 1 09/04/2015 | <<ISSUE NAME>> <<ISSUE DATE>> |
|---|---|---|---|---|---|
| T–00 | TITLE SHEET | ● | ● | ● | ◌ |
| CE–01 | CIVIL STANDARD SHEET | ● | ● | ◌ | ◌ |
| CE–02 | SITE REMOVAL PLAN | ● | ● | ● | ◌ |
| CE–03 | SITE PLAN | ● | ● | ● | ◌ |
| CE–04 | GRADING PLAN | ● | ● | ● | ◌ |
| CE–05 | UTILITY PLAN | ● | ● | ● | ◌ |
| CE–06 | PROFILE, STORM CALCS & DRAINAGE DISTRICT PLAN | ● | ● | ◌ | ◌ |
| CE–07 | CIVIL DETAIL SHEET | ● | ● | ◌ | ◌ |
| ES–01 | ELECTRICAL SCHEDULES & STANDARDS | ● | ● | ◌ | ◌ |
| ES–02 | ELECTRICAL SITE PLANS | ● | ● | ● | ◌ |
| ES–03 | ELECTRICAL DETAILS | ● | ● | ◌ | ◌ |
| – | SURVEY PLAN BY NOWAK AND FRAUS (REFERENCE ONLY) | ● | ● | ◌ | ◌ |
| D2455–1 | TRAFFIC & SAFETY SYSTEMS EQUIPMENT LAYOUT | ◌ | ◌ | ● | ◌ |
| D2455–2 | TRAFFIC & SAFETY SYSTEMS EQUIPMENT LAYOUT | ◌ | ◌ | ● | ◌ |
| D2455–3 | TRAFFIC & SAFETY SYSTEMS EQUIPMENT LAYOUT | ◌ | ◌ | ● | ◌ |

ISSUE LEGEND: ○ PREVIOUS ISSUE ● CURRENT ISSUE ◌ POTENTIAL FUTURE ISSUE

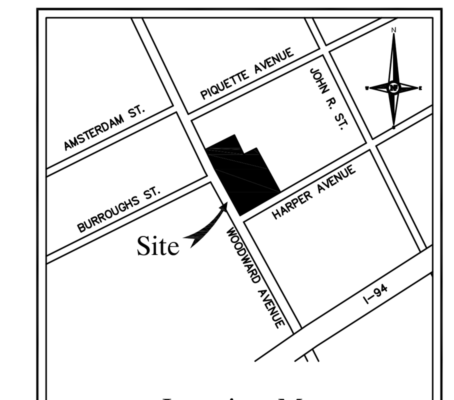



Location Map
N.T.S.




SITE REMOVAL PLAN

SCALE: 1" = 20'-0"




Location Map
N.T.S.

## LEGEND

EX.
- STORM SEWER MANHOLE
- FIRE HYDRANT
- FOUND CAPPED IRON
- FOUND IRON
- SIGN
- LIGHT POLE
- UTILITY POLE
- GATE VALVE
- G — GAS MARKERS
- OHL — OVERHEAD LINES
- T/P — TOP OF PAVEMENT
- T/C — TOP OF CURB
- T/B — TOP OF BANK
- GUT — GUTTER
- E/P — EDGE OF PAVEMENT
- TREE LINE
- XXX.XX — EXISTING GRADE

GRAPHIC SCALE

10 0 5 10 20 40

( IN FEET )
1 inch = 20 ft.

**GENERAL NOTES:**

1. REMOVE ALL EXISTING BUMPER BLOCKS WITHIN PROJECT LIMITS AND DISPOSE OFF SITE .
2. REMOVE ALL EXISTING FENCES WITHIN PROJECT LIMITS AND DISPOSE OUTSIDE. (ALTERNATE NO. 2)
3. REMOVE FIVE ELECTRICAL POLES AND "DE-ENERGIZED" OVERHEAD ELECTRICAL LINES AS NOTED. UTILITY POLES (ONE INSIDE LOT AND TWO OUTSIDE LOT) AND "ENERGIZED" DTE SERVICE THROUGH LOT TO REMAIN AS NOTED.
4. SEE SHEET CE-03 FOR DETAILED DESCRIPTION OF ALL ALTERNATES.

3 WORKING DAYS
**BEFORE YOU DIG**
**CALL MISS DIG.**
**1-800-482-7171**
ALTERNATE NUMBER (810) MISS-DIG
COLOR CODES FOR UTILITY LOCATING:

| | | | |
|---|---|---|---|
| Yellow | OIL & GAS | Blue | WATER |
| Orange | PHONE & CATV | Green | STORM DRAIN |
| Red | ELECTRIC | Brown | SEWER |
| | | Pink | SURVEYING |

IF YOU ARE GOING TO WORK NEAR OVERHEAD WIRES ... CALL MISS DIG

THE LOCATION OF SELECT UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

NOTICE:
CONSTRUCTION SITE SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR; NEITHER THE OWNER NOR THE ENGINEER SHALL BE RESPONSIBLE FOR THE SAFETY OF THE WORK, OF ANY NEARBY STRUCTURES, OR ANY OTHER PERSONS.

CAUTION!!!
THE LOCATIONS AND ELEVATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THIS DRAWING ARE ONLY APPROXIMATE. NO GUARANTEE IS EITHER EXPRESSED OR IMPLIED AS TO THE COMPLETENESS OR ACCURACY THEREOF. THE CONTRACTOR SHALL BE EXCLUSIVELY RESPONSIBLE FOR DETERMINING THE EXACT UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION.

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FAX: 248.488.9811
www.mepmi.com

Seal/Registration

PROJECT TITLE

**IBIO - LOT 12 PARKING IMPROVEMENTS**

6000 Woodward Avenue
Detroit, MI 48202

KEY PLAN

SHEET TITLE

**SITE REMOVAL PLAN**

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| 08/25/15 | BID |
| 08/17/15 | OWNER REVIEW |

DRAWN
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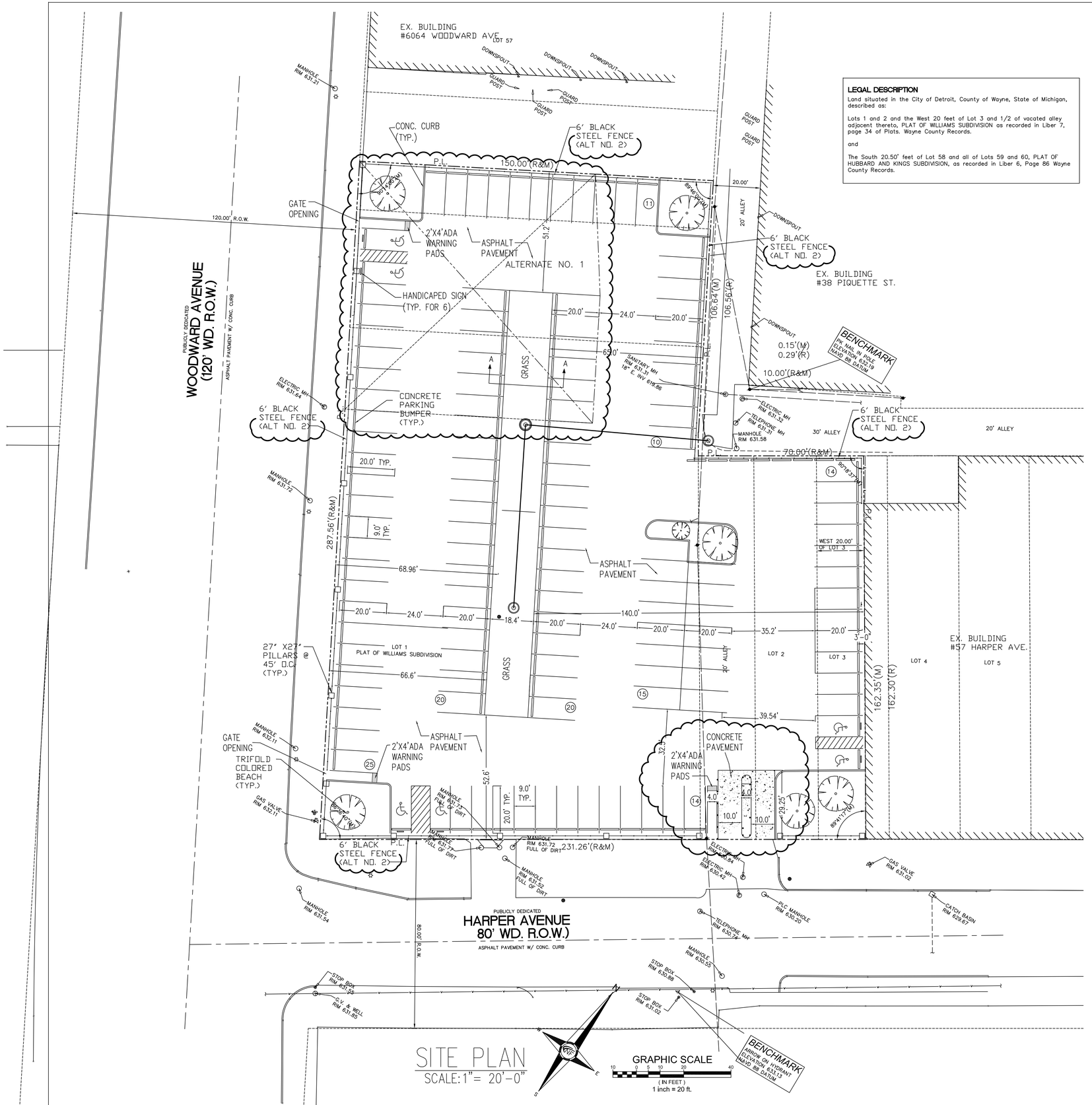
**1515-1**

