

### **LEGEND:**

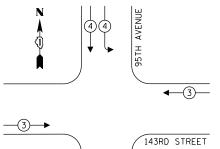
**◆** PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

√-(\*)- ► PEDESTRIAN PHASE

♦ OL OVERLAP

### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

|                  | NO. OF | LED     | 7.        | TOTAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 17     | 11      | 50        | 93.5    |
| (YELLOW)         | 17     | 20      | 5         | 17.0    |
| (GREEN)          | 17     | 12      | 45        | 91.8    |
| PERMISSIVE ARROW | 8      | 10      | 10        | 8.0     |
| PED. SIGNAL      | 8      | 20      | 100       | 160.0   |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | 1      | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1      | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | -      | 120     | 50        | -       |
| LUMINAIRE        | -      | 250     | 50        | -       |
|                  |        |         | TOTAL =   | 645.3   |
|                  |        |         |           |         |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE ORLAND PARK, ILLINOIS 60462

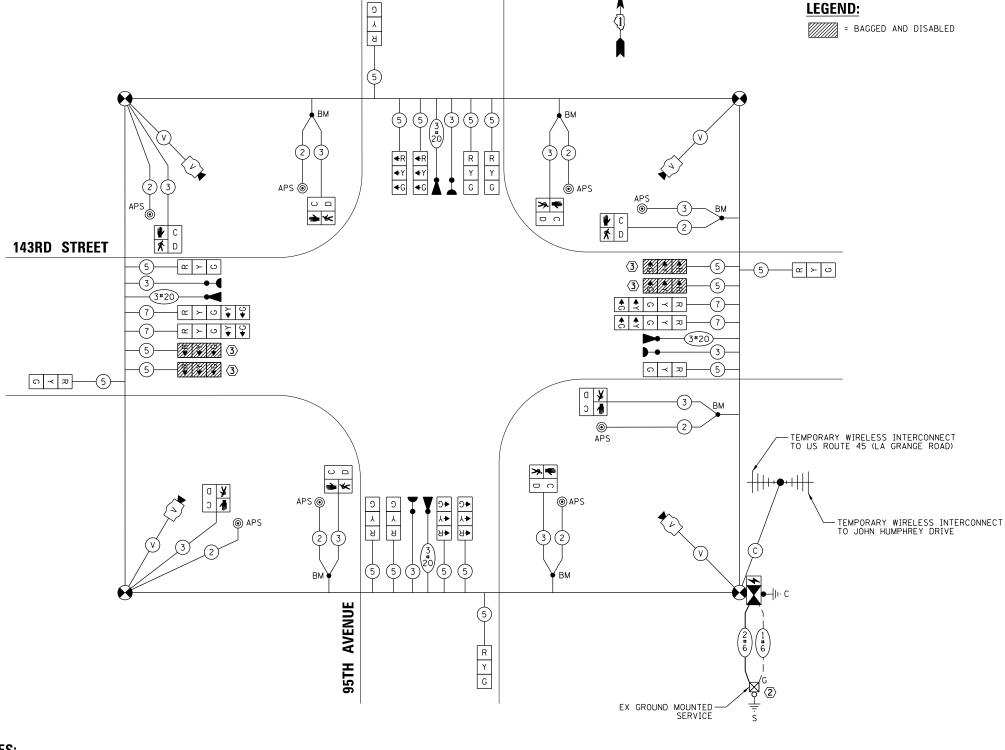
ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

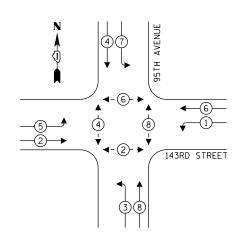
### **CONSTRUCTION NOTES:**

- (1) THE CONTRACTOR SHALL BAG AND DISABLE THE EXISTING TRAFFIC SIGNAL SECTION HEADS, PEDESTRIAN SIGNAL HEADS, AND PEDESTRIAN PUSH-BUTTONS ONCE THE TEMPORARY TRAFFIC SIGNAL IS TURNED ON AND OPERATIONAL.
- SUGGESTED TEMPORARY SERVICE INSTALLATION AND DRILL EXISTING DOUBLE HANDHOLE TO BE INCLUDED IN THE COST OF TEMPORARY TRAFFIC SIGNAL INSTALLATION PAY ITEM.
- 3 THE CONTRACTOR SHALL BAG AND DISABLE ENTIRE SIGNAL HEAD FOR EXISTING CONDITIONS, MOT STAGE 1, AND FINAL CONDITION.

### **EXISTING CONDITION TEMPORARY CABLE PLAN** (NOT TO SCALE)



| ACCOUNT NUMBER:  |                              |                 |           |                              |                 |       |       |          |           |         |               |                |             |          |         |
|--|------------------------------|-----------------|-----------|------------------------------|-----------------|-------|-------|----------|-----------|---------|---------------|----------------|-------------|----------|---------|
|  | USER NAME = dtroyer          | DESIGNED -      | REVISED - |                              |                 | Т     |       | RY CABL  |           |         | F.A.U.<br>RTF | SECTION        | COUNTY      | TOTAL    | . SHEET |
| RISTOPHER B. BURKE ENGINEERING, LTD.<br>W. Higgins Road, Sulle 600 |                              | DRAWN -         | REVISED - | STATE OF ILLINOIS            |                 |       |       | IG COND  |           |         | 2520          | 16-00078-00-CH | соок        | 228      | 101     |
| nont, Illinois 60018<br>823-0500                                   | PLOT SCALE = 40.0000 ' / in. | CHECKED -       | REVISED - | DEPARTMENT OF TRANSPORTATION |                 | 143RI | STREE | T AT 951 | TH AVENUE |         |               |                | CONTRAC     | T NO. 61 | 1K89    |
|  | PLOT DATE = 12/3/2024        | DATE - 12/03/24 | REVISED - |                              | SCALE: 1" = 20" | SHEET | OF    | SHEETS   | STA.      | TO STA. |               | ILLINOIS FE    | AID PROJECT |          |         |



### **LEGEND:**

**◆ \* PROTECTED PHASE** 

← -(\*)- - PROTECTED/PERMITTED PHASE

√
→

PEDESTRIAN PHASE

Output

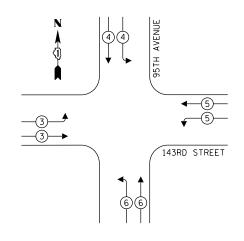
Description

A continue

A c

♦ OL OVERLAP

### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 20    | 11      | 50        | 110.0   |
| (YELLOW)         | 20    | 20      | 5         | 20.0    |
| (GREEN)          | 20    | 12      | 45        | 108.0   |
| PERMISSIVE ARROW | -     | 10      | 10        | -       |
| PED. SIGNAL      | 8     | 20      | 100       | 160.0   |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | -     | 250     | 50        | -       |
|                  |       |         | TOTAL =   | 673.0   |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS PHONE: NEW PHONE

COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:\_

### MOT PRE-STAGE, MOT STAGE 2, **AND MOT STAGE 3 TEMPORARY CABLE PLAN** (NOT TO SCALE)

### 2 THE CONTRACTOR SHALL BAG AND DISABLE THE ENTIRE SIGNAL HEAD SECTION FOR MOT PRE-STAGE, MOT STAGE 2, AND MOT STAGE 3.

# = BAGGED AND DISABLED (3) (5) (5) (2)(3)APS 🍥 **>> €** ပ 143RD STREET \_ ഷ | ≻ | ഗ | 5-4-4 (5)—(#) + (4) G ≺ ¬ (5) э TEMPORARY WIRELESS INTERCONNECT TO US ROUTE 45 (LA GRANGE ROAD) APS ≫₹ **→** ≪ -TEMPORARY WIRELESS INTERCONNECT TO JOHN HUMPHREY DRIVE 5 5 3 5 5 AVENUE (5) EX GROUND MOUNTED-

### **CONSTRUCTION NOTES:**

1 THE CONTRACTOR SHALL BAG AND DISABLE THE LEFT TURN YELLOW AND GREEN INDICATIONS FOR MOT PRE-STAGE, MOT STAGE 2, AND MOT STAGE 3.

| ВВ | CHRISTO<br>9575 W. Higg<br>Rosemont, III<br>(847) 823-05 |
|----|--|

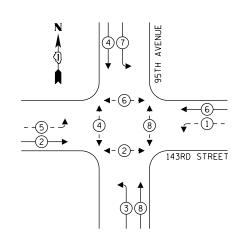
DESIGNED -REVISED -DRAWN REVISED -HECKED -REVISED PLOT DATE = 12/3/2024 DATE - 12/03/24 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY CABLE PLAN MOT PRE-STAGE, MOT STAGE 2, AND MOT STAGE 3 143RD STREET AT 95TH AVENUE SHEETS STA.

SECTION COUNTY 16-00078-00-CH COOK 228 102 CONTRACT NO. 61K89

LEGEND:



### LEGEND:

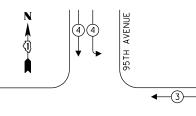
**◆** PROTECTED PHASE

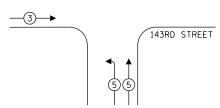
← - \*\* - PROTECTED/PERMITTED PHASE

◆- \*- PEDESTRIAN PHASE

◆ OL OVERLAP

### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE





### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 17    | 11      | 50        | 93.5    |
| (YELLOW)         | 17    | 20      | 5         | 17.0    |
| (GREEN)          | 17    | 12      | 45        | 91.8    |
| PERMISSIVE ARROW | 8     | 10      | 10        | 8.0     |
| PED. SIGNAL      | 8     | 20      | 100       | 160.0   |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | -     | 250     | 50        | -       |
|                  |       |         | TOTAL =   | 645.3   |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE

ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

### PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER:

### **CONSTRUCTION NOTES:**

 $\stackrel{\textstyle \frown}{}$  The contractor shall bag and disable entire signal head for mot stage 1 and final condition.

# TEMPORARY CABLE PLAN

**MOT STAGE 1 AND FINAL CONDITION** (NOT TO SCALE)

|  | C  |   | LEGEND:  BAGGED AND DISABLED                                    |
|--|--|---|---|
| 2 3  | BM 5 5 3 3 5 5 20 R R R Y Y G G G G                | BM V V V APS  |   |
| 143RD STREET  APS ®  □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ |  | (1) (2) (3) (BM) (1) (C) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1 | (5)—(x) v   |
| 5 D  | D Q  | □ ¥ 3 BM  □ APS  □ O O O O O O O O O O O O O O O O O O          | TEMPORARY WIRELESS INTERCONNECT TO US ROUTE 45 (LA GRANGE ROAD) |
| Q Y 2 @APS   | APS (a) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | (3) (2) (V) (BM)  | TEMPORARY WIRELESS INTERCONNECT TO JOHN HUMPHREY DRIVE          |
|  | 95TH AVENUE  | EX GROUND MOUNTED SERVICE                                       | 2 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1 (1                        |

N

DESIGNED -PLOT DATE = 12/3/2024

REVISED -DRAWN -REVISED -CHECKED -REVISED -DATE - 12/03/24 REVISED -

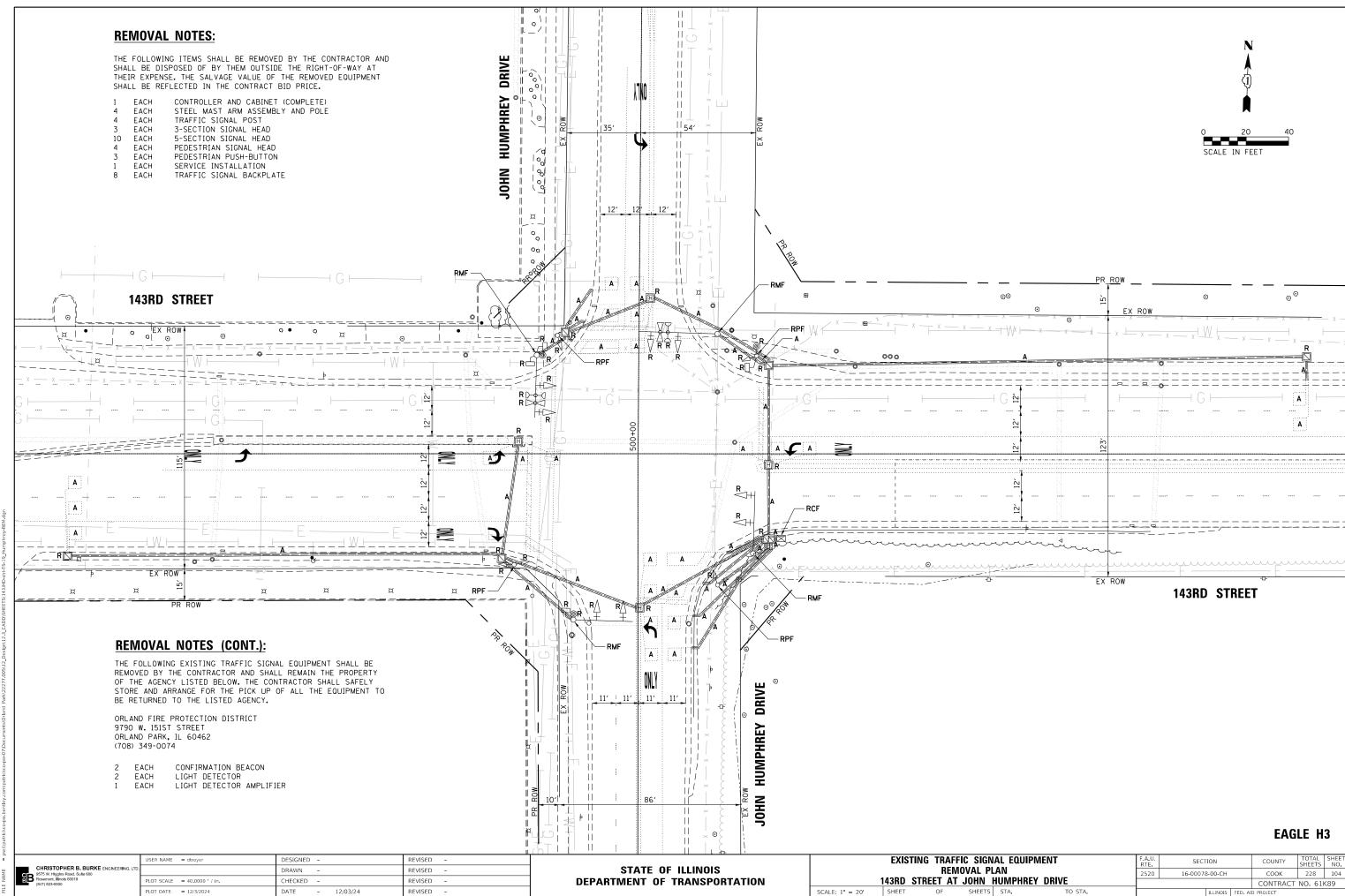
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TEMPORARY CABLE PLAN MOT STAGE 1 AND FINAL CONDITION 143RD STREET AT 95TH AVENUE

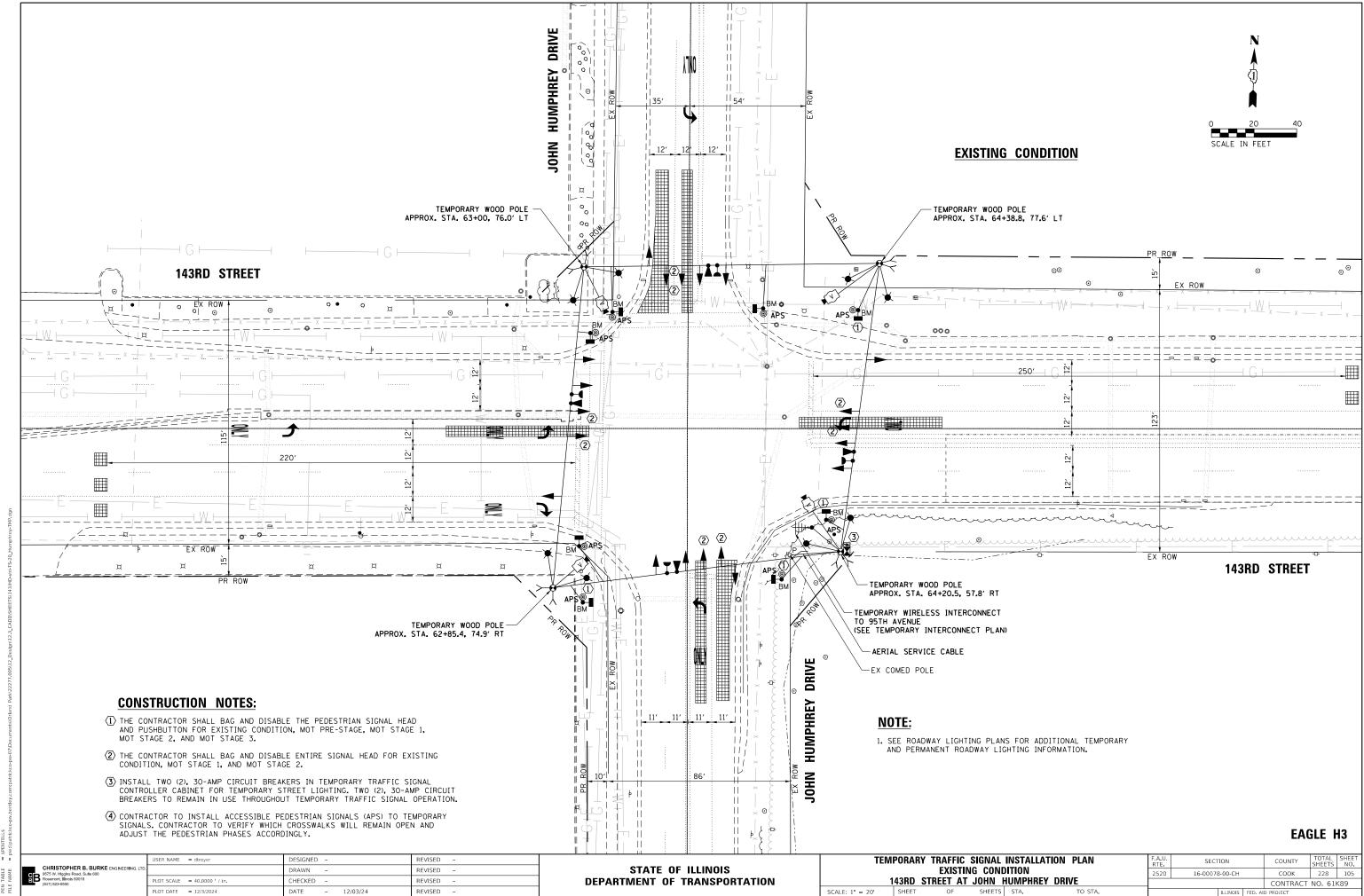
SECTION COUNTY 16-00078-00-CH COOK 228 103 CONTRACT NO. 61K89

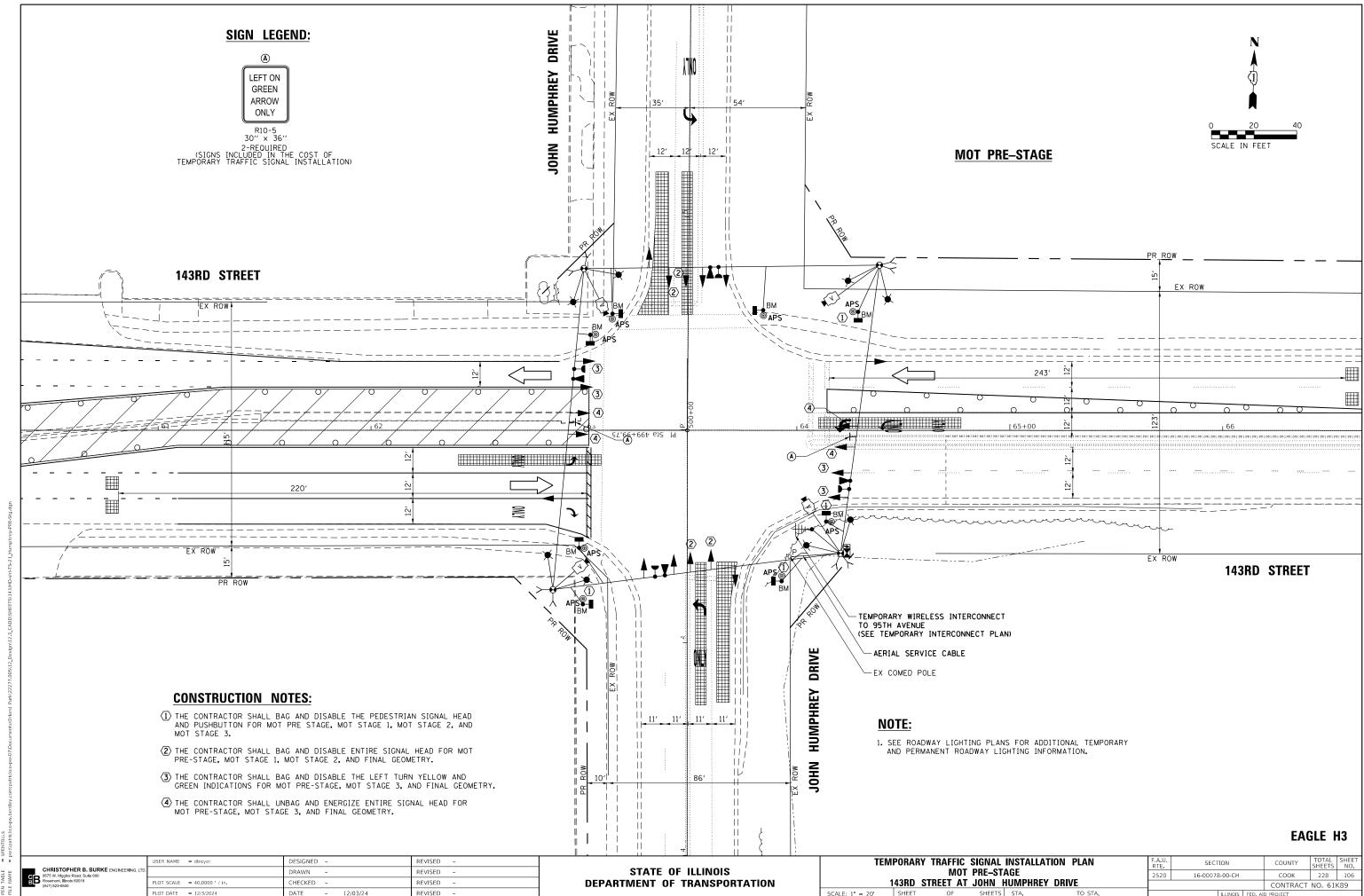
SCALE: 1" = 20' SHEET

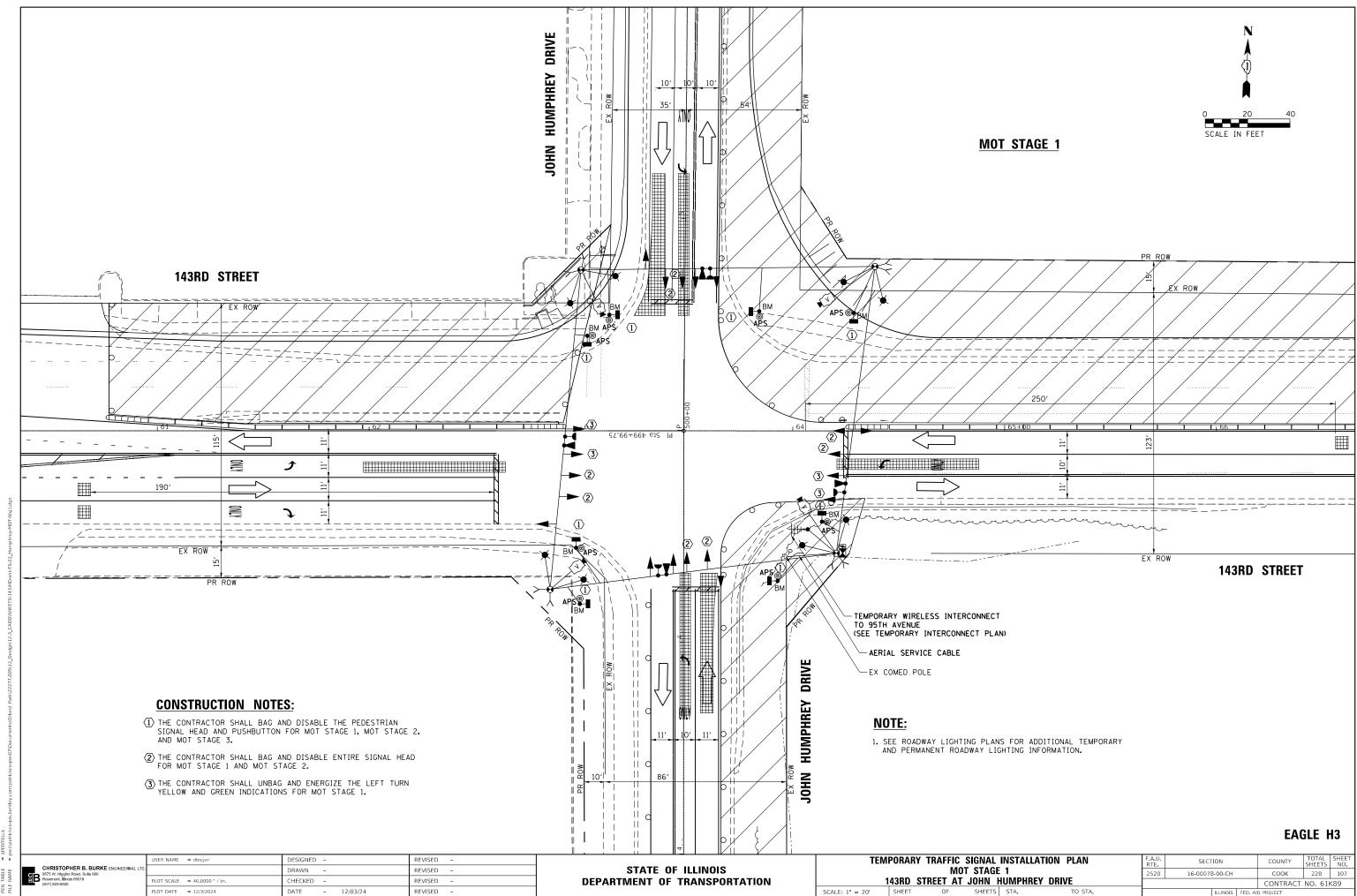
SHEETS STA.

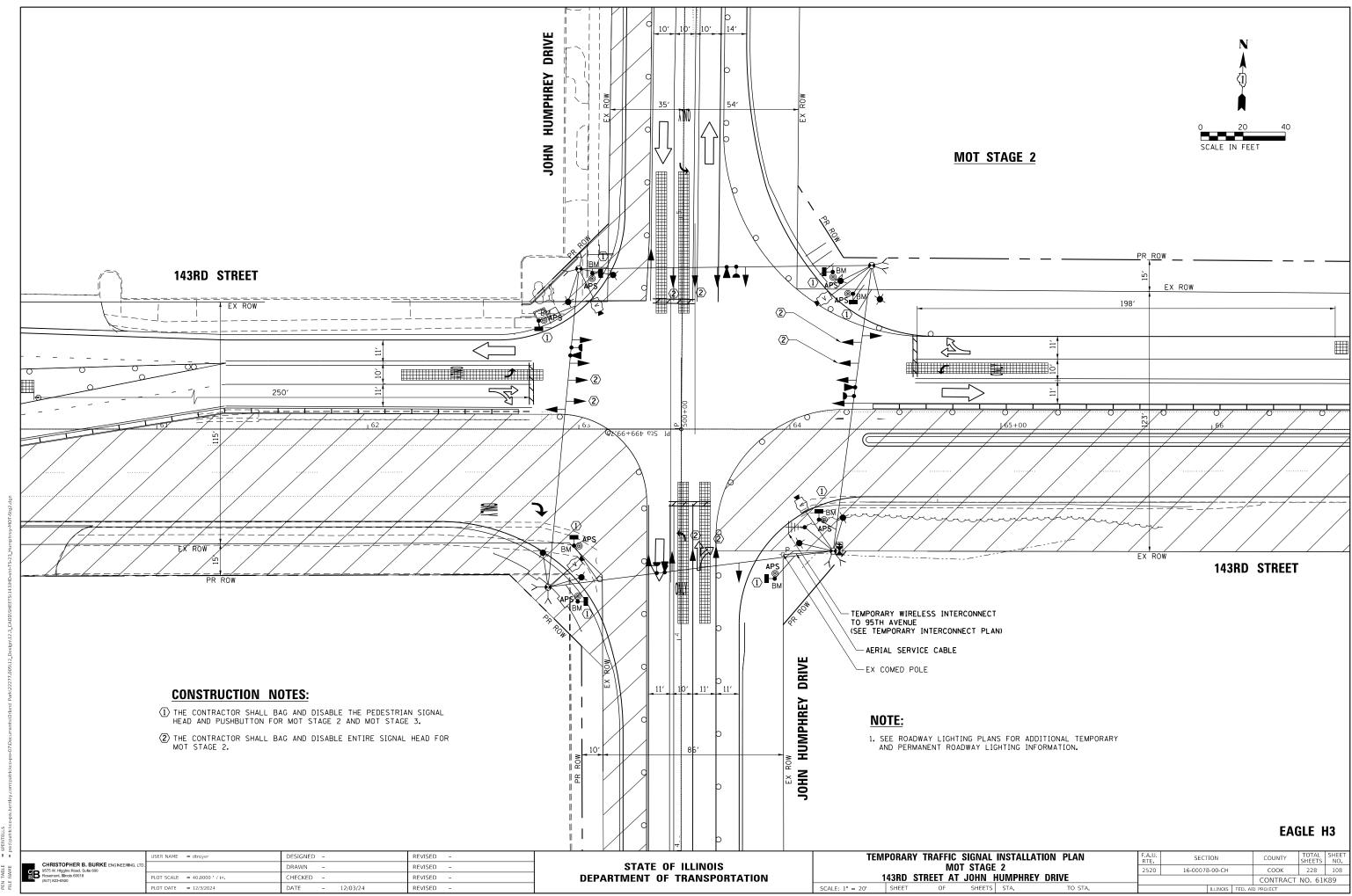


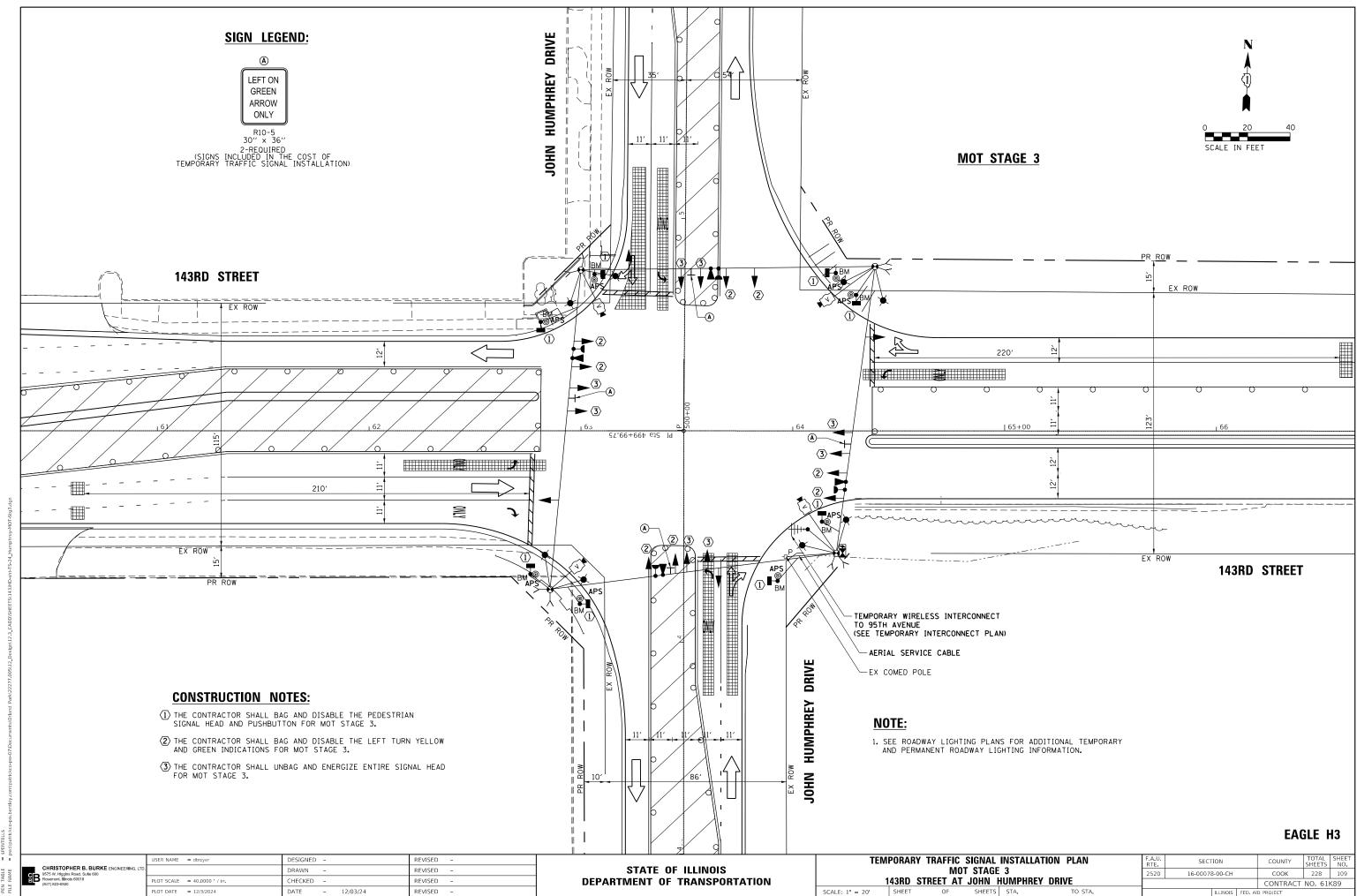
PEN TABLE = \$PENTBLL\$
FILE NAME = pw:\\patrickco-pv