SHEET NO.
**CE-02**




## SITE PLAN
SCALE: 1" = 20'-0"

**LEGAL DESCRIPTION**

Land situated in the City of Detroit, County of Wayne, State of Michigan, described as:

Lots 1 and 2 and the West 20 feet of Lot 3 and 1/2 of vacated alley adjacent thereto, PLAT OF WILLIAMS SUBDIVISION as recorded in Liber 7, page 34 of Plats. Wayne County Records.

and

The South 20.50' feet of Lot 58 and all of Lots 59 and 60, PLAT OF HUBBARD AND KINGS SUBDIVISION, as recorded in Liber 6, Page 86 Wayne County Records.

COMMENTS:

1. 129 PARKING SPACES.
2. ALL SURFACE DRAINING WILL FLOW DIRECTLY TO PARTIAL RETENTION AREA.
3. TWO CATCH BASINS ARE PROVIDED IN RETENTION AREA WITH A CONNECTING STORM LINE TO EXISTING LINE AT THE NORTHEAST PART OF THE SITE.
4. PAVEMENT SECTION WILL CONSIST OF 8"OF 21AA CRUSHED LIMESTONE 4"OF BITUMINOUS (ASPHALTIC) PER SECTION SHOWN.
5. RETENTION AREA TO BE LINED WITH GRASS.
6. LANDSCAPING TO BE PROVIDED WITH ISLANDS, CORNERS AS SHOWN, ETC.

## GENERAL NOTES

1. CONTRACTOR SHALL CONDUCT WORK IN MANNER THAT AVOIDS INJURY OR DAMAGE TO ADJACENT PROPERTY OR IMPROVEMENTS, BUILDINGS, TREES, SHRUBBERY, POLE LINES, FENCES, GUIDE POSTS, DRAINAGE STRUCTURES, PAVEMENTS, AND OTHER OBJECTS ON OR ADJACENT TO THE WORK SITE, THAT ARE NOT DESIGNATED FOR REMOVAL, SHALL BE PROTECTED FROM INJURY OR DAMAGE. THE CONTRACTOR SHALL PROVIDE AND INSTALL SUITABLE SAFEGUARD TO PROTECT ANY OBJECT FROM INJURY OR DAMAGE.
2. CONTRACTORS SHALL PROTECT EXISTING PAVEMENT AND PAVEMENT EDGES AGAINST DAMAGE OR MARKING FROM EQUIPMENT WITH STEEL TRACKS AND FROM EQUIPMENT LOADED IN EXCESS OF STRENGTH OF PAVEMENT OR PAVEMENT EDGE. CONTRACTOR SHALL RESTORE ANY AREAS AND ROUTES TO THIER ORIGINAL CONDITION BEFORE FINAL ACCEPTANCE OF THE WORK.
3. CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR PROJECT FROM CITY OF DETROIT, DETROIT WATER AND SEWER DEPARTMENT AND OTHER DEPARTMENTS HAVING JURISDICTION OVER WORK.
4. CONTRACTOR SHALL PROVIDE ALL BARRICADES, CONSTRUCTION FENCING, SIGNING, CONES, WARNING FLASHERS, ETC. REQUIRED BY OWNER AND GOVERNMENT ENTITIES TO MAINTAIN A SAFE AND SECURE FACILITY. IT IS CONTRACTOR'S RESPONSIBILITY TO MAINTAIN BARRICADES, FENCING, ETC. TO A CONDITION ACCEPTABLE TO OWNER AND OWNER'S REPRESENTATIVE.
5. CONTRACTOR SHALL BACKFILL ALL EXCAVATIONS, SITE DEPRESSIONS, AND OTHER CONDITIONS AS NECESSARY WITH AGGREGATE FROM EXISTING PAVEMENT COMPACTED TO 95% MODIFIED PROTRACTOR TO ACHIEVE BOTTOM OF BASE GRADE ELEVATIONS. BACKFILL OF SITE SHALL BE PERFORMED IN A CONTROLLED MANNER IN ACCORDANCE WITH CONTRACT SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SUFFICIENT NOTICE TO OWNER AND OWNER'S REPRESENTATIVE TO PERFORM CONSTRUCTION INSPECTION AND MATERIALS TESTING OF MATERIAL INSTALLATION.
6. CONTRACTOR SHALL INSTALL NEW ORNAMENTAL FENCING AS DETAILED ON CONSTRUCTION DRAWINGS. ORNAMENTAL FENCE SHALL BE APPROVED BY WAYNE STATE UNIVERSITY.
7. IT IS CONTRACTORS RESPONSIBILITY TO ENSURE PLACEMENT AND COMPACTION OF BACKFILL MATERIALS COMFORM TO CONTRACT SPECIFICATIONS AND CONSTRUCTION DRAWINGS, INCLUDING DENSITIES. THOUGH THE OWNER MAY CHOOSE TO ENGAGE INDEPENDENT MATERIALS TESTING SERVICES DURING THE SITE RESTORATION PHASE OF PROJECT, THIS IN NO WAY ALLEVIATES CONTRACTOR FROM THIS RESPONSIBILITY.
8. CONTRACTOR SHALL PROVIDE OWNER WITH "AS-BUILT" SITE DRAWINGS UPON COMPLETION OF DEMOLITION AND SITE RESTORATION ACTIVITIES.
9. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES, STRUCTURES, AND TREES TO REMAIN. CONTRACTOR SHALL, AT HIS EXPENSE, REPLACE ANY UTILITY OR STRUCTURE DAMAGED DURING CONSTRUCTION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL WORK FOR THE PROJECT AND SITE DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, RESTORING AND PROVIDING POWER TO ALL SITE LIGHTING AND PARKING LOT ACCESS EQUIPMENT.

PROJECT ALTERNATES:

BASE BID: PAVING/STORM OF EXISTING GRAVEL LOT 12 – REMOVAL OF BUMPER BLOCKS, 5 LIGHT POLES AND OVERHEAD WIRE. GRADING AND ASPHALT PAVING. STRIPING AND SIGNAGE. CONCRETE PAVING OF ENTRY, TRAFFIC ISLAND AND CURBED AREAS. STORM SEWER SYSTEM AND CONNECTION TO EXISTING SYSTEM.

ALT NO. 1: PAVING OF EXISTING ASPHALT LOT – REMOVAL OF EXISTING ASPHALT AND CATCH BASIN. REUSE EXISTING PAVING BASE. GRADING AND ASPHALT PAVING. STRIPING OF LOT AND SIGNAGE. CONCRETE PAVING OF CURBED AREAS.

ALT NO. 1A – PROVIDE NEW PAVING BASE.

ALT NO. 2: 6' BLACK STEEL FENCE AND PIERS – REMOVAL OF CHAIN LINK FENCE AROUND GRAVEL LOT AND BLACK STEEL FENCE AT ASPHALT LOT. 6' BLACK STEEL FENCE WITH PIERS ALONG WEST AND SOUTH SIDES OF LOT (WOODWARD AND HARPER). 6' BLACK STEEL FENCE ALONG NORTH AND EAST ENDS OF LOT.

ALT NO. 3: LOT LIGHTING – LIGHT FIXTURES, POLES, FOUNDATIONS AND UNDERGROUND WIRING FOR LOT AND ENTRY ISLAND. INCOMING SERVICE FROM DTE, METER AND DISTRIBUTION PANELBOARD. LIGHTING CONTROL PANEL. UNDERGROUND CONDUITS FOR FUTURE ELECTRIC VEHICLE CHARGING STATIONS, CAMERAS AND GUARD HUT. (SEE ELECTRICAL DRAWINGS)

ALT NO. 4: GATES – GATE ACCESS SYSTEM (PEDESTAL CARD READERS, GATE ARMS AND CONTROLS) BY TRAFFIC AND SAFETY CONTROL SYSTEMS, INC. UNDERGROUND CONDUITS AND WIRING BETWEEN GATE EQUIPMENT AND BACK TO DISTRIBUTION PANELBOARD AND COMMUNICATIONS CABINET. ENCLOSURE FOR ALL COMMUNICATION AND CONTROL EQUIPMENT (COMMUNICATIONS CABINET). CONDUIT ACROSS LOT AND HANDHOLE AT NORTHWEST CORNER OF LOT FOR FUTURE FIBER CROSSING OF WOODWARD AVENUE. (SEE ELECTRICAL DRAWINGS)

ALT NO. 5: LANDSCAPING – TREES IN GRASSY ISLANDS

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Seal/Registration

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6000 Woodward Avenue
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KEY PLAN

SHEET TITLE
**SITE PLAN**

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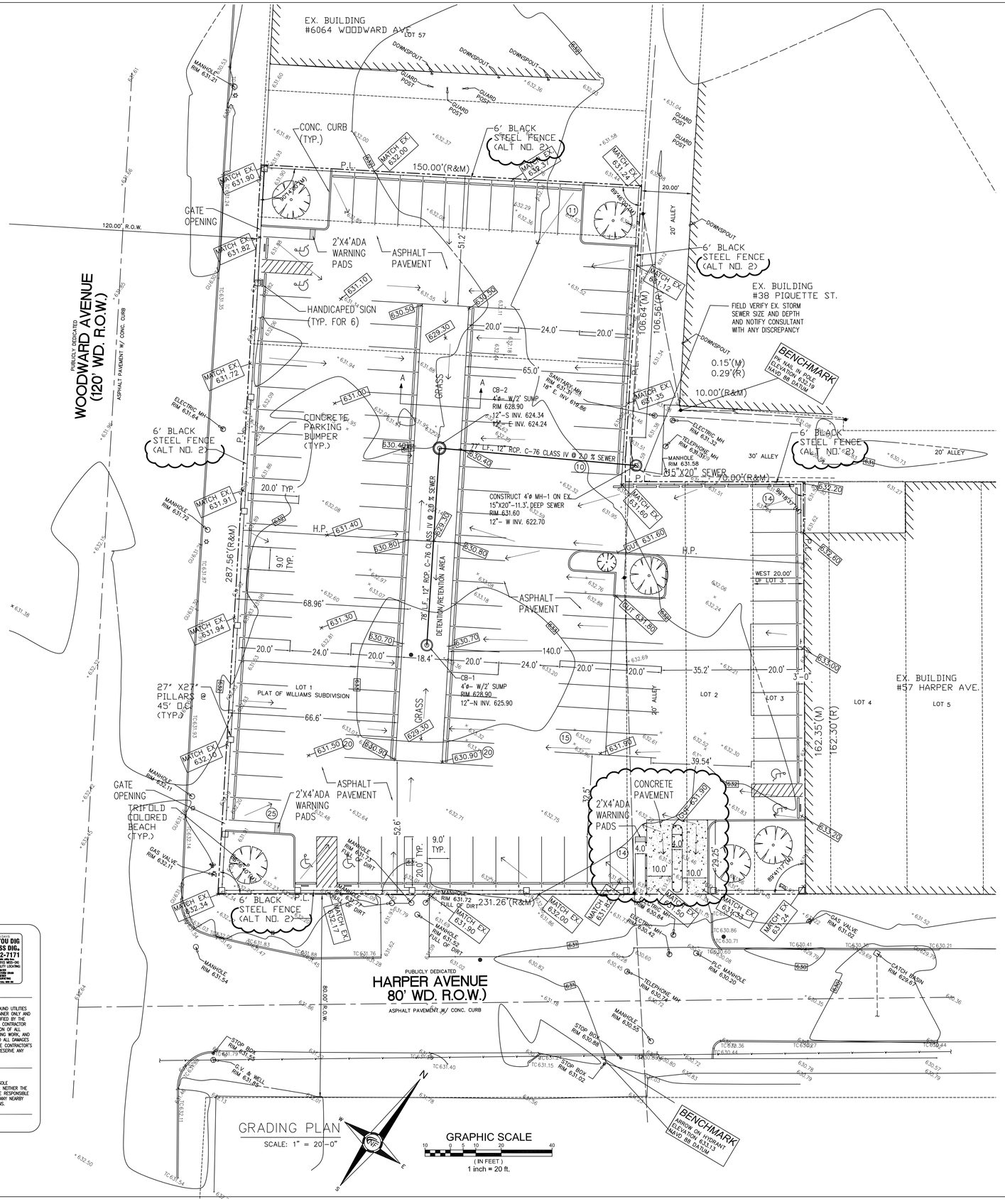
**CE-03**