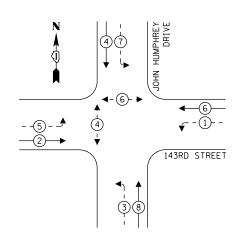












### LEGEND:

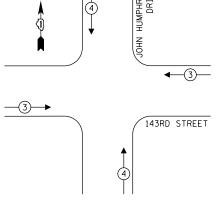
**◆ \* PROTECTED PHASE** 

← -(\*)- - PROTECTED/PERMITTED PHASE

◆- \*- ► PEDESTRIAN PHASE

♦ OL OVERLAP

# PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS** NO. OF LED

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 12    | 11      | 50        | 66.0    |
| (YELLOW)         | 12    | 20      | 5         | 12.0    |
| (GREEN)          | 12    | 12      | 45        | 64.8    |
| PERMISSIVE ARROW | 16    | 10      | 10        | 16.0    |
| PED. SIGNAL      | 4     | 20      | 100       | 80.0    |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1433.8  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE

ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE

COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

### DESIGNED -REVISED -DRAWN -REVISED -HECKED -REVISED PLOT DATE = 12/3/2024 DATE - 12/03/24 REVISED -

### **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

(2)(3)

- K > O > V

- K > O > V

2 2

### TEMPORARY CABLE PLAN **EXISTING CONDITION** 143RD STREET AT JOHN HUMPHREY DRIVE SCALE: 1" = 20"

SECTION 16-00078-00-CH COOK 228 111 CONTRACT NO. 61K89

**LEGEND**:

= BAGGED AND DISABLED

TEMPORARY WIRELESS INTERCONNECT TO 95TH AVENUE

**EXISTING CONDITION** 

SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

NOTE:

EX COMED POLE -

1)

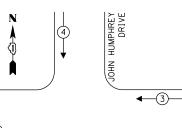
1

JOHN

**>> €** 

R Y G ◆Y ◆G

# TEMPORARY EMERGENCY VEHICLE



|   | <u>CONSTRUCTION NOTES:</u>   |
|---|--|
|   | (1) THE CONTRACTOR SHALL BAG AND DISABLE THE PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON FOR EXISTING CONDITION, MOT PRE-STAGE, MOT STAGE 1, MOT STAGE 2, AND MOT STAGE 3. |
| _ | (2) THE CONTRACTOR SHALL BAG AND DISABLE ENTIRE SIGNAL HEAD FOR EXISTIN CONDITION, MOT STAGE 1, AND MOT STAGE 2.   |
| _ | (3) INSTALL TWO (2) 30-AMP CIRCUIT BREAKERS IN TEMPORARY TRAFFIC SIGNAL  |

(3) INSTALL TWO (2), 30-AMP CIRCUIT BREAKERS IN TEMPORARY TRAFFIC SIGNAL CONTROLLER CABINET FOR TEMPORARY STREET LIGHTING. TWO (2), 30-AMP CIRCUIT BREAKERS TO REMAIN IN USE THROUGHOUT TEMPORARY TRAFFIC SIGNAL OPERATION.

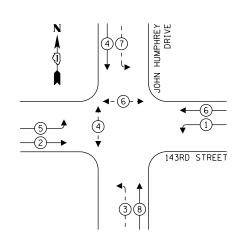
143RD STREET

G ≺ ¬ (5)

9**→** ↓**→** ② ②

O+C C C A B

**TEMPORARY CABLE PLAN** (NOT TO SCALE)



### **LEGEND:**

**◆** PROTECTED PHASE

← -(\*)- - PROTECTED/PERMITTED PHASE

√-(\*)- ► PEDESTRIAN PHASE

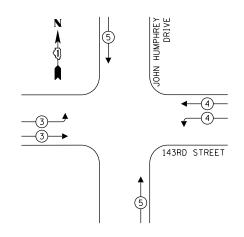
◆ OL OVERLAP

### **LEGEND**:

= BAGGED AND DISABLED

-TEMPORARY WIRELESS INTERCONNECT TO 95TH AVENUE

### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 16    | 11      | 50        | 88.0    |
| (YELLOW)         | 16    | 20      | 5         | 16.0    |
| (GREEN)          | 16    | 12      | 45        | 86.4    |
| PERMISSIVE ARROW | 8     | 10      | 10        | 8.0     |
| PED. SIGNAL      | 4     | 20      | 100       | 80.0    |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1473.4  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE

ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE

ACCOUNT NUMBER

COMPANY: COMMONWEALTH EDISON

### **CONSTRUCTION NOTES:**

 $\stackrel{\textstyle <}{\text{ 1D}}$  The contractor shall bag and disable the pedestrian signal head and pushbutton for mot pre stage, mot stage 1, mot stage 2, and

143RD STREET

「○ ≺ ¬ (5)

- $\langle \overline{\bf 2} \rangle$  THE CONTRACTOR SHALL BAG AND DISABLE ENTIRE SIGNAL HEAD FOR MOT PRE-STAGE, MOT STAGE 1, MOT STAGE 2, AND FINAL GEOMETRY.
- $\langle \overline{3} \rangle$  The contractor shall bag and disable the Left turn yellow and GREEN INDICATIONS FOR MOT PRE-STAGE, MOT STAGE 3, AND FINAL GEOMETRY.
- $\begin{picture}(4)\put(0.00)(0$

### NOTE:

1. SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

EX COMED POLE-

# **TEMPORARY CABLE PLAN**

(NOT TO SCALE)

# MOT PRE-STAGE

R R

(2)(3)

**→** ≪

- C > O (3)

- r > 0 (3) - F F F 4 (5)——\(\varphi\) \(\varphi\) \(\varphi\) \(\varphi\) \(\varphi\)

JOHN

**>> €** 

1)

1

(3) (7)

R Y G ◆Y ◆G

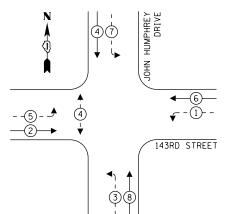
○→↓→②②</li

7 5 5

(5)

O+C C C A B

| BER:          |                            |                 |           |                              |                 |          |         |        |         |         |        |            |                         |         |         |
|---------------|----------------------------|-----------------|-----------|------------------------------|-----------------|----------|---------|--------|---------|---------|--------|------------|-------------------------|---------|---------|
|               | USER NAME = dtroyer        | DESIGNED -      | REVISED - |                              |                 | TI       | EMPOR#  | RY CAB | LE PLAN |         | F.A.U. | SECTIO     | N COUNT                 | , TOTA  | L SHEET |
| NEERING, LTD. |                            | DRAWN -         | REVISED - | STATE OF ILLINOIS            |                 |          |         | PRE-ST |         |         | 2520   | 16-00078-0 | 00-CH COOK              | 228     | 112     |
|               | PLOT SCALE = 40.0000 / in. | CHECKED -       | REVISED - | DEPARTMENT OF TRANSPORTATION | 1               | 43RD STR | REET AT | JOHN   | HUMPHRE | Y DRIVE |        |            | CONTRA                  | ACT NO. | δ1K89   |
|               | PLOT DATE = 12/3/2024      | DATE - 12/03/24 | REVISED - |                              | SCALE: 1" = 20' | SHEET    | OF      | SHEETS | STA.    | TO STA. |        | IL         | LINOIS FED. AID PROJECT |         |         |



### **LEGEND**:

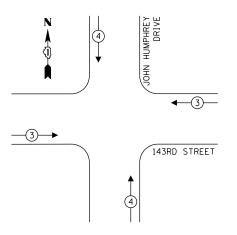
**◆** PROTECTED PHASE

← - \*\* - PROTECTED/PERMITTED PHASE

√-(\*)- ► PEDESTRIAN PHASE

♦ OL OVERLAP

### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 12    | 11      | 50        | 66.0    |
| (YELLOW)         | 12    | 20      | 5         | 12.0    |
| (GREEN)          | 12    | 12      | 45        | 64.8    |
| PERMISSIVE ARROW | 16    | 10      | 10        | 16.0    |
| PED. SIGNAL      | -     | 20      | 100       | -       |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1353.8  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK

14700 RAVINIA AVENUE ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

**CONSTRUCTION NOTES:** 

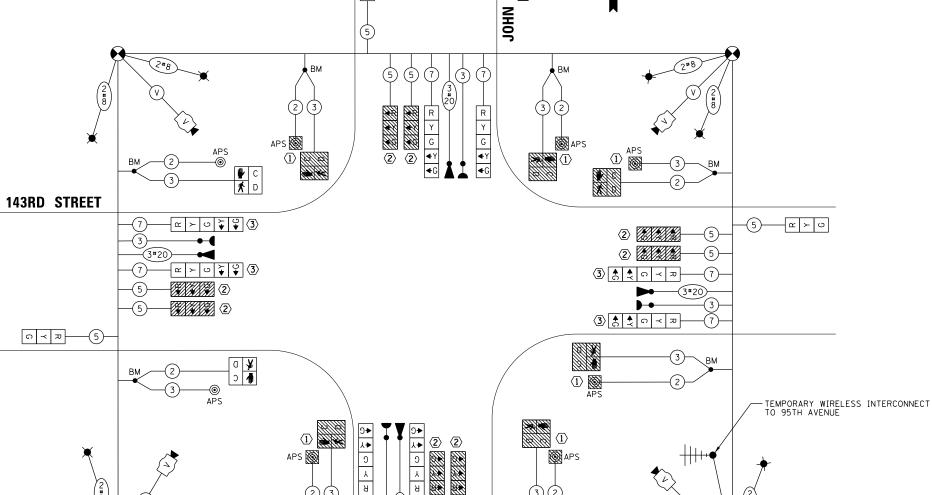
 $\stackrel{\textstyle \frown}{}$  THE CONTRACTOR SHALL BAG AND DISABLE THE PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON FOR MOT STAGE 1, MOT STAGE 2, AND MOT STAGE 3.

(2) THE CONTRACTOR SHALL BAG AND DISABLE ENTIRE SIGNAL HEAD FOR MOT STAGE 1 AND MOT STAGE 2.

 $\begin{picture}(3)\label{thm:contractor} \end{picture}$  The contractor shall unbag and energize the left turn yellow and green indications for mot stage 1.

# **LEGEND**:

= BAGGED AND DISABLED



### NOTE:

1. SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

EX COMED POLE-

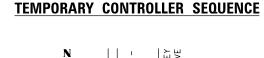
# **MOT STAGE 1**

755

(5)

| EMPO | RAR  | <u>Y</u> | CABLE  | P |
|------|------|----------|--------|---|
|      | (NOT | ТО       | SCALE) |   |
|      |      |          |        |   |

| ACCOUNT NUMBER:   |                              |                 |           |                              |                 |                                     |  |                |             |                         |     |
|---|------------------------------|-----------------|-----------|------------------------------|-----------------|-------------------------------------|--|----------------|-------------|-------------------------|-----|
|   | USER NAME = dtroyer          | DESIGNED -      | REVISED - |                              |                 | TEMPORARY CABLE PLAN                | MOT STAGE 1 2520 16-00078-00-CH COOK 228 113 | SHEET          |             |                         |     |
| CHRISTOPHER B. BURKE ENGINEERING, LTD.<br>9575 W. Higgins Road, Sulle 600 |                              | DRAWN -         | REVISED - | STATE OF ILLINOIS            |                 | MOT STAGE 1                         | 2520   | 16-00078-00-CH | СООК        | 228                     | 113 |
| Rosemont, Illinois 60018<br>(847) 823-0500                                | PLOT SCALE = 40.0000 ' / in. | CHECKED -       | REVISED - | DEPARTMENT OF TRANSPORTATION |                 | 143RD STREET AT JOHN HUMPHREY DRIVE |  |                | CONTRACT    | TOTAL SHEETS NO 228 11: | (89 |
|   | PLOT DATE = 12/3/2024        | DATE - 12/03/24 | REVISED - |                              | SCALE: 1" = 20" | SHEET OF SHEETS STA. TO STA.        |  | ILLINOIS FED   | AID PROJECT |                         |     |



# 143RD STREET

### **LEGEND:**

**◆** PROTECTED PHASE

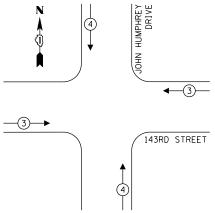
← - (\*)- - PROTECTED/PERMITTED PHASE

◆- \*- PEDESTRIAN PHASE

♦ OL OVERLAP

### TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE

38



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 12    | 11      | 50        | 66.0    |
| (YELLOW)         | 12    | 20      | 5         | 12.0    |
| (GREEN)          | 12    | 12      | 45        | 64.8    |
| PERMISSIVE ARROW | 16    | 10      | 10        | 16.0    |
| PED. SIGNAL      | -     | 20      | 100       | -       |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1353.8  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK

14700 RAVINIA AVENUE ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE

COMPANY: COMMONWEALTH EDISON

### ACCOUNT NUMBER: DESIGNED -DRAWN -CHECKED -

PLOT DATE = 12/3/2024

### **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

### TEMPORARY CABLE PLAN MOT STAGE 2 143RD STREET AT JOHN HUMPHREY DRIVE SCALE: 1" = 20" SHEETS STA.

NOTE:

SECTION COUNTY 16-00078-00-CH COOK 228 114 CONTRACT NO. 61K89

JOHN

(3) (7)

R Y G ◆Y ◆G

G ←Y ←G

② ②

755

(5)

2 2

O+C C C A B

(2)(3)

- K > O \ V

- K > O > V

SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

EX COMED POLE -

2

1)

1

# **MOT STAGE 2**

**TEMPORARY CABLE PLAN** 

(NOT TO SCALE)

 $\ensuremath{\langle \mathbf{2}\rangle}$  The contractor shall bag and disable entire signal head for MOT stage 2.

 $\stackrel{\textstyle <}{\text{ 1D}}$  The contractor shall bag and disable the pedestrian signal head and pushbutton for mot stage 2 and mot stage 3.

**CONSTRUCTION NOTES:** 

REVISED -

REVISED -

REVISED -

REVISED

143RD STREET

「○ ≺ ¬ (5)

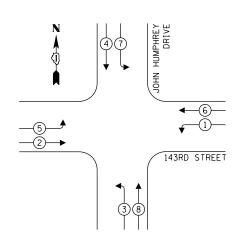
|                  | NO. OF | LED     | %         | TOTAL   |
|------------------|--------|---------|-----------|---------|
| TYPE             | LAMPS  | WATTAGE | OPERATION | WATTAGE |
| SIGNAL (RED)     | 12     | 11      | 50        | 66.0    |
| (YELLOW)         | 12     | 20      | 5         | 12.0    |
| (GREEN)          | 12     | 12      | 45        | 64.8    |
| PERMISSIVE ARROW | 16     | 10      | 10        | 16.0    |
| PED. SIGNAL      | -      | 20      | 100       | -       |
| CONTROLLER       | 1      | 100     | 100       | 100.0   |
| UPS              | 1      | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1      | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -      | 25      | 5         | -       |
| FLASHER          | -      | -       | 50        | -       |
| STREET NAME SIGN | -      | 120     | 50        | -       |
| LUMINAIRE        | 8      | 230     | 50        | 920.0   |

**LEGEND**:

= BAGGED AND DISABLED

TEMPORARY WIRELESS INTERCONNECT TO 95TH AVENUE

DATE - 12/03/24



### **LEGEND:**

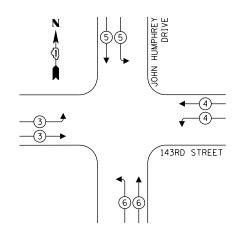
**◆** PROTECTED PHASE

← - (\*)- - PROTECTED/PERMITTED PHASE

◆- \*- PEDESTRIAN PHASE

♦ OL OVERLAP

### **TEMPORARY EMERGENCY VEHICLE** PREEMPTION SEQUENCE



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 20    | 11      | 50        | 110.0   |
| (YELLOW)         | 20    | 20      | 5         | 20.0    |
| (GREEN)          | 20    | 12      | 45        | 108.0   |
| PERMISSIVE ARROW | -     | 10      | 10        | -       |
| PED. SIGNAL      | -     | 20      | 100       | -       |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        |         |
| STREET NAME SIGN | -     | 120     | 50        |         |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1433.0  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE

ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE

COMPANY: COMMONWEALTH EDISON ACCOUNT NUMBER: ---

# **LEGEND**: = BAGGED AND DISABLED JOHN (3) (7) ←R ←Y ←G ←G ④G ③ R Y G 143RD STREET - r v **(2**) - r v (2) ② n ≺ z o ≺ ₽ 5 1) -TEMPORARY WIRELESS INTERCONNECT TO 95TH AVENUE 3 3 □ □ □ • □ • 1 ਨ \ ਨ ਸ 7 5 5 (5) EX COMED POLE-**CONSTRUCTION NOTES:**

### $\bigcirc$ THE CONTRACTOR SHALL BAG AND DISABLE THE PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON FOR MOT STAGE 3.