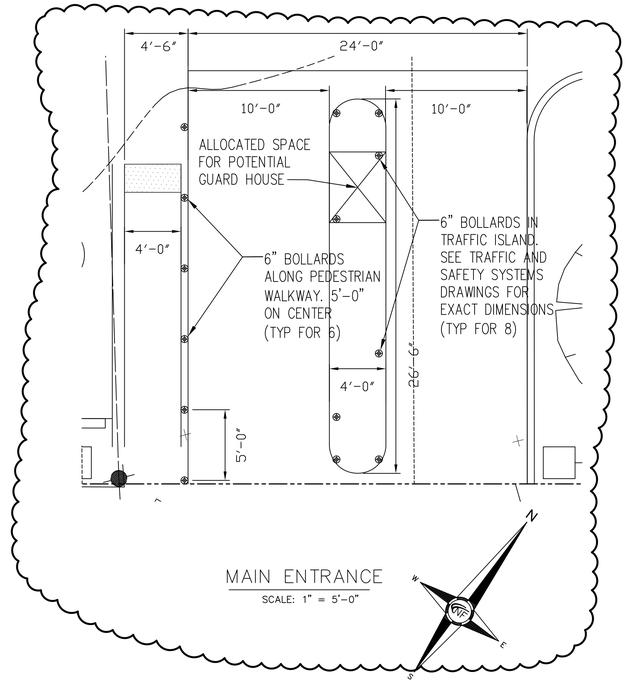



**NOTES:**

1. PURPOSE INCLUDES UPGRADE AND IMPROVEMENT OF EXISTING PAVEMENT, FENCING, CURB, AND OTHER SITE FEATURES.
2. CONTRACTOR SHALL PROVIDE NECESSARY TRAFFIC CONTROL AND SIGNAGE TO MAINTAIN ACCESS TO AND WITHIN PROPERTY DURING CONSTRUCTION. CONTRACTOR SHALL PROVIDE APPROPRIATE BARRICADES AROUND WORK ARE AS FOR PEDESTRIAN AND VEHICULAR SAFEVTY.
3. CONTRACTOR SHALL ADHERE TO ALL WAYNE STATE UNIVERSITY, CITY, COUNTY AND STATE ORDINANCES GOVERNING HOURS OFOPERATION.
4. UTILITY LOCATIONS SHOWN ON PLANS ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITY OWNERS TO HAVE NECESSARY UTILITIES STAKED PRIOR TO STARTING ANY WORK.
5. CONTRACTOR SHALL PROTECT, OR HAVE RELOCATED, ANY UTILITIES INTERFERING WITH CONSTRUCTION.
6. CONTRACTOR SHALL PROVIDE SILT FENCES AND OTHER SOIL EROSION AND SEDIMENTATION CONTROL (SESC) MEASURES AROUND WORK AREA TO COMPLY WITH CITY OF DETROIT REQUIREMENTS. CONTRACTOR SHALL MAINTAIN SESC DEVICES DURING DURATION OF PROJECT AND REMOVE TEMPORARY SESC MEASURES AT COMPLETION OFPROJECT.
7. CONTRACTOR SHALL USE APPROPRIATE CONSTRUCTION METHODS AND EQUIPMENT ANDTAKE NECESSARY PRECAUTIONS TO AVOID DAMAGE TO EXISTING STRUCTURES DESIGNATED TO REMAIN. ANY DAMAGE OCCURRING AS A RESULT OF. CONTRACTOR SHALL BE REPAIRED AT NO ADDITIONAL COST TO THE OWNER.
8. DURING CONSTRUCTION ,CONTRACTOR SHALL MAINTAIN SITE GRADING TO ENSURE STORM WATER WILL DRAIN FROM SITE ADEQUATELY. LOCAL DEPRESSIONS SHALL BE AVOIDED TO PREVENT PONDING. DRAINAGE SHALL BE ROUTED TO A COMMON COLLECTION BASIN ORSYSTEM.
9. CONTRACTOR SHALL PERFORM ALL OTHER DEMOLITION AND/OR REMOVALS AS INDICATED ON THE PLANS. ALL EXCESS MATERIALS ARE TO BE REMOVED FROM SITE AND DISPOSED OF IN AN ENVIRONMENTALLY APPROPRIATE MANNER AS DETERMINED BY WAYNE STATE UNIVERSITY AND CITY OFDETROIT. REMOVAL AND DISPOSAL OF EXCESS MATERIALS WILL BE CONSIDERED INCIDENTAL.
10. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NECESSARY CONSTRUCTION STAKING, GRADE, AND ALIGNMENT CONTROLS. CONTRACTOR SHALL PROVIDE SUFFICIENT GRADE AND ALIGNMENT REFERENCES BY MEANS OF STAKES, STRINGLINES AND OTHER APPROVEDMEANS.
11. CONTRACTOR IS REQUIRED TO PROVIDE TRAFFIC CONTROL FOR COMPLETION OF CONSTRUCTION IN ACCORDANCE WITH LOCAL, COUNTY AND STATE REQUIREMENTS.
12. ALLWORK SHALL BE DONE IN ACCORDANCE WITH CURRENT STANDARDS, SPECIFICATIONS AND GENERAL CONDITIONS OF WAYNE STATE UNIVERSITY, CITY OF DETROIT, AND OTHER GOVERNING AGENCIES.

**NOTES:**

1. GRADES ARE PROVIDED FOR INFORMATION ONLY .CONTRACTOR SHALL MATCH EXISTING GRADES AS PRACTICAL AND ELIMINATE ALL EXISTING PAVEMENT DEPRESSIONS AND LOW SPOTS BY RE-GRADING SUBGRADE AND BASE WHERE NECESSARY.
2. STANDARD PARKING SPACE SIZE OF 9'-0"X 20' USED UNLESS NOTED.
3. CONTRACTOR SHALL MATCH GRADES AT EXISTING SAW CUT EDGES, CONCRETE COLLARS, AND STRUCTURES.
4. DIMENSIONS GIVEN FOR CARD READERS AND ACCESS CONTROL GATES ARE TYPICAL. FIELD CONDITIONS MAY WARRANT MODIFICATIONS AND FINAL LOCATIONS. CONTRACTOR TO GET APPROVAL BY WSU.
5. ADA COMPLIANT HANDICAPPED SIGNS TO BE MOUNTED TO FENCE UNLESS CODE REQUIRES OTHERWISE. MINIMUM HEIGHT FROM GROUND ELEVATION TO BOTTOM OF SIGN SHALL BE 48".




BEFORE YOU DIG CALL MISS DIG. 1-800-482-7171
ALTERNATE NUMBER (DTE) MISS-DIG
COLOR CODES FOR UTILITY LOCATING

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**GRADING PLAN**

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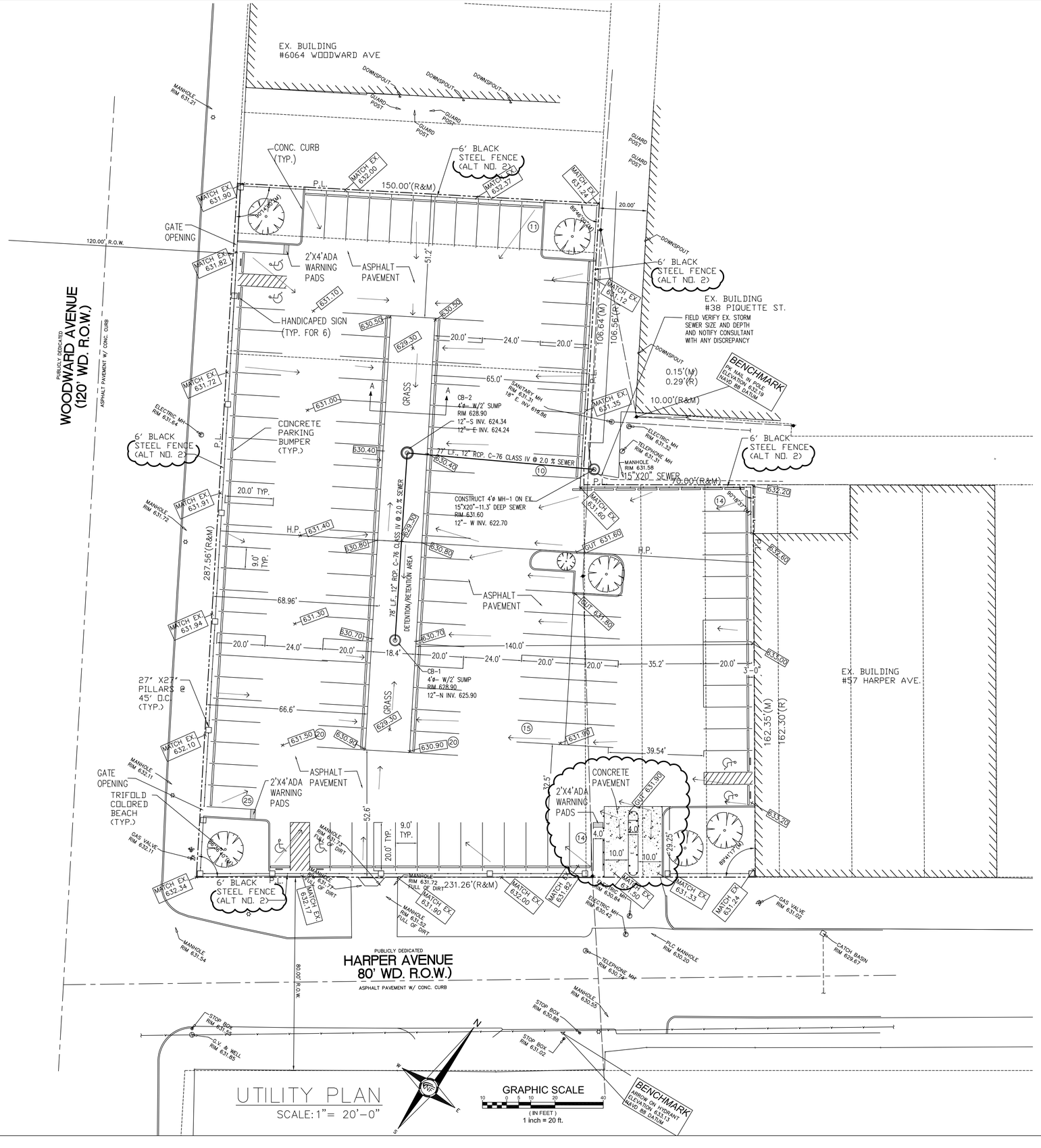
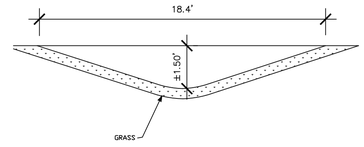



# UTILITY PLAN

SCALE: 1"= 20'-0"




SECTION A-A
PARTIAL RETENTION AREA

## ESTIMATED QUANTITIES:

STORM SEWER:

| DESCRIPTION | QUANTITY | UNITS |
|---|---|---|
| 12" RCP C-76 CLASS IV SEWER | 155 | L.F. |
| 4' DIA CATCH BASIN | 2 | EA. |
| 4' DIA MANHOLE | 1 | EA. |

PAVING:

| DESCRIPTION | QUANTITY | UNITS |
|---|---|---|
| 8" AGGREGATE BASE, 21 AA | 48,247 | SF |
| 4" ASPHALT PAVEMENT | 48,133 | EA. |
| 8" CONCRETE PAVEMENT | 114 | SF |
| 6"CONCRETE CURBT | 385 | LF |
| 8' CONCRETE PARKING BUMPERS | 107 | EA. |

FENCES:

| DESCRIPTION | QUANTITY | UNITS |
|---|---|---|
| 6' BLACK STEEL FENCE | 847 | L.F. |
| 27"X27' FENCE PILLARS | 14 | EA. |


3 WORKING DAYS
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CALL MISS DIG.
1-800-482-7171
OR
ALTERNATE NUMBER (810) MISS-DIG
COLOR CODES FOR UTILITY LOCATING
Color PLS OR DATA
Red ELECTRIC
Yellow GAS, OIL, STEAM
Orange COMMUNICATIONS
Blue WATER
Green SEWER
IT IS THE LAW (ACT 53 OF 1974, AS AMENDED) TO NOTIFY MISS DIG SYSTEM, INC. (313) 559-2300 OR 800-482-7171 AT LEAST THREE WORKING DAYS, BUT NOT MORE THAN TEN CALENDAR DAYS, BEFORE YOU EXCAVATE, DRILL, OR BLAST.

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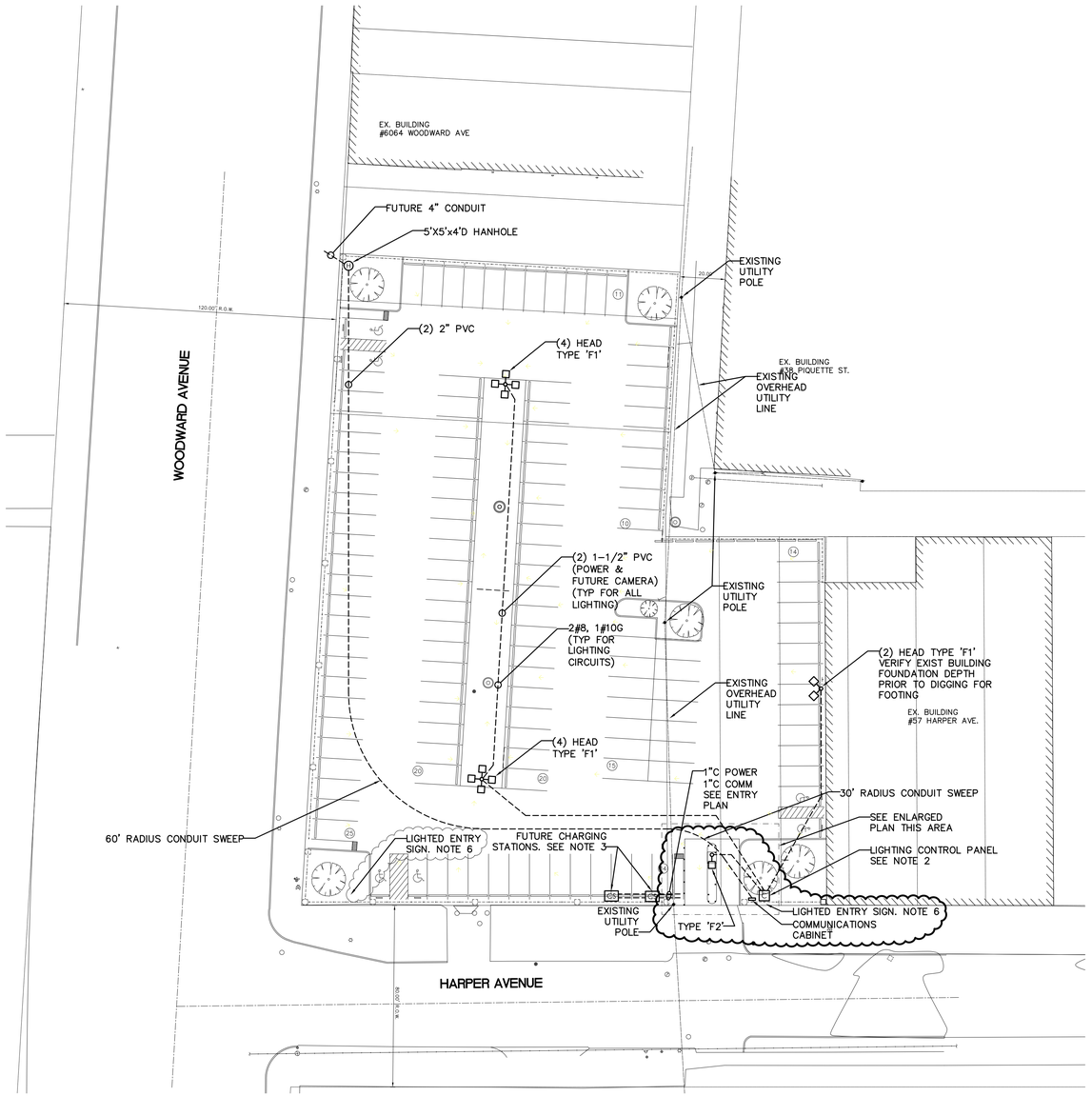
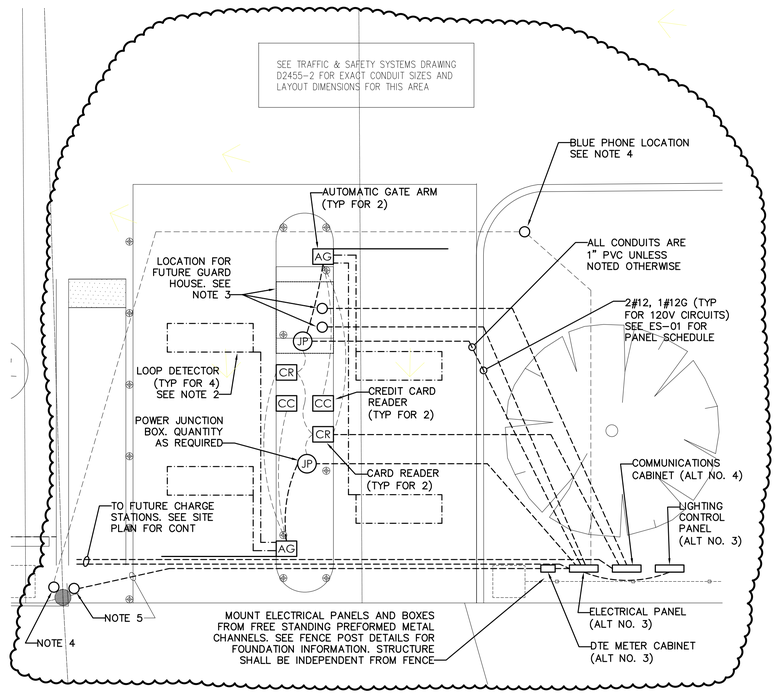