- $\ensuremath{\bigcirc}$  The contractor shall bag and disable the left turn yellow and green indications for mot stage 3.
- $\ensuremath{\overline{\text{(3)}}}$  The contractor shall unbag and energize entire signal head for mot stage 3.

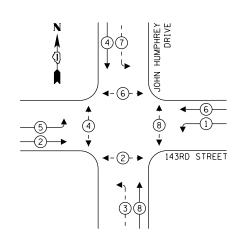
### NOTE:

SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

# **MOT STAGE 3**

**TEMPORARY CABLE PLAN** (NOT TO SCALE)

|                | RTF I | SECTION        | COUNTY           | SHEET                      | S NO                           |
|----------------|-------|----------------|------------------|----------------------------|--------------------------------|
| 3              | 2520  | 16-00078-00-CH | COOK             | 228                        | 115                            |
| IUMPHREY DRIVE |       |                | CONTRAC          | T NO. €                    | 1K89                           |
| STA. TO STA.   |       | ILLINOIS       | FED. AID PROJECT |                            |                                |
|                |       |                |                  | 3 2520 16-00078-00-CH COOK | 3 2520 16-00078-00-CH COOK 228 |



### **LEGEND:**

**◆ \* PROTECTED PHASE** 

← -(\*)- - PROTECTED/PERMITTED PHASE

√
→

PEDESTRIAN PHASE

Output

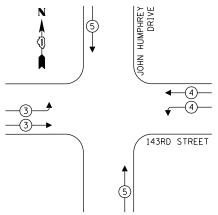
Description

A continue

A c

◆ OL OVERLAP

# **TEMPORARY EMERGENCY VEHICLE**



### TRAFFIC SIGNAL **ELECTRICAL SERVICE REQUIREMENTS**

NO. OF LED % TOTAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 16    | 11      | 50        | 88.0    |
| (YELLOW)         | 16    | 20      | 5         | 16.0    |
| (GREEN)          | 16    | 12      | 45        | 86.4    |
| PERMISSIVE ARROW | 8     | 10      | 10        | 8.0     |
| PED. SIGNAL      | -     | 20      | 100       | -       |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | 1     | 150     | 100       | 150.0   |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 8     | 230     | 50        | 920.0   |
|                  |       |         | TOTAL =   | 1393.4  |

ENERGY COSTS TO:

VILLAGE OF ORLAND PARK 14700 RAVINIA AVENUE

ORLAND PARK, ILLINOIS 60462

ENERGY SUPPLY: CONTACT: NEW BUSINESS

PHONE: NEW PHONE COMPANY: COMMONWEALTH EDISON

ACCOUNT NUMBER:

DESIGNED -DRAWN -HECKED -PLOT DATE = 12/3/2024 DATE - 12/03/24

REVISED -REVISED REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

(2)(3)

- C > O (3)

- r > 0 **(3** 

(5)—(#)

2 2

TEMPORARY CABLE PLAN FINAL GEOMETRY 143RD STREET AT JOHN HUMPHREY DRIVE

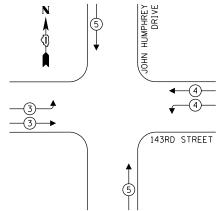
SECTION 16-00078-00-CH

TEMPORARY WIRELESS INTERCONNECT TO 95TH AVENUE

**LEGEND**:

= BAGGED AND DISABLED

# PREEMPTION SEQUENCE



# **CONSTRUCTION NOTES:**

REVISED -

1 THE CONTRACTOR SHALL UNBAG AND ENERGIZE THE PEDESTRIAN SIGNAL HEAD AND PUSHBUTTON FOR FINAL GEOMETRY.

143RD STREET

「○ ≺ ¬ (5)

- $\begin{tabular}{ll} \begin{tabular}{ll} \beg$
- (3) THE CONTRACTOR SHALL BAG AND DISABLE THE LEFT TURN YELLOW AND GREEN INDICATORS FOR FINAL GEOMETRY.

### NOTE:

JOHN

**> (1)** □ ○

R Y G ◆Y ◆G

SEE ROADWAY LIGHTING PLANS FOR ADDITIONAL TEMPORARY AND PERMANENT ROADWAY LIGHTING INFORMATION.

EX COMED POLE -

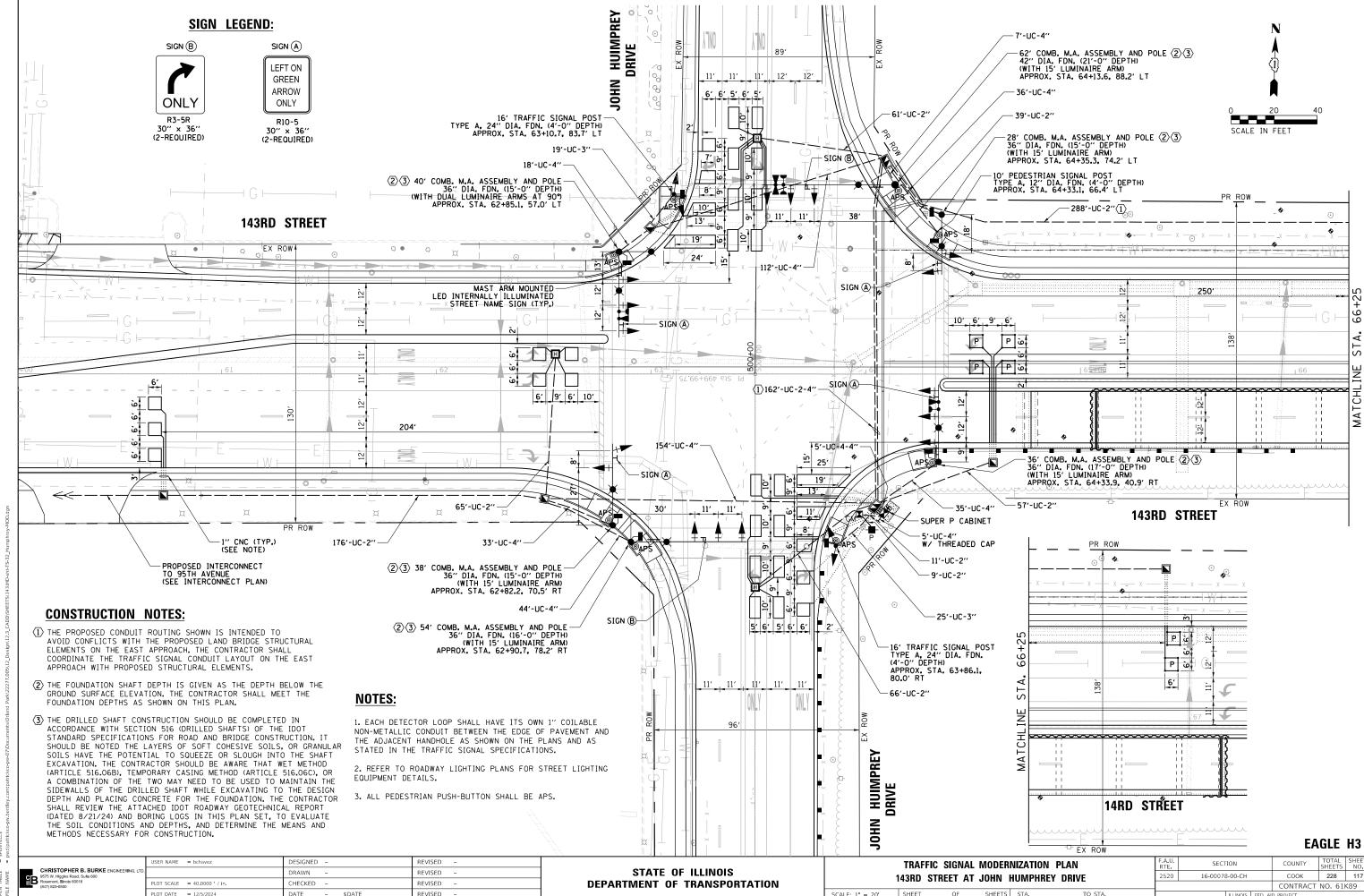
### **FINAL GEOMETRY TEMPORARY CABLE PLAN** (NOT TO SCALE)

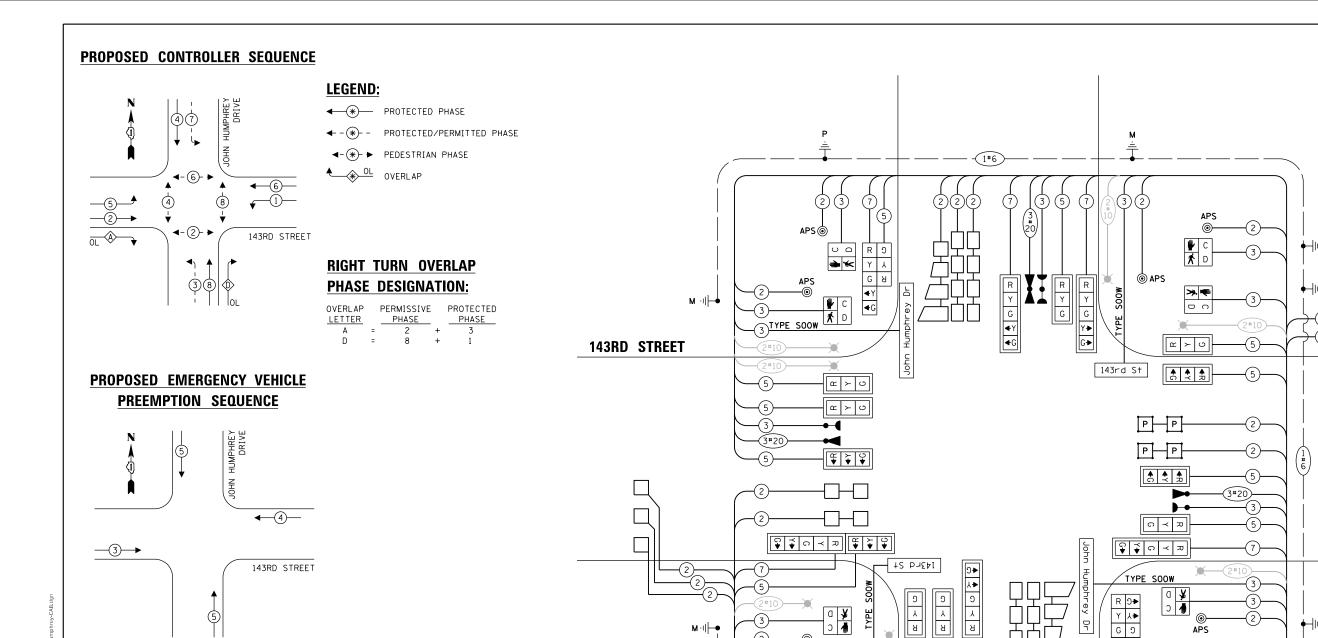
○→↓→②②</li

O+C C C A B

a ¥ ⇒ ∰ ① ⊚

COOK 228 116 CONTRACT NO. 61K89





PROPOSED TRACER CABLE

PROPOSED INTERCONNECT TO 95TH AVENUE

1. REFER TO ROADWAY LIGHTING PLANS FOR STREET LIGHTING EQUIPMENT DETAILS.

# TRAFFIC SIGNAL

| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 20    | 11      | 50        | 110.0   |
| (YELLOW)         | 20    | 20      | 5         | 20.0    |
| (GREEN)          | 20    | 12      | 45        | 108.0   |
| PROT-PERM ARROW  | 16    | 10      | 10        | 16.0    |
| PED. SIGNAL      | 8     | 20      | 100       | 160.0   |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | -     | 150     | 100       | -       |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 7     | 250     | 50        | 875.0   |
|                  |       |         | TOTAL -   | 1/1// 0 |

ORLAND PARK, IL 60462

PHONE: NEW PHONE

ACCOUNT NUMBER:

DESIGNED -REVISED -DRAWN -REVISED -CHECKED -REVISED PLOT DATE = 12/3/2024 DATE - 12/03/24 REVISED -

NOTE:

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

(5)

JOHN HUMPHREY DRIVE

1#6

**CABLE PLAN** 

(NOT TO SCALE)

CABLE PLAN, PHASE DESIGNATION DIAGRAM, AND EMERGENCY VEHICLE PREEMPTION SEQUENCE 143RD STREET AND JOHN HUMPHREY DRIVE SCALE: 1" = 20' SHEET SHEETS STA.

G D

Y → ↓ → ← G → と □ ○

APS

SECTION COUNTY 16-00078-00-CH COOK 228 118 CONTRACT NO. 61K89

EAGLE H3

-SUPER P CABINET

N.T.S.

P

| <b>ELECTRICAL SERVICE REQUIREMENTS</b> |       |        |         |           |       |  |  |
|--|-------|--------|---------|-----------|-------|--|--|
|  |       | NO. OF | LED     | %         | TOTA  |  |  |
| E                                      |       | LAMPS  | WATTAGE | OPERATION | WATTA |  |  |
| NΔI                                    | (RED) | 20     | 11      | 50        | 110.0 |  |  |

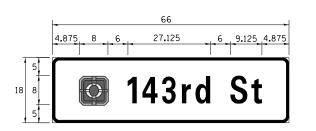
| TYPE             | LAMPS | WATTAGE | OPERATION | WATTAGE |
|------------------|-------|---------|-----------|---------|
| SIGNAL (RED)     | 20    | 11      | 50        | 110.0   |
| (YELLOW)         | 20    | 20      | 5         | 20.0    |
| (GREEN)          | 20    | 12      | 45        | 108.0   |
| PROT-PERM ARROW  | 16    | 10      | 10        | 16.0    |
| PED. SIGNAL      | 8     | 20      | 100       | 160.0   |
| CONTROLLER       | 1     | 100     | 100       | 100.0   |
| UPS              | 1     | 25      | 100       | 25.0    |
| VIDEO SYSTEM     | -     | 150     | 100       | -       |
| BLANK-OUT SIGN   | -     | 25      | 5         | -       |
| FLASHER          | -     | -       | 50        | -       |
| STREET NAME SIGN | -     | 120     | 50        | -       |
| LUMINAIRE        | 7     | 250     | 50        | 875.0   |
|                  |       |         | TOTAL =   | 1414.0  |

### ENERGY COSTS TO:

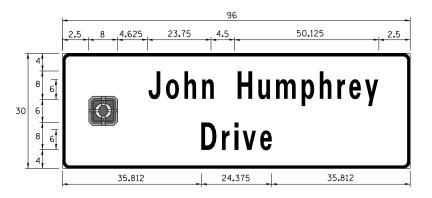
VILLAGE OF ORLAND PARK 14700 S. RAVINIA AVENUE,

ENERGY SUPPLY: CONTACT: NEW BUSINESS

COMPANY: COMMONWEALTH EDISON



| DESIGN<br>SERIES | SIGN DIMENSION | QTY<br>REQUIRED |
|------------------|----------------|-----------------|
| D                | 66 × 18        | 2               |



| DESIGN<br>SERIES | SIGN DIMENSION | QTY<br>REQUIRED |
|------------------|----------------|-----------------|
| D                | 96 × 30        | 2               |

### NOTE:

THE LED ILLUMINATED STREET NAME SIGNS SHALL BE ONE-SIDED. ALL LED ILLUMINATED STREET NAME SIGNS SHALL BE MAST ARM DIRECT MOUNT, EXCEPT FOR THE ILLUMINATED STREET NAME SIGN AT THE SOUTHEAST CORNER, WHICH SHALL BE BRACKET MOUNTED ON THE POLE SHAFT. FOR ADDITIONAL DESIGN AND INSTALLATION INFORMATION, PLEASE SEE DISTRICT ONE ILLUMINATED STREET NAME SIGN DETAIL.

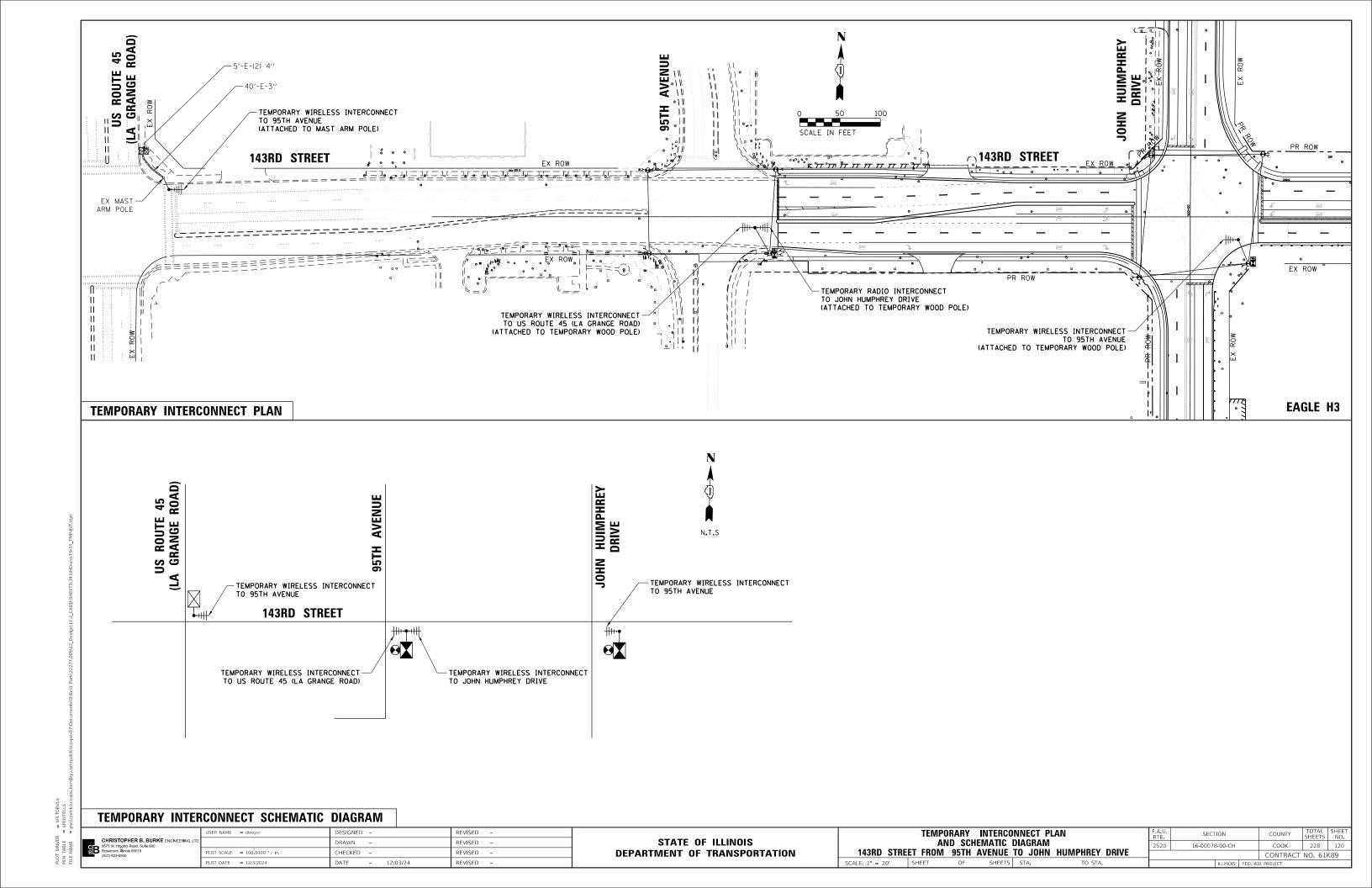
### SCHEDULE OF QUANTITIES

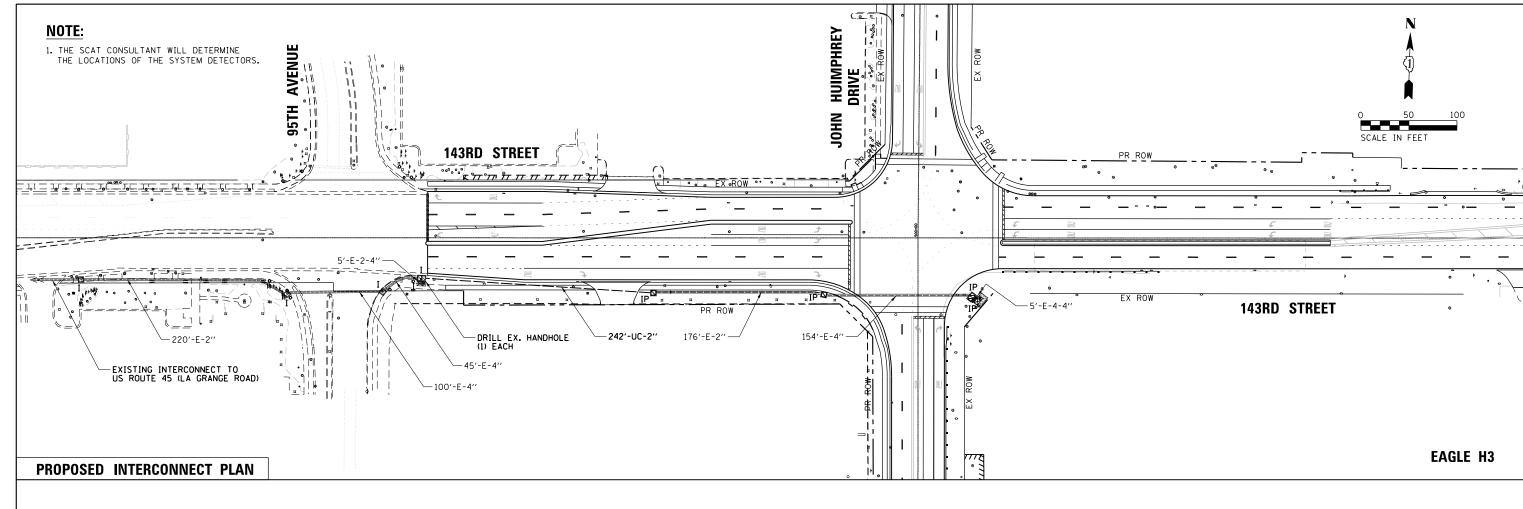
| ITEM  | UNIT  | QUANTIT |
|---|-------|---------|
| SIGN PANEL - TYPE 1   | SQ FT | 30      |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.                            | FOOT  | 772     |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.                            | FOOT  | 44      |
| UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.                            | FOOT  | 790     |
| HANDHOLE  | EACH  | 5       |
| HEAVY-DUTY HANDHOLE   | EACH  | 3       |
| DOUBLE HANDHOLE   | EACH  | 2       |
| PAINT NEW TRAFFIC SIGNAL POST   | EACH  | 3       |
| PAINT NEW COMBINATION MAST ARM AND POLE, UNDER 40 FOOT                    | EACH  | 3       |
| PAINT NEW COMBINATION MAST ARM AND POLE, 40 FOOT AND OVER                 | EACH  | 3       |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C                               | FOOT  | 1747    |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C                               | FOOT  | 2621    |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C                               | FOOT  | 3404    |
| ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C                               | FOOT  | 1713    |
| ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR                         | FOOT  | 3844    |
| ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C                             | FOOT  | 58      |
| ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C        | FOOT  | 1377    |
| TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.                              | EACH  | 2       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 28 FT.                       | EACH  | 1       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 36 FT.                       | EACH  | 1       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 38 FT.                       | EACH  | 1       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 40 FT.                       | EACH  | 1       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 54 FT.                       | EACH  | 1       |
| STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 62 FT.                       | EACH  | 1       |
| CONCRETE FOUNDATION, TYPE A   | FOOT  | 12      |
| CONCRETE FOUNDATION, TYPE C   | FOOT  | 4       |
| CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER                              | FOOT  | 78      |
| CONCRETE FOUNDATION, TYPE E 42-INCH DIAMETER                              | FOOT  | 21      |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED                     | EACH  | 11      |
| SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED                      | EACH  | 1       |
| SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED                      | EACH  | 3       |
| SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED                     | EACH  | 5       |
| PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER | EACH  | 8       |
| TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC                        | EACH  | 16      |
| INDUCTIVE LOOP DETECTOR   | EACH  | 15      |
| DETECTOR LOOP, TYPE I   | FOOT  | 1328    |
| PREFORMED DETECTOR LOOP   | FOOT  | 333     |
| LIGHT DETECTOR  | EACH  | 3       |
| LIGHT DETECTOR AMPLIFIER  | EACH  | 1       |
| TEMPORARY TRAFFIC SIGNAL INSTALLATION                                     | EACH  | 2       |
| REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT                                  | EACH  | 1       |
| REMOVE EXISTING HANDHOLE  | EACH  | 9       |
| REMOVE EXISTING DOUBLE HANDHOLE   | EACH  | 1       |
| REMOVE EXISTING CONCRETE FOUNDATION                                       | EACH  | 9       |
| EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C           | FOOT  | 872     |
| LED INTERNALLY ILLUMINATED STREET NAME SIGN                               | EACH  | 4       |
| FULL-ACTUATED CONTROLLER AND TYPE SUPER P CABINET (SPECIAL)               | EACH  | 1       |
| SERVICE INSTALLATION, GROUND MOUNTED, METERED                             | EACH  | 1       |
| PEDESTRIAN SIGNAL POST, 10 FT.  | EACH  | 1       |
| ELECTRIC CABLE IN CONDUIT, STREET NAME SIGN, NO. 14 3C, TYPE SOOW         | FOOT  | 950     |
| UNINTERRUPTABLE POWER SUPPLY, SPECIAL                                     | EACH  | 1       |
| ACCESSIBLE PEDESTRIAN SIGNALS   | EACH  | 8       |
| CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER                              | FOOT  | 4       |
| TEMPORARY TRAFFIC SIGNAL TIMING   | EACH  | 2       |

\* - 100% COST TO THE VILLAGE OF ORLAND PARK

SCALE: 1" = 20"

### EAGLE H3





# -EXISTING INTERCONNECT TO US ROUTE 45 (LA GRANGE ROAD). REFER TO THE NEXT PLAN SHEET FOR EXISTING INTERCONNECT SYSTEM INFORMATION. 143RD STREET (36F) JOHN HUIMPHREY Drive

### **SCHEDULE OF QUANTITIES**

|   | CODE NO. | ITEM  | UNIT | QUANTITY |
|---|----------|---|------|----------|
|   | 81028200 | UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.          | FOOT | 242      |
|   | 85000200 | MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION     | EACH | 1        |
|   | 86400100 | TRANSCEIVER - FIBER OPTIC                               | EACH | 1        |
|   | 87300925 | ELECTRIC CABLE IN CONDUIT, TRACER, NO. 141C             | FOOT | 630      |
|   | 87900200 | DRILL EXISTING HANDHOLE                                 | EACH | 1        |
| 1 | 89502300 | REMOVE ELECTRIC CABLE FROM CONDUIT                      | FOOT | 1344     |
|   | X8710024 | FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F | FOOT | 653      |
|   | Z0033046 | RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2               | EACH | 1        |

### NOTE:

1. THE SCAT CONSULTANT WILL DETERMINE THE LOCATIONS OF THE SYSTEM DETECTORS.

### **CONSTRUCTION NOTE:**

 $\langle 1 \rangle$  THIS ITEM AND QUANTITY IS FOR THE REMOVAL OF THE EXISTING TRACER CABLE AND FIBER OPTIC CABLE FOR THE EXISTING INTERCONNECT ON 143RD STREET, BETWEEN 95TH AVENUE AND JOHN HUMPHREY DRIVE.

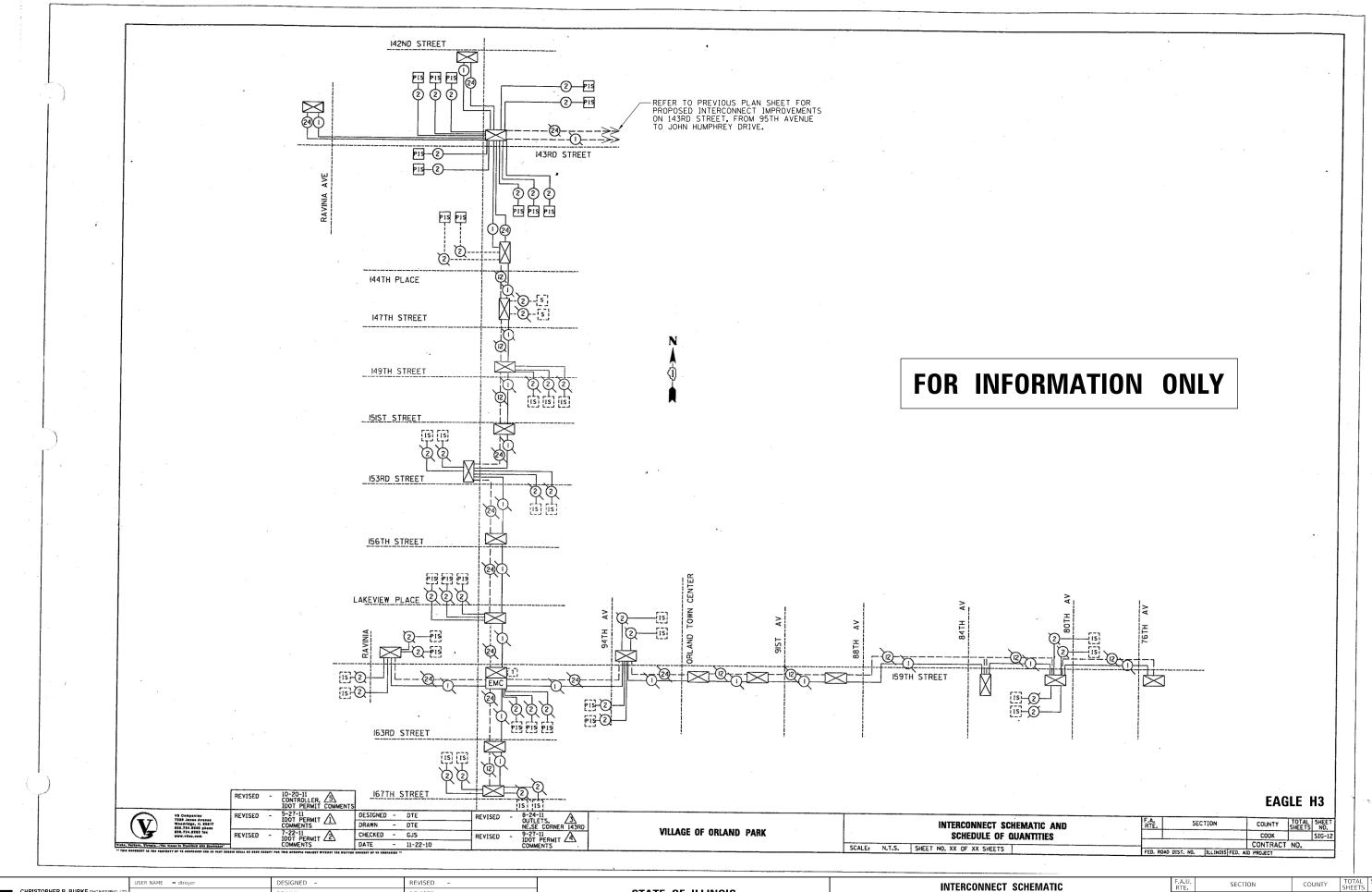
### PROPOSED INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES

|   |   | USER NAME = dtroyer           | DESIGNED - | REVISED - |  |
|---|---|-------------------------------|------------|-----------|--|
| C | CHRISTOPHER B. BURKE ENGINEERING, LTD.<br>9575 W. Higgins Road, Sulle 600 |                               | DRAWN -    | REVISED - |  |
|   |   | PLOT SCALE = 100.0000 ' / in. | CHECKED -  | REVISED - |  |
|   |   |                               |            |           |  |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