1 ELECTRICAL SITE PLAN
SCALE: 1" = 30'

GRAPHIC SCALE
15 0 7.5 15 30 60
( IN FEET )
1 inch = 30 ft.




2 ENTRY PLAN
SCALE: 1" = 5'

GRAPHIC SCALE
2.5 0 1.25 2.5 5 10
( IN FEET )
1 inch = 5 ft.

NOTES:

1. SEE SHEET ES-01 FOR ELECTRICAL SPECIFICATIONS AND SCHEDULES
2. SEE SHEET ES-03 FOR ELECTRICAL DETAILS AND WIRING DIAGRAMS
3. PROVIDE CONDUIT STUB-UPS ONLY AT LOCATIONS FOR FUTURE 'CLIPPER CREEK' VEHICLE CHARGING STATIONS AND GUARD HOUSE. ONE POWER AND ONE COMMUNICATIONS.
4. PROVIDE POWER AND COMMUNICATIONS CONDUITS FOR FUTURE BLUE EMERGENCY PHONE. POWER CONDUIT SHALL RUN TO POWER PANEL AND COMMUNICATIONS CONDUIT SHALL RUN TO BASE OF EXISTING UTILITY POLE.
5. PROVIDE 2" RIGID STEEL CONDUIT UP UTILITY POLE AND 2" PVC TO METER BOX AND PANELBOARD FOR DTE SERVICE. PROVIDE 3#2, 1#6G. FINAL CONNECTION AT POLE AND METER TO BE PROVIDED BY DTE.
6. PROVIDE 120V CIRCUITS FOR (2) LIGHTED SIGNS. ONE SIGN AT VEHICLE ENTRY AND ONE AT SOUTHWEST CORNER OF LOT. SEE TRAFFIC AND SAFETY SYSTEMS DRAWINGS FOR LOCATION AND DETAILS.

PROJECT ALTERNATES

BASE BID: PAVING/STORM OF EXISTING GRAVEL LOT 12 (SEE CIVIL – NO ELECTRICAL)
ALT NO. 1: PAVING/STORM OF EXISTING ASPHALT LOT (SEE CIVIL – NO ELECTRICAL)
ALT NO. 2: 6' BLACK STEEL FENCE AND PIERS (SEE CIVIL – NO ELECTRICAL)
ALT NO. 3: LOT LIGHTING – INCLUDES THREE TYPE 'F1' AND ONE TYPE 'F2' POLES, FIXTURES AND UNDERGROUND WIRE AND CONDUIT, INCOMING DTE SERVICE WITH PANELBOARD, LIGHTING CONTROL PANEL AND INTERCONNECTING WIRING, UNDERGROUND CONDUITS FOR FUTURE CHARGING STATIONS, CAMERAS AND GUARD HOUSE.
ALT NO. 4: GATES – INCLUDES COMMUNICATOINS CABINET, UNDERGROUND POWER AND CONDUITS FOR CARD READERS, GATE ARMS AND BLUE PHONE, CONDUIT TO AND HANDHOLE FOR FUTURE WOODWARD FIBER CROSSING.
ALT NO. 5: LANDSCAPING/TREES (SEE CIVIL – NO ELECTRICAL)

WAYNE STATE UNIVERSITY
WSU PROJECT #211-121168

MEP Engineers, LLC
Mechanical|Electrical|Plumbing
ENGINEERING & CONSTRUCTION SERVICES
30403 West 13 Mile Road
Farmington Hills, Michigan 48334
PH: 248.488.9822
FAX: 248.488.9811
www.mepmi.com

Seal/Registration

PROJECT TITLE

**IBIO - LOT 12 PARKING IMPROVEMENTS**

6000 Woodward Avenue
Detroit, MI 48202

KEY PLAN

SHEET TITLE

ELECTRICAL SITE PLAN

| DATE: | ISSUED FOR: |
|---|---|
| 09/04/15 | ADDENDUM NO. 1 |
| 08/25/15 | BID |
| 08/17/15 | OWNER REVIEW |

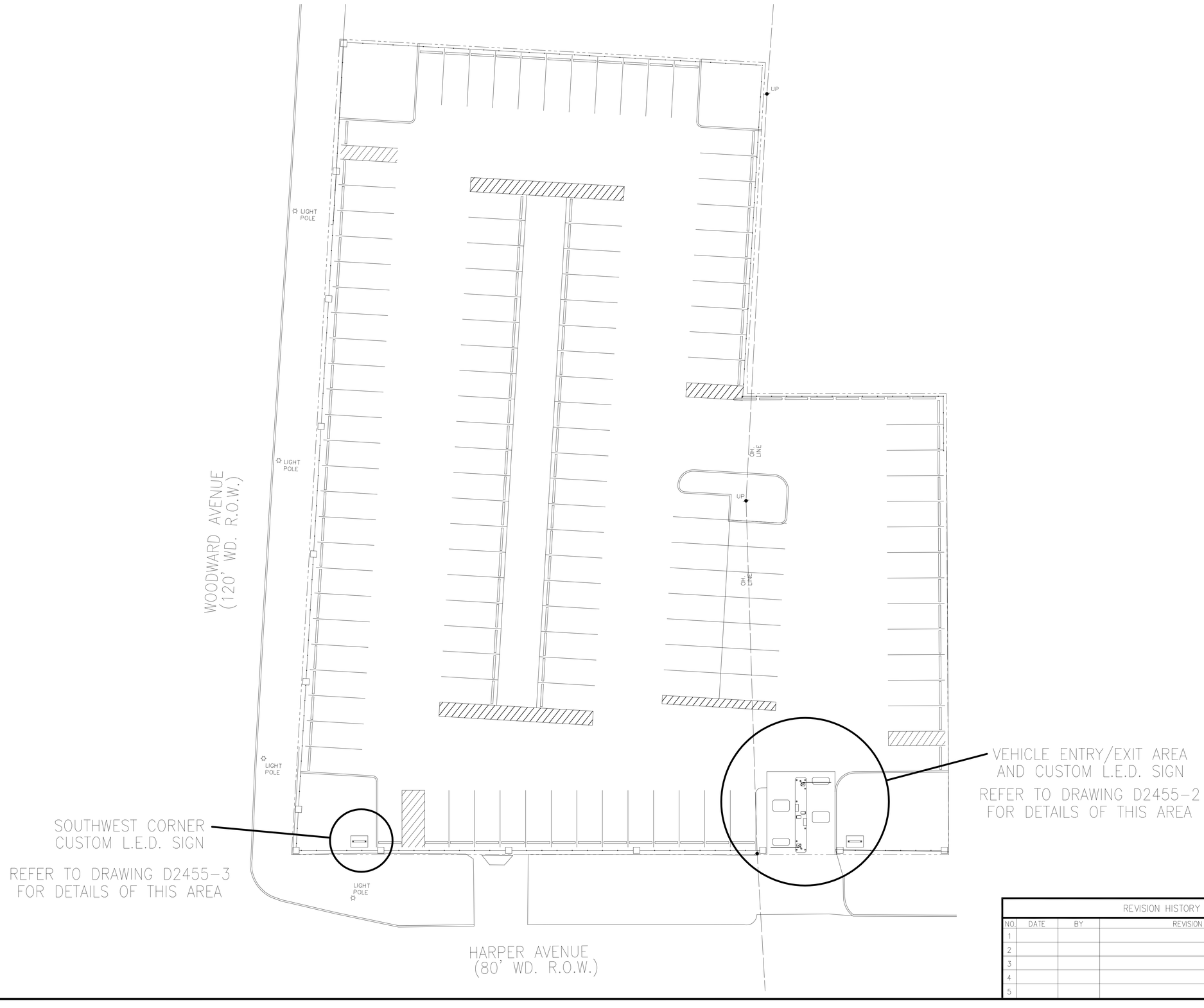
DRAWN S.P.P-K.
CHECKED S.P.P-K.
APPROVED S.M.