PROPOSED INTERCONNECT PLAN, SCHEMATIC, AND SCHEDULE OF QUANTITIES 143RD STREET FROM 95TH AVENUE TO JOHN HUMPHREY DRIVE

SECTION 16-00078-00-CH COOK 228 121 CONTRACT NO. 61K89



DRAWN -REVISED -CHECKED -REVISED -DATE -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  INTERCONNECT SCHEMATIC (FOR INFORMATION ONLY)

16-00078-00-CH соок 228 122 CONTRACT NO. 61K89

### LIGHTING GENERAL NOTES

- 1. THE EXACT LOCATIONS OF ALL UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR BEFORE THE INSTALLATION OF ANY EQUIPMENT. FOR THE LOCATIONS OF THE UTILITIES, CALL JULIE AT (800) 892-0123.
- 2. BEFORE INSTALLING LIGHT STANDARDS NEAR OVERHEAD AND UNDERGROUND ELECTRIC UTILITIES SHALL CALL COM ED FOR LOCATION APPROVAL AND MINIMUM CLEARANCE REQUIREMENTS.
- THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY AS WELL AS SUPERVISION/ DIRECTION
  AND MEANS/METHODS OF CONSTRUCTION.
- 4. ALL WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
  - A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS PREPARED BY IDOT (ADOPTED
  - B. "THE 2020 NATIONAL ELECTRICAL CODE".
  - C. MUNICIPAL CODES & STANDARDS.
- 5. NO MATERIALS SHALL BE DELIVERED TO THE JOB SITE UNTIL ALL PERTINENT EQUIPMENT SUBMITTALS HAVE BEEN REVIEWED BY THE ENGINEER.
- 6. ALL UNDERGROUND WIRING SHALL BE XLP TYPE-USE, EXTRA ABRASION RESISTANCE, 600 VOLTS, BURIED A MINIMUM 30 INCHES BELOW FINISHED GRADE, FOLLOWING THE ROADWAY OR SIDEWALK EDGE.
- 7. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, (IF APPLICABLE) AND HAVE BEEN
- 8. TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES.
- 9. ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ESTABLISHMENT OF THE TOP OF FOUNDATION ELEVATION WITH THE FINISHED GRADE.
- 11. THE ELECTRICAL CONTRACTOR SHALL FURNISH TWO SETS OF FULL SIZE RECORD DRAWINGS TO THE ENGINEER UPON COMPLETION OF THE LIGHTING AND ELECTRICAL IMPROVEMENTS. THE DRAWINGS SHALL SHOW THE INSTALLED LOCATIONS OF ALL LIGHT POLES, UNDERGROUND CONDUITS/WIRING, HANDHOLES, JUNCTION BOXES & CONTROLLER CABINETS. THE DRAWINGS WILL BE REVIEWED BY THE ENGINEER.
- 12. UPON COMPLETION OF THE PROPOSED LIGHTING IMPROVEMENTS, THE CONTRACTOR SHALL PERFORM ELECTRICAL TESTING AND VERIFY THAT THE INSTALLATION COMPLIES WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TIMELY NOTIFICATION AND ALL COORDINATION WITH COM ED FOR NEW ELECTRIC SERVICE TO THE PROPOSED LIGHTING CONTROLLER.
- 14. THE CONTRACTOR SHALL LABEL ALL WIRES WITH WIRE MARKERS INDICATING THE CIRCUIT ID IN EVERY CONTROLLER, POLE BASE, HAND HOLE AND SPLICE/CONNECTION POINT. WIRE MARKERS SHALL BE WHITE NYLON WITH INTERGRAL MECHANICAL FASTENER WITH MINIMUM ⅓4″ X 1″ WRITEABLE AREA.
- 15. THE LIGHT POLE LOCATIONS SHALL COMPLY WITH THE MINIMUM CLEAR WIDTH FOR AN ACCESSIBLE ROUTE FOR SIDEWALKS PER CURRENT AMERICAN WITH DISABILITIES ACT (ADA) REQUIREMENTS (COMPLY WITH IDOT BDE CHAPTER 17-4.04 AND PROWAG R301.1).
- 16. THE CONTRACTOR SHALL USE A STANDARD FOUNDATION WHENEVER POSSIBLE. WHEN UTILITY CONFLICT PROHIBITS USE OF STANDARD FOUNDATION THE CONTRACTOR MAY USE AN OFFSET FOUNDATION AT THE DIRECTION OF THE ENGINEER.

### **ABBREVIATIONS**

| Α    | AMPS                         | НН  | HAND HOLE              |
|------|------------------------------|-----|------------------------|
| BOC  | BACK OF CURB                 | HPS | HIGH PRESSURE SODIUM   |
| CKT  | CIRCUIT                      | PVC | POLYVINYL CHLORIDE     |
| DIA  | DIAMETER                     | RGS | RIGID GALVANIZED STEEL |
| FT   | FOOT                         | ROW | RIGHT OF WAY           |
| FOC  | FACE OF CURB                 | STA | STATION                |
| GND  | GROUND                       | ٧   | VOLTS                  |
| HD   | HEAVY DUTY                   | W   | WATTS                  |
| HDPE | HIGH DENSITY<br>POLYETHYLENE |     |                        |

### LIGHTING BILL OF MATERIALS

| 20800150 TRENCH BACKFILL CU YD  80400100 ELECTRIC SERVICE INSTALLATION EACH 80400200 ELECTRIC UTILITY SERVICE CONNECTION L SUM  81028200 UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. FOOT  81028220 UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. FOOT  81028740 UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA. FOOT | 15<br>1<br>1<br>50<br>640<br>4450 |
|--|-----------------------------------|
| 80400200 ELECTRIC UTILITY SERVICE CONNECTION L SUM 81028200 UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. FOOT 81028220 UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. FOOT   | 1<br>50<br>640<br>4450            |
| 81028200 UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA. FOOT 81028220 UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. FOOT  | 50<br>640<br>4450                 |
| 81028220 UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA. FOOT   | 640<br>4450                       |
|  | 4450                              |
| 81028740 UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/2" DIA, FOOT   |                                   |
|  | 3                                 |
| 81400730 HANDHOLE, COMPOSITE CONCRETE EACH   |                                   |
| 81702110 ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 10 FOOT  | 3955                              |
| 81702130 ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6 FOOT   | 33160                             |
| 81702150 ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2 FOOT   | 220                               |
| 81800240 AERIAL CABLE, 2-1/C NO. 8 WITH MESSENGER FOOT   | 505                               |
| 81800340 AERIAL CABLE, 3-1/C NO. 8 WITH MESSENGER FOOT   | 895                               |
| 82500350 LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP EACH   | 1                                 |
| 83057305 LIGHT POLE, WOOD, 55 FOOT, CLASS 3, WITH 15FT MAST ARM EACH   | 3                                 |
| 83600200 LIGHT POLE FOUNDATION, 24" DIAMETER FOOT  | 120                               |
| 84200500 REMOVAL OF LIGHTING UNIT, SALVAGE EACH  | 2                                 |
| 84200804 REMOVAL OF POLE FOUNDATION EACH   | 7                                 |
| 84400105 RELOCATE EXISTING LIGHTING UNIT EACH  | 5                                 |
| X1400238 LUMINAIRE, LED, SPECIAL EACH  | 13                                |
| X1400268 REMOVAL OF LIGHTING LUMINAIRE, SALVAGE EACH   | 5                                 |
| X8211008 TEMPORARY LUMINAIRE, LED, ROADWAY, DESIGNATION H EACH   | 11                                |
| X8250091 COMBINATION LIGHTING CONTROLLER EACH  | 1                                 |
| X8250500 LIGHTING UNIT COMPLETE (SPECIAL) EACH   | 8                                 |
| X8301115 MAST ARM, STREET LIGHTING, 15' EACH   | 8                                 |
| X8301802 REMOVE TEMPORARY WOOD POLE EACH   | 2                                 |
| X8302161 TEMPORARY WOOD POLE, 60 FT., CLASS 4 EACH   | 2                                 |
| X8360215 LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET FOOT  | 40                                |
| X8410107 REMOVE TEMPORARY LIGHTING UNIT, NO SALVAGE EACH   | 3                                 |
| X8410141 REMOVAL OF TEMPORARY LUMINAIRE EACH   | 8                                 |
| Z0033028 MAINTENANCE OF LIGHTING SYSTEM CAL MO   | 12                                |

### CAUTION NOTICE TO CONTRACTOR

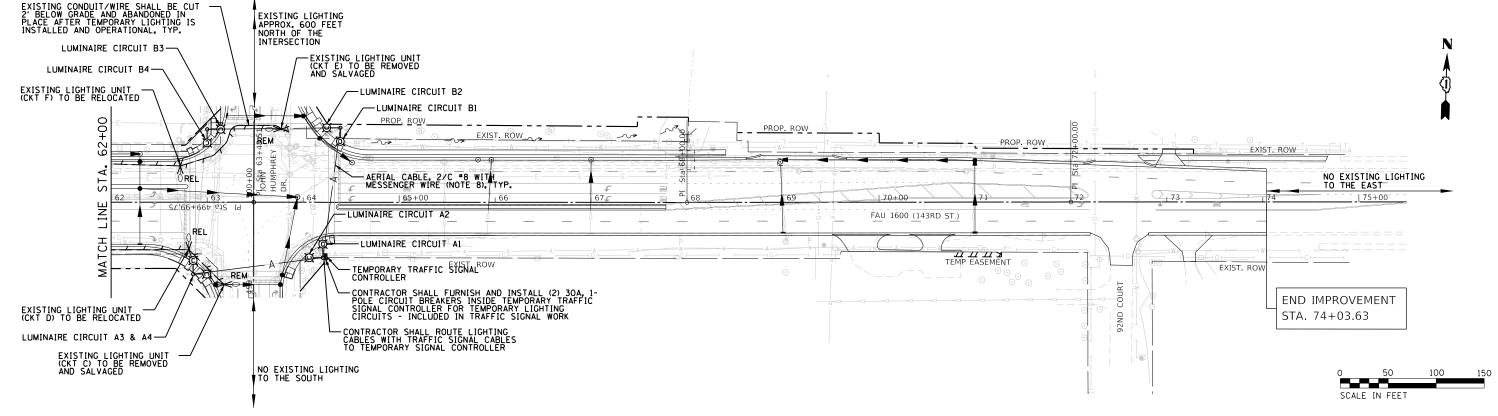
THE CONTRACTOR IS SPECIFICALLY CAUTIONED THE LOCATION AND/OR ELEVATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THESE PLANS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY LOCATION CENTER AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ENGINEER OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS.

> THE VILLAGE OF ORLAND PARK WILL OWN AND MAINTAIN THE PROPOSED ROADWAY LIGHTING SYSTEM.

THE VILLAGE OF ORLAND PARK WILL OWN AND MAINTAIN THE PROPOSED COMBINATION LIGHTING AT 143RD ST. & JOHN HUMPHREY DR.

SCALE: 1" = 50"

| JOHN HUMPHREY DRIVE AT 143RD STREET    | F.A.U.<br>RTE | SECTION          | COUNTY    | TOTAL<br>SHEETS | SHEET<br>NO. |
|--|---------------|------------------|-----------|-----------------|--------------|
| GENERAL NOTES AND BILL OF MATERIALS    | 2520          | 16-00078-00-CH   | COOK      | 228             | 123          |
| GENERAL NOTES AND DILE OF MATERIALS    |               |                  | CONTRACT  | NO. 61          | K89          |
| SHEET OF SHEETS STA BEGIN TO STA 75:00 |               | V. 191010 000 11 | 0.000.000 |                 | -            |



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION

16-00078-00-CH

JOHN HUMPHREY DRIVE AT 143RD STREET

REMOVAL / TEMPORARY LIGHTING PLAN (1 OF 1)