MEP PROJECT NO.

**1515-1**

SHEET NO.

ES-02




| REVISION HISTORY | | | |
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**TRAFFIC & SAFETY CONTROL SYSTEMS, INC.**
48584 DOWNING
WIXOM, MI 48393-3501
(248) 348-0570

TITLE
WAYNE STATE UNIVERSITY – LOT 12
PROPOSED PARKING CONTROL EQUIPMENT LAYOUT DETAILS

| BY | DATE | SCALE | DRAWING NO. | CHECKER | SHEET | OF | PLOT SCALE |
|---|---|---|---|---|---|---|---|
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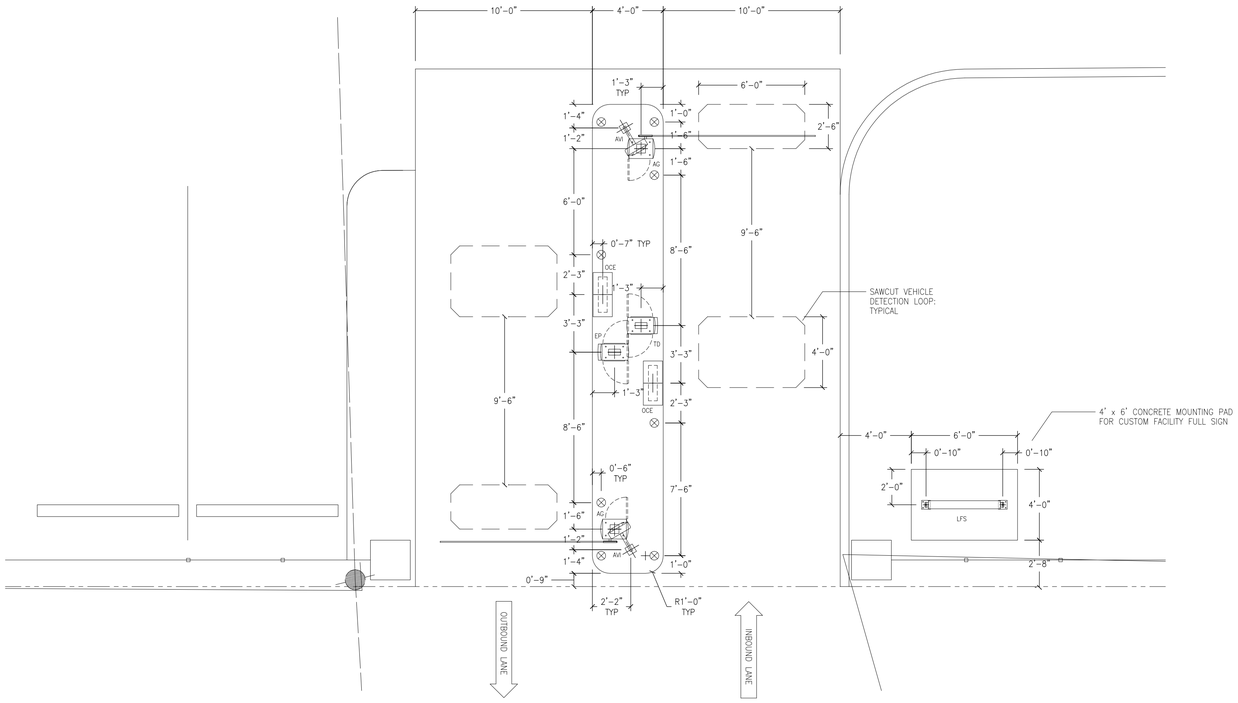
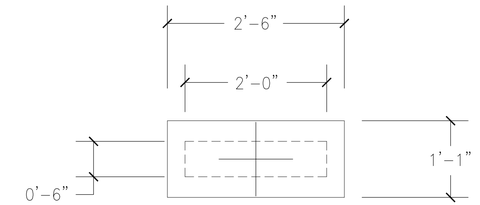


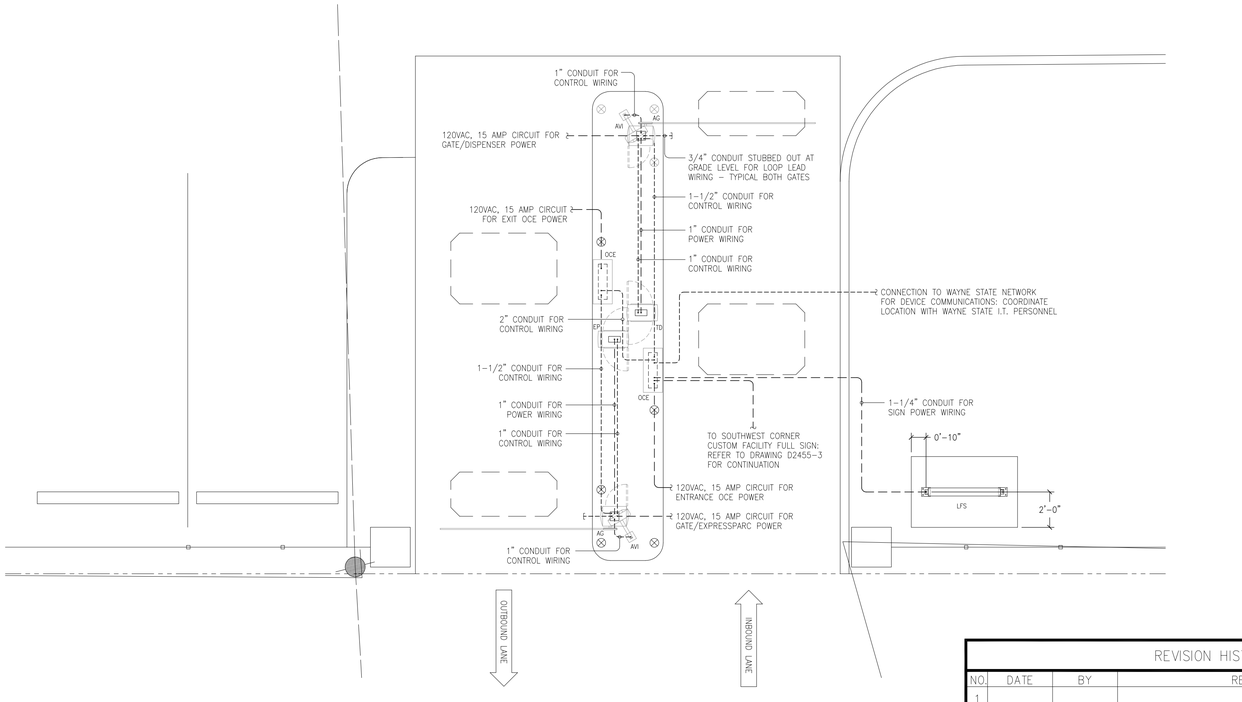

A D2455-2 VEHICLE ENTRY/EXIT AREA DIMENSIONAL LAYOUT DETAIL




C D2455-2 ONE CARD ENCLOSURE FOOTPRINT

LEGEND:

- 6" DIA. CONCRETE FILLER PROTECTIVE POST (PROVIDED BY OTHERS) ⊗
- AMG-2000 SERIES ENTRY TICKET DISPENSER — TD
- AMG-4000 SERIES EXPRESSPARC EXIT STATION — TD
- WSU 'ONE CARD' READER W/EQUIPMENT ENCLOSURE — OCE
- RFID READER W/"SIDEFIRE" GOOSENECK STAND — AVI
- CUSTOM L.E.D. FACILITY FULL SIGN — LFS
- AMG-1750 BARRIER GATE OPERATOR — AG




B D2455-2 VEHICLE ENTRY/EXIT AREA ELECTRICAL LAYOUT DETAIL

GENERAL NOTES:

1. KEEP CONDUIT STUBS A MAXIMUM OF 2" ABOVE ISLAND SURFACE.
2. CONDUITS MUST BE CLUSTERED AT CENTER OF EQUIPMENT LOCATIONS UNLESS OTHERWISE INDICATED.
3. ALL POWER CONDUITS AND WIRES MUST BE KEPT A MINIMUM OF 1'-6" FROM DETECTION LOOPS.
4. LEAVE 6' OF CABLE AT EQUIPMENT LOCATIONS.
5. ALL POWER RUNS, CONDUITS, POSTS, WIRES AND CONCRETE ISLANDS ARE BY OTHERS.
6. CONCRETE ISLANDS MUST BE LEVEL UNDER EQUIPMENT LOCATIONS.
7. LANE TRAFFIC DELINEATIONS ARE BY OTHERS.
8. ALL POWER RUNS SHALL HAVE HOT, NEUTRAL, AND GROUND CONDUCTORS.
9. ALL DIMENSIONS ARE TYPICAL UNLESS OTHERWISE INDICATED.
10. IF ANY COMMUNICATION WIRE ENDS IN AN OFFICE, LEAVE 20' OF CABLE FOR LOCATIONAL PURPOSES.

REVISION HISTORY

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|---|---|---|---|---|---|---|---|
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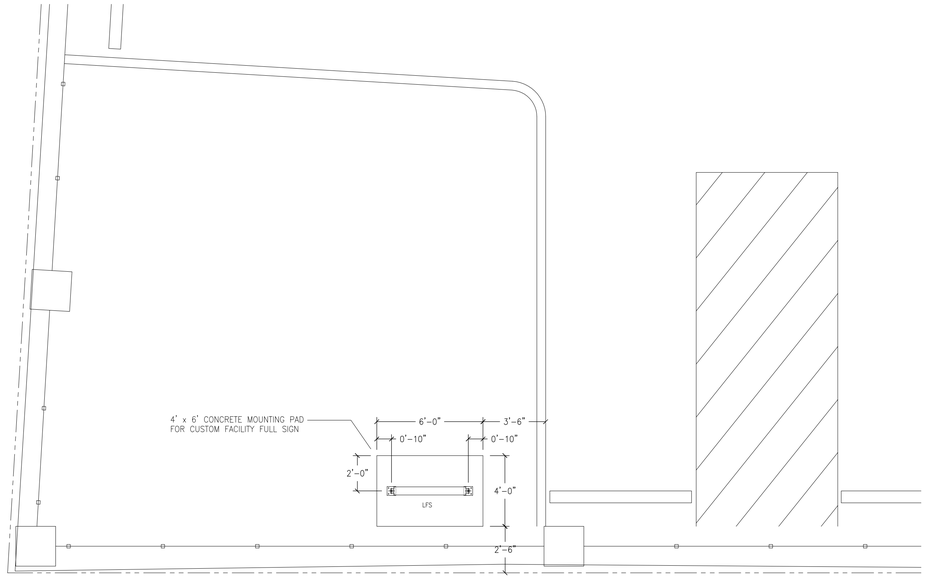


A — D2455-3 — SOUTHWEST CORNER SIGN AREA DIMENSIONAL LAYOUT DETAIL

LEGEND:

6" DIA. CONCRETE FILLER PROTECTIVE POST (PROVIDED BY OTHERS)

AMG-2000 SERIES ENTRY TICKET DISPENSER — TD

AMG-4000 SERIES EXPRESSPARC EXIT STATION — TD

WSU 'ONE CARD' READER W/EQUIPMENT ENCLOSURE — OCE

RFID READER W/"SIDEFIRE" GOOSENECK STAND — AVI

CUSTOM L.E.D. FACILITY FULL SIGN — LFS

AMG-1750 BARRIER GATE OPERATOR — AG

GENERAL NOTES:

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4. LEAVE 6' OF CABLE AT EQUIPMENT LOCATIONS.
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6. CONCRETE ISLANDS MUST BE LEVEL UNDER EQUIPMENT LOCATIONS.
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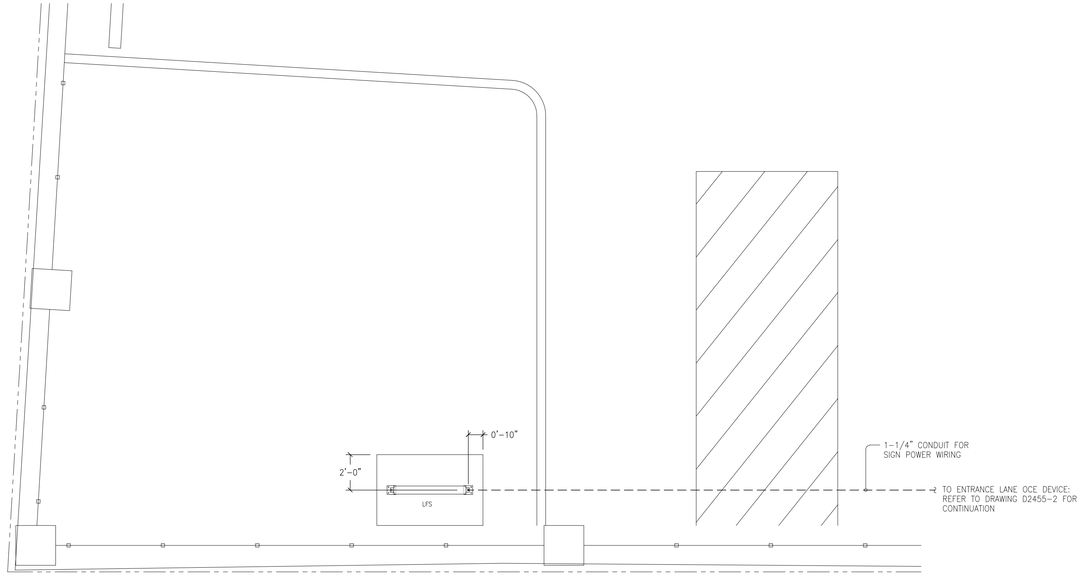
8. ALL POWER RUNS SHALL HAVE HOT, NEUTRAL, AND GROUND CONDUCTORS.
9. ALL DIMENSIONS ARE TYPICAL UNLESS OTHERWISE INDICATED.
10. IF ANY COMMUNICATION WIRE ENDS IN AN OFFICE, LEAVE 20' OF CABLE FOR LOCATIONAL PURPOSES.




B — D2455-3 — SOUTHWEST CORNER SIGN AREA ELECTRICAL LAYOUT DETAIL

REVISION HISTORY

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| AJJ | 8/27/15 | NONE | D2455-3 | | 3 | 3 | 1=48 |