COUNTY

COOK

CONTRACT NO. 61K89

228 124

DESIGNED

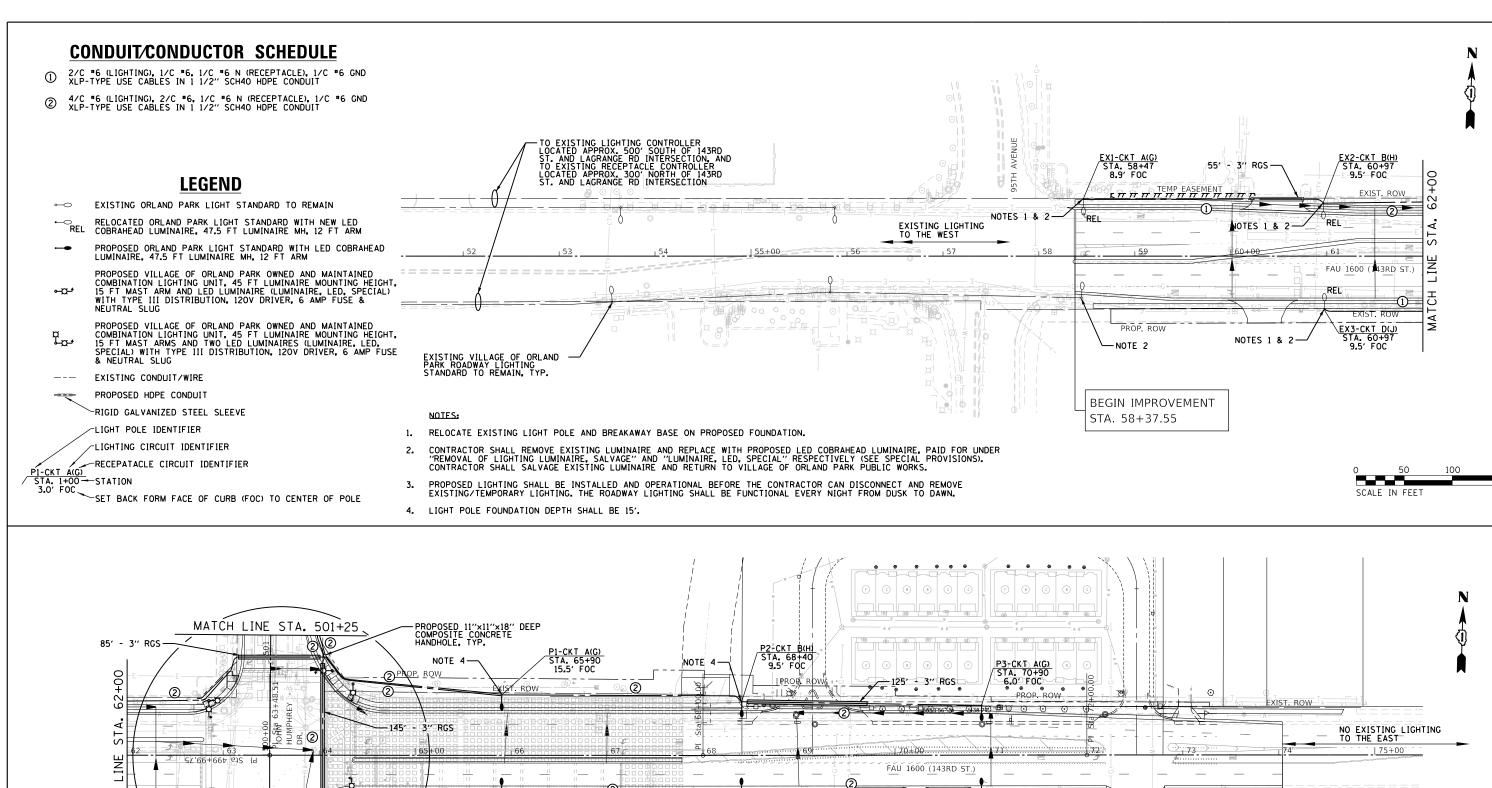
RAWN

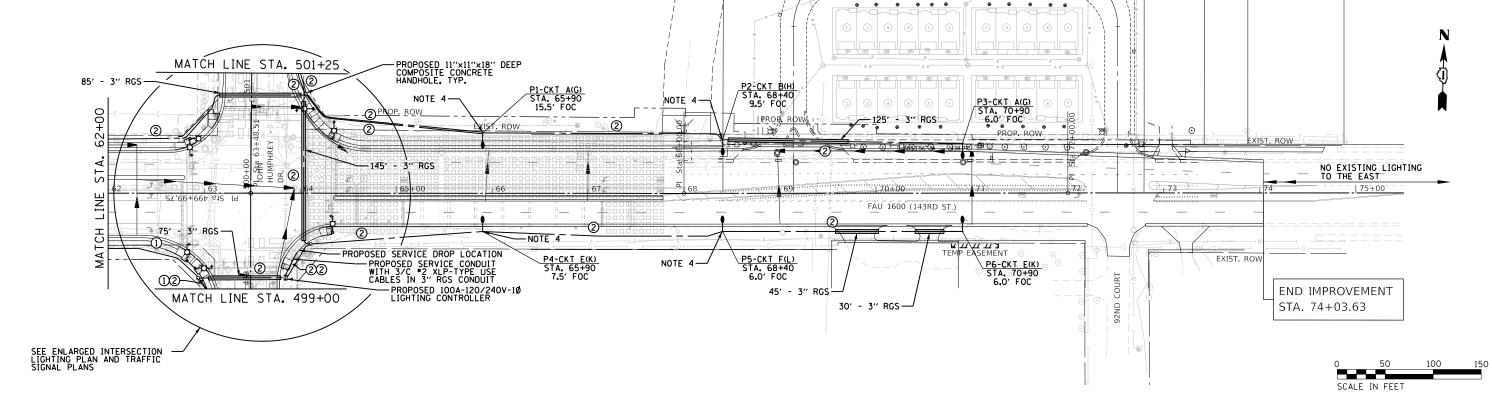
HECKED

REVISED

REVISED

REVISED





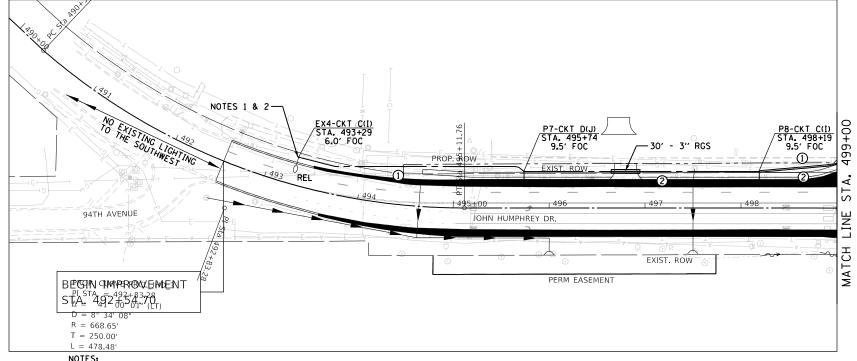
DESIGNED REVISED SECTION COUNTY JOHN HUMPHREY DRIVE AT 143RD STREET STATE OF ILLINOIS DRAWN REVISED 16-00078-00-CH COOK 228 125 PROPOSED LIGHTING PLAN (1 OF 2) HECKED REVISED **DEPARTMENT OF TRANSPORTATION** OT SCALE = 100.0000 ' / in. CONTRACT NO. 61K89 DATE REVISED

### CONDUIT/CONDUCTOR SCHEDULE

- 2/C =6 (LIGHTING), 1/C =6, 1/C =6 N (RECEPTACLE), 1/C =6 GND XLP-TYPE USE CABLES IN 1 1/2" SCH4O HDPE CONDUIT
- 4/C =6 (LIGHTING), 2/C =6, 1/C =6 N (RECEPTACLE), 1/C =6 GND XLP-TYPE USE CABLES IN 1 1/2" SCH40 HDPE CONDUIT

### **LEGEND**

- EXISTING ORLAND PARK LIGHT STANDARD TO REMAIN
- RELOCATED ORLAND PARK LIGHT STANDARD WITH NEW LED COBRAHEAD LUMINAIRE, 47.5 FT LUMINAIRE MH, 12 FT ARM
- PROPOSED ORLAND PARK LIGHT STANDARD WITH LED COBRAHEAD LUMINAIRE, 47.5 FT LUMINAIRE MH, 12 FT ARM
- PROPOSED VILLAGE OF ORLAND PARK OWNED AND MAINTAINED COMBINATION LIGHTING UNIT, 45 FT LUMINAIRE MOUNTING HEIGHT, 15 FT MAST ARM AND LED LUMINAIRE (LUMINAIRE, LED, SPECIAL) WITH TYPE III DISTRIBUTION, 120V DRIVER, 6 AMP FUSE & بص
- PROPOSED VILLAGE OF ORLAND PARK OWNED AND MAINTAINED COMBINATION LIGHTING UNIT, 45 FT LUMINAIRE MOUNTING HEIGHT, 15 FT MAST ARMS AND TWO LED LUMINAIRES (LUMINAIRE, LED, SPECIAL) WITH TYPE III DISTRIBUTION, 120V DRIVER, 6 AMP FUSE & NEITHER SLIG.
- EXISTING CONDUIT/WIRE
- PROPOSED HDPE CONDUIT
- -RIGID GALVANIZED STEEL SLEEVE
- -LIGHT POLE IDENTIFIER
- LIGHTING CIRCUIT IDENTIFIER
- RECEPATACLE CIRCUIT IDENTIFIER
- PI-CKT A(G)
  STA. 1+00 STATION
  3.0' FOC
  - -SET BACK FORM FACE OF CURB (FOC) TO CENTER OF POLE



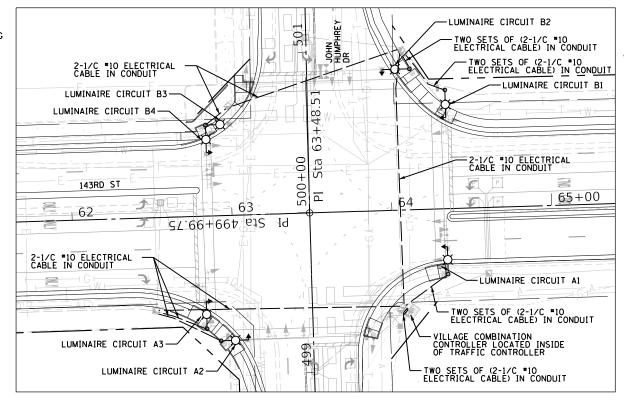
- NOTES:
- RELOCATE EXISTING LIGHT POLE AND BREAKAWAY BASE ON PROPOSED FOUNDATION.
- CONTRACTOR SHALL REMOVE EXISTING LUMINAIRE AND REPLACE WITH PROPOSED LED COBRAHEAD LUMINAIRE, PAID FOR UNDER "REMOVAL OF LIGHTING LUMINAIRE, SALVAGE" AND "LUMINAIRE, LED, SPECIAL" RESPECTIVELY (SEE SPECIAL PROVISIONS). CONTRACTOR SHALL SALVAGE EXISTING LUMINAIRE AND RETURN TO VILLAGE OF ORLAND PARK PUBLIC WORKS.
- PROPOSED LIGHTING SHALL BE INSTALLED AND OPERATIONAL BEFORE THE CONTRACTOR CAN DISCONNECT AND REMOVE EXISTING/TEMPORARY LIGHTING. THE ROADWAY LIGHTING SHALL BE FUNCTIONAL EVERY NIGHT FROM DUSK TO DAWN.
- 4. LIGHT POLE FOUNDATION DEPTH SHALL BE 15'.

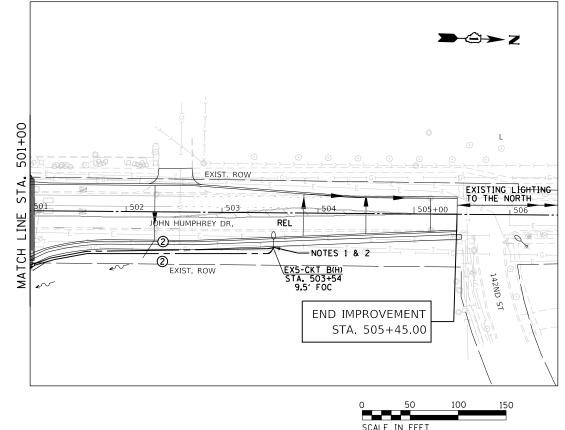


Đ-Ĝ-≻z

### NOTES:

- THE PROPOSED COMBINATION LIGHTING CIRCUITS SHALL NOT BE CONNECTED TO THE ROADWAY LIGHTING CIRCUITS.
- COMBINATION POLE LUMINAIRES ARE POWERED FROM TRAFFIC CONTROLLER. SEE TRAFFIC SIGNAL PLANS.
- THE COMBINATION LIGHTING CABLE AND TRAFFIC SIGNAL CABLES WILL BE IN A SHARED CONDUIT.
- SEE TRAFFIC SIGNAL PLANS FOR LOCATION OF COMBINATION POLES, HANDHOLES, AND CONDUIT.
- SPLICING IS NOT ALLOWED IN BELOW GRADE





DESIGNED -REVISED -DRAWN REVISED HECKED REVISED DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  **ENLARGED INTERSECTION LIGHTING PLAN** JOHN HUMPHREY DRIVE AT 143RD STREET PROPOSED LIGHTING PLAN (2 OF 2)

SCALE IN FEET SECTION 16-00078-00-CH COOK 228 126 CONTRACT NO. 61K89

ITEM

MAIN CIRCUIT BREAKER

### NOTES:

1. ALL ITEMS LISTED IN LIGHTING CONTROLLER COMPONENT SCHEDULE SHALL BE CONSIDERED INCIDENTAL TO THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240 VOLT, 100 AMP" INCLUDING CABINET AND FOUNDATION.

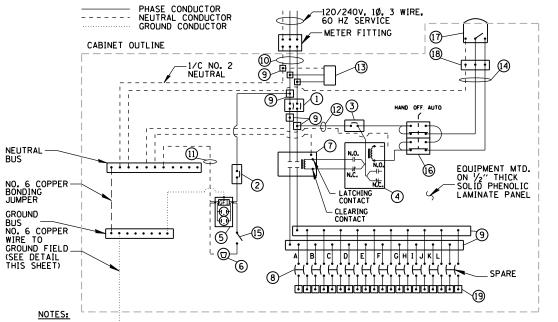
SPECIFICATION 100 AMPERE, 2P, 240V SERVICE RATING, 10KAIC

- 2. THE LIGHTING CONTROLLER TOGETHER WITH ALL OF ITS COMPONENTS SHALL BE UL LISTED AS AN "ENCLOSED INDUSTRIAL CONTROL PANEL" UNDER UL508A.
- 3. CONNECTION OF SURGE ARRESTOR TO LINE SIDE OF MAIN CIRCUIT BREAKER SHALL NOT BE "DOUBLE LUGGED."
- 4. THE MAIN CIRCUIT BREAKER SHALL BE LABELED "SERVICE DISCONNECT". LAMPHOLDER CIRCUIT BREAKER SHALL HAVE RED WARNING NAMEPLATE INDICATING "MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF".
- 5. ALL SWITCHES AND CONTROLS SHALL BE IDENTIFIED USING TWO COLOR ENGRAVED NAMEPLATES.
- 6. THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.
- 7. ALL EXPOSED BUS BARS SHALL BE INSULATED.
- 8. ALL WIRING SHALL BE COPPER.

### LIGHTING CONTROLLER COMPONENT SCHEDULE

|         | LIGHTII       | NG C                                       | ONTROI             | .LER | CIRCUIT            | Γ LOA   | DS           |
|---------|---------------|--|--------------------|------|--------------------|---------|--------------|
| CIRCUIT | WIRE<br>COLOR | 191W ROADWAY FESTOON RECEPTACLE TOTAL CIRC |                    |      |                    |         | CIRCUIT LOAD |
|         | COLOR         | QTY.                                       | LOAD/FIXT. (WATTS) | QTY. | LOAD/FIXT. (WATTS) | (WATTS) | AMPS (VOLTS) |
| Α       | R             | 3  | 191 W              | -    | 180 W              | 573 W   | 2.4 A (240V) |
| В       | В             | 3  | 191 W              | -    | 180 W              | 573 W   | 2.4 A (240V) |
| С       | R             | 2  | 191 W              | -    | 180 W              | 382 W   | 1.6 A (240V) |
| D       | В             | 2  | 191 W              | -    | 180 W              | 382 W   | 1.6 A (240V) |
| E       | R             | 2  | 191 W              | -    | 180 W              | 382 W   | 1.6 A (240V) |
| F       | В             | 1  | 191 W              | -    | 180 W              | 191 W   | 0.8 A (240V) |
| G       | BL            | -  | 191 W              | 3    | 180 W              | 540 W   | 4.5 A (120V) |
| Н       | 0             | -  | 191 W              | 3    | 180 W              | 540 W   | 4.5 A (120V) |
| I       | BL            | -  | 191 W              | 2    | 180 W              | 360 W   | 3.0 A (120V) |
| J       | 0             | -  | 191 W              | 2    | 180 W              | 360 W   | 3.0 A (120V) |
| K       | BL            | -  | 191 W              | 2    | 180 W              | 360 W   | 1.5 A (120V) |
| L       | 0             | -  | 191 W              | 1    | 180 W              | 180 W   | 1.5 A (120V) |
| TOTAL   | -             | 13   | N/A                | 13   | N/A                | 4441 W  | 18.5 (240V)  |

WIRE COLORS R=RED B=BLACK BL=BLUE O=ORANGE W=WHITE G-GREEN



- 1. ALL GROUND CONDUCTORS SHALL BE GREEN AND NEUTRAL CONDUCTORS SHALL BE WHITE. PHASE CONDUCTORS SHALL BE COLOR CODED IN ACCORDANCE WITH SECTION 1066.02 OF THE STANDARD SPECIFICATIONS. CONTRACTOR SHALL ONLY USE SOLID COLOR CODED INSULATIONS. COLOR STRIPPING OF PHASE CONDUCTORS SHALL NOT BE
- 2. IN ADDITION TO THE TERMINATIONS SHOWN, THE NEUTRAL AND GROUND BUS BARS SHALL EACH ACCOMMODATE A MINIMUM OF 8 ADDITIONAL TERMINATIONS (#2-#14).

FURNISHED BY CONTRACTOR

INSTALLED BY

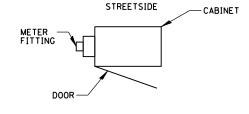
-FURNISHED & INSTALLED CONTRACTOR

- 2" RIGID GLAVANIZED STEEL (RGS) ELBOW

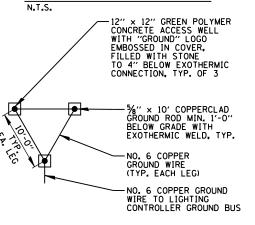
-5/8"x10" COPPERWELD GROUND ROD W/ #4 AWG BARE COPPER GROUND WIRE ATTACHED W/ CLAMPS, LISTED FOR DIRECT

-GRADE LINE

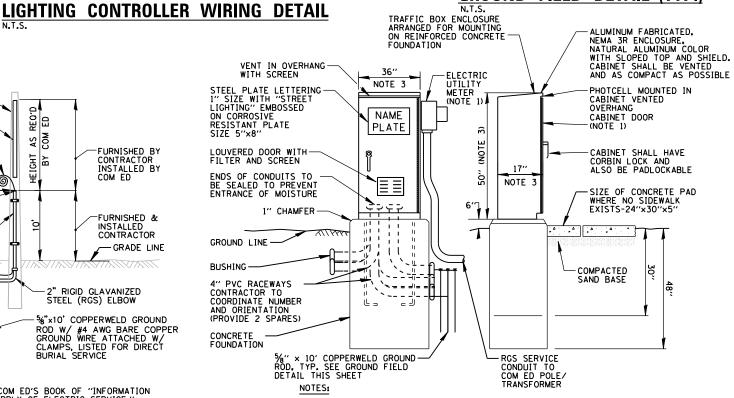
3. IN ADDITION TO THE TERMINATIONS SHOWN, THE POWER DISTRIBUTION BLOCKS ON THE LOAD SIDE OF THE MAIN BREAKER SHALL EACH ACCOMMODATE A MINIMUM OF 4 ADDITIONAL TERMINATIONS (#2-#14).



### **CABINET METER FITTING** & DOOR ORIENTATION



### **GROUND FIELD DETAIL (TYP.)** N.T.S.



- SEE CABINET METER FITTING AND DOOR ORIENTATION DETAIL FOR METER AND DOOR ORIENTATION.
- 2. ALL ITEMS SHOWN ABOVE (INCLUDING FOUNDATION & GROUND FIELD)
  SHALL BE INCLUDED IN THE PRICE BID FOR "LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100 AMP", EXCEPT FOR THE SERVICE CONDUIT WHICH
- 3. CABINET DIMENSIONS SHOWN ARE APPROXIMATE, CABINET SHALL BE AS COMPACT AS POSSIBLE, CONTRACTOR TO COORDINATE.

# LIGHTING CONTROLLER CABINET AND FOUNDATION

SER NAME = dtrove DESIGNED REVISED RAWN REVISED HECKED REVISED REVISED

STATE OF ILLINOIS

ALL WORK SHALL CONFORM TO COM ED'S BOOK OF "INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRIC SERVICE."

2. CONTRACTOR SHALL PROVIDE CONDUIT BUSHING AND SEALING COMPOUND AT TOP OF RISER.

3. ALL MATERIAL ABOVE (EXCEPT FOR POLE) SHALL BE INCLUDED IN THE PRICE BID FOR "ELECTRIC SERVICE INSTALLATION". THE HORIZONTAL SERVICE CONDUIT AND WIRING FROM POLE TO CONTROLLER SHALL BE

COM ED OVERHEAD CONNECTION POLE

EXISTING COM ED WOOD UTILITY POLE

NON-METALLIC U-GAURD CONTRACTOR TO INSTALL

SUFFICIENT CABLE SLACK
TO REACH COM ED
SECONDARY/TRANSFORMER
WITHOUT SPLICING

COM ED TO INSTALL FROM 10 FT. ABOVE GRADE AND UP

10'-2" GALV. CONDUIT 2 HOLE STRAPS, AS

2" RGS CONDUIT WITH 3/C #2 XLP-TYPE USE CABLES TO LIGHTING

CONTROLLER CABINET

(NOTE 2

AS

HEIGHT BY

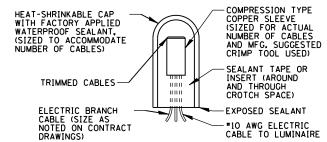
SECTION JOHN HUMPHREY DRIVE AT 143RD STREET LIGHTING DETAILS (1 OF 8)

COUNTY 16-00078-00-CH COOK 228 127 CONTRACT NO. 61K89

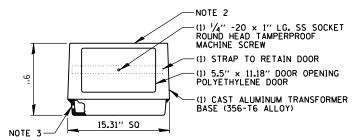
**DEPARTMENT OF TRANSPORTATION** 

- 1. LIGHT POLES SHALL MEET WIND LOADING & VIBRATION REQUIREMENTS ACCORDING TO THE LATEST AASHTO STANDARDS AND ARTICLE 1069.01 IN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
- 2. POLE HANDHOLE SHALL FACE AWAY FROM TRAFFIC.
- 3. LIGHT POLE, LUMINAIRE, BREAKAWAY TRANSFORMER BASE, AND BANNER ARMS PAID FOR UNDER "LIGHTING UNIT COMPLETE (SPECIAL).
- 4. POLE SHALL BE RATED FOR BANNER ARMS. BANNER ARMS SHALL NOT BE INSTALLED, THEY SHALL BE DELIVERED TO MOUNT PROSPECT PUBLIC WORKS.

# LIGHTING UNIT COMPLETE, SPECIAL



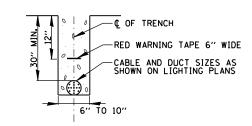
SPLICING ELECTRIC CABLE



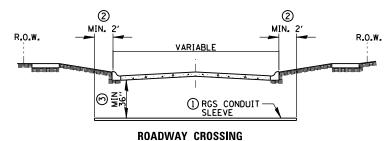
### NOTES:

- 1. BEFORE INSTALLATION OF BREAKAWAY BASE, USER SHOULD CONSULT WITH AUTHORIZED DISTRIBUTOR REGARDING USERS PROPOSED APPLICATION, LOAD REQUIREMENTS AND INSTALLATION METHODS. FAILURES CAN RESULT FROM USERS MISAPPLICATION OR IMPROPER INSTALLATION, TO APPROACH OPTIMUM STATIC LOADS, USE THE LARGEST POSSIBLE BOLT CIRCLES. SHIMS SHALL NOT BE ALLOWED.
- 2. TOP BOLT CIRCLE SHALL BE 14.5" MIN. AND 15" MAX. BOTTOM BOLT CIRCLE SHALL BE 14.5" MIN. AND 16.25" MAX.
- 3. DRILLED AND TAPPED 1/2"-13 UNC HOLE FOR GROUND CONNECTOR.
- 4. COST INCLUDED IN "LIGHTING UNIT COMPLETE (SPECIAL)" PAY ITEM.
- 5. PAINTED BLACK TO MATCH POLE.

### BREAKAWAY TRANSFORMER BASE

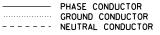


### TRENCH CROSS SECTION



- ① SLEEVE SHALL BE HEAVY WALL RIGID GALVANIZED STEEL (RGS) CONDUIT.
- ② SLEEVE SHALL EXTEND A MINIMUM OF 2 FT. BEYOND BACK OF CURB.
- 3 SLEEVE SHALL BE A MINIMUM OF 36" BELOW ROADWAY OR CURB BOTTOM.

### **ELECTRIC CONDUIT INSTALLATION**



TO 240V ROADWAY

LUMINAIRE

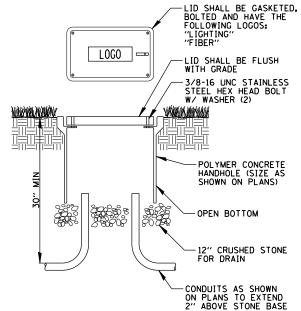
BLOO

9-

..c.. □::::::

- 5A FUSE FOR LUMINAIRES AND 2A FUSE FOR FESTOON RECEPTACLE (NEUTRAL SHALL BE NON-FUSED) 2-POLE BREAKAWAY FUSE HOLDER & INSULATING BOOTS
- 2 XLP-TYPE USE POLE WIRES (\*10 TO LUMINAIRE & \*12 TO RECEPTACLE) COLOR TO MATCH BRANCH WIRING
- MULTIPLE COMPRESSION FITTINGS (SPLICE), TYP.
- 4 CONCRETE FOUNDATION
- 5 WIRES AS SHOWN ON PLANS
- 6 PROPOSED LIGHTING DUCT PULLED THROUGH PVC RACEWAY
- 7 POLE GROUND LUG
- (8) NO. 6 GROUND WIRE MECHANICALLY CLAMPED TO GROUND ROD
- GROUND ROD
- 10 20A-120V GFCI-WR RECEPTACLE
- WIRE COLOR R=RED B=BLACK BL=BLUF LIGHTING O=ORANGE W=WHITE G=GREEN RECEPTACLES

### POLE HANDHOLE WIRING DIAGRAM



- 1. NO SPLICING ALLOWED IN HANDHOLE. UNLESS EXPLICITLY STATED.
- 2. POLYMER CONCRETE HANDHOLE AND LID SHALL BE GREY.

TO STA, 75+00

3. BOX & LID SHALL MEET/EXCEED ANSI TIER 15 LOADING REQUIREMENTS, AND BE TESTED IN ACCORDANCE WITH THE LATEST EDITION OF THE ANSI/SCTE 77 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY", AND THE PROVISIONS OF PARAGRAPHS 5.2.3 AND 5.2.4 OF WESTERN UNDERGROUND COMMITTEE GUIDE 3.6.

### POLYMER CONCRETE HANDHOLE

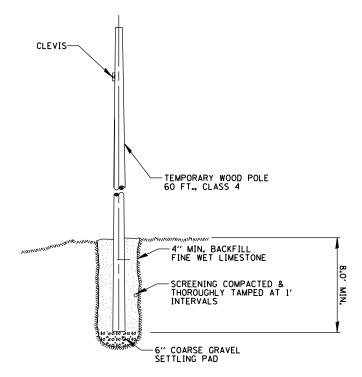
DESIGNED REVISED RAWN REVISED HECKED REVISED DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  JOHN HUMPHREY DRIVE AT 143RD STREET LIGHTING DETAILS (2 OF 8)

SCALE: 1" = 50"

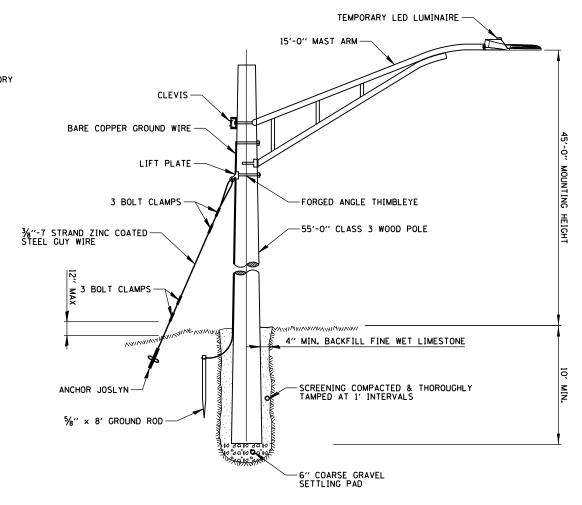
SECTION COUNTY 16-00078-00-CH COOK 228 128 CONTRACT NO. 61K89

# $\underset{\scriptscriptstyle N.T.S.}{\underline{\textbf{AERIAL}}} \hspace{0.1cm} \underline{\textbf{CABLE}} \hspace{0.1cm} \underline{\textbf{CONNECTION}} \hspace{0.1cm} \underline{\textbf{DETAIL}}$



ALL WORK ABOVE SHALL BE PAID FOR UNDER "TEMPORARY WOOD POLE, 60 FT., CLASS 4" (SEE SPECIAL PROVISIONS).

### TEMPORARY WOOD POLE DETAIL



TEMPORARY LIGHT POLE ATTACHMENT DETAIL

-HEAVY DUTY INSULATED PULLEY CLEVIS

TO LUMINAIRE, WHERE APPLICABLE

NEUTRAL CONDUCTOR

WATERPROOF FUSEHOLDER

-WATERPROOF FUSEHOLDER AND SOLID NEUTRAL SLUG

PHASE CONDUCTOR

-BARE COPPER GROUND WIRE EVERY THIRD POLE

WOOD POLE

MESSENGER TIED TO-INSULATOR WITH FACTORY FORMED CABLE TIE

AWG BARE COPPER GROUND WIRE

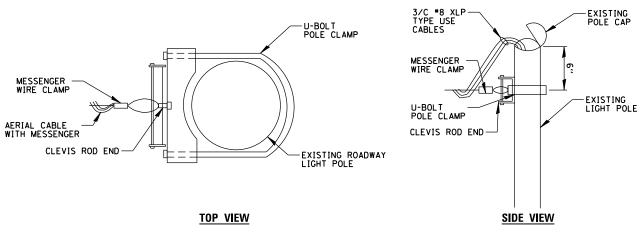
WATERPROOF INSULATION PIERCING TAP CONNECTOR

GROUND CLAMP

### NOTES:

ALL WORK ABOVE (EXCEPT FOR LUMINAIRE) SHALL BE PAID FOR UNDER, "LIGHT POLE, WOOD, 55
FOOT, CLASS 3, WITH 15FT MAST ARM". TEMPORARY LUMINAIRE PAID FOR UNDER "TEMPORARY
LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H" (SEE SPECIAL PROVISIONS).

### **TEMPORARY LIGHT POLE DETAIL**



NOTES:

1. USE THIS DETAIL FOR TEMPORARY AERIAL CABLE CONNECTION TO EXISTING ALUMINUM POLE.

# EXISTING POLE AERIAL CABLE ATTACHMENT

### NOTES:

- UNDER DIRECTION OF THE ENGINEER THE CONTRACTOR SHALL INSTALL TEMPORARY WOOD POLES WITH AERIAL CABLES IN AREAS WHERE DAMAGE TO THE EXISTING LIGHTING CONDUIT / CABLES FROM DIRECTIONAL BORING IS UNAVOIDABLE.
- 2. THE CONTRACTOR SHALL PROVIDE INTERMEDIATE SUPPORTS TO MAINTAIN MINIMUM CLEARANCES. REFER TO AERIAL CABLE ATTACHED TO STRUCTURE DETAIL.
- 3. COST OF SPLICES AND MOUNTING HARDWARE SHALL BE INCLUDED IN THE UNIT PRICE FOR AERIAL CABLE.

DESIGNED -REVISED DRAWN REVISED HECKED REVISED DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION JOHN HUMPHREY DRIVE AT 143RD STREET 16-00078-00-CH COOK 228 129 LIGHTING DETAILS (3 OF 8) CONTRACT NO. 61K89 TO STA. 75+00

ONE-LINE LEGEND

RELOCATED ROADWAY LUMINAIRE

PROPOSED ROADWAY LUMINAIRE

EXISTING ELECTRIC CABLE IN CONDUIT

PROPOSED ELECTRIC CABLE IN CONDUIT

EXISTING ELECTRIC SERVICE LOCATION ROADWAY CIRCUIT IDENTIFIER

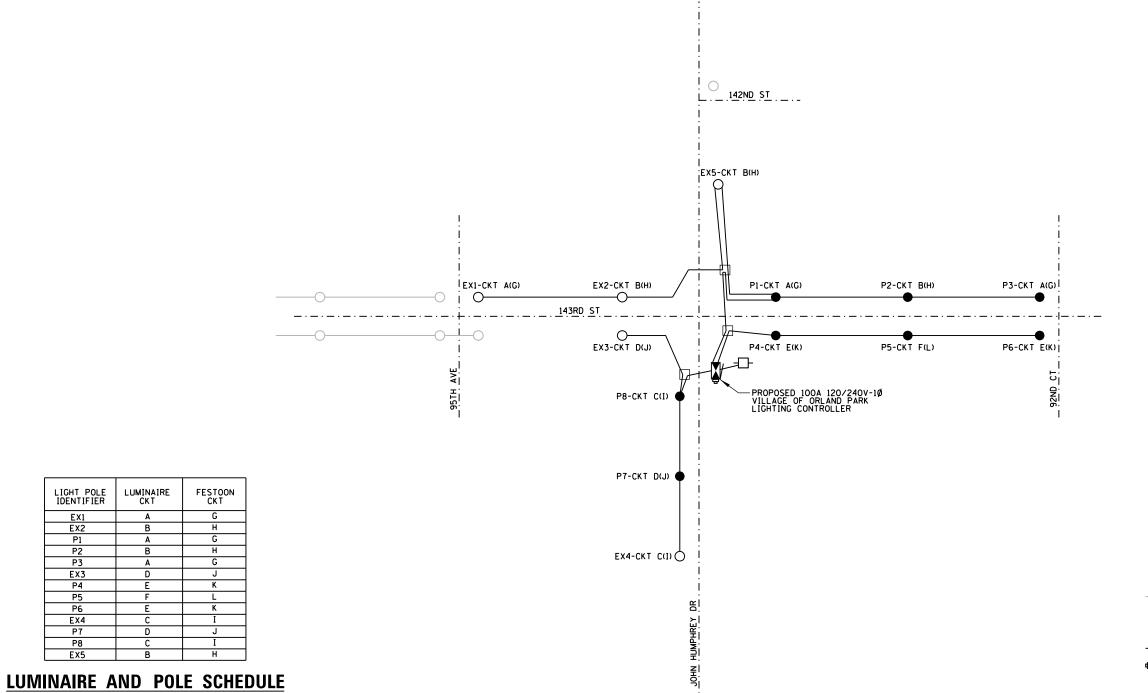
EXISTING LUMINAIRE

LIGHTING CONTROLLER

HANDHOLE

--- CENTERLINE OF ROADWAY

AI POLE NUMBER



# **LIGHTING ONE-LINE DIAGRAM** N.T.S.

|  | USER NAME = dtroyer           | DESIGNED -      | REVISED - |                              |                           | JOHN HUMPHREY DRIVE AT 143RD STREET |          |                |            | F.A.U.<br>RTE | SECTION | COUNTY        | TOTAL<br>SHEETS | SHEET<br>NO. |      |
|--|-------------------------------|-----------------|-----------|------------------------------|---------------------------|-------------------------------------|----------|----------------|------------|---------------|---------|---------------|-----------------|--------------|------|
| CHRISTOPHER B. BURKE ENGINEERING, LTD<br>9575 W. Higgins Road, Sulle 600 |                               | DRAWN -         | REVISED - | STATE OF ILLINOIS            | LIGHTING DETAILS (4 OF 8) |                                     | 2520     | 16-00078-00-CH | соок       | 228           | 130     |               |                 |              |      |
| Rosemont, Illinois 60018<br>(847) 823-0500                               | PLOT SCALE = 100.0000 ' / in. | CHECKED -       | REVISED - | DEPARTMENT OF TRANSPORTATION |                           |                                     | LIGITING | DLIAIL         | 3 (4 01 0) |               |         |               | CONTRACT        | Γ NO. 6      | 1K89 |
|  | PLOT DATE = 12/3/2024         | DATE - 12/03/24 | REVISED - |                              | SCALE: 1" = 50'           | SHEET                               | OF       | SHEETS         | STA. BEGIN | TO STA. 75+00 |         | ILLINOIS FED. | AID PROJECT     |              |      |

LUMINAIRE CKT

LIGHT POLE IDENTIFIER EX1 EX2 P1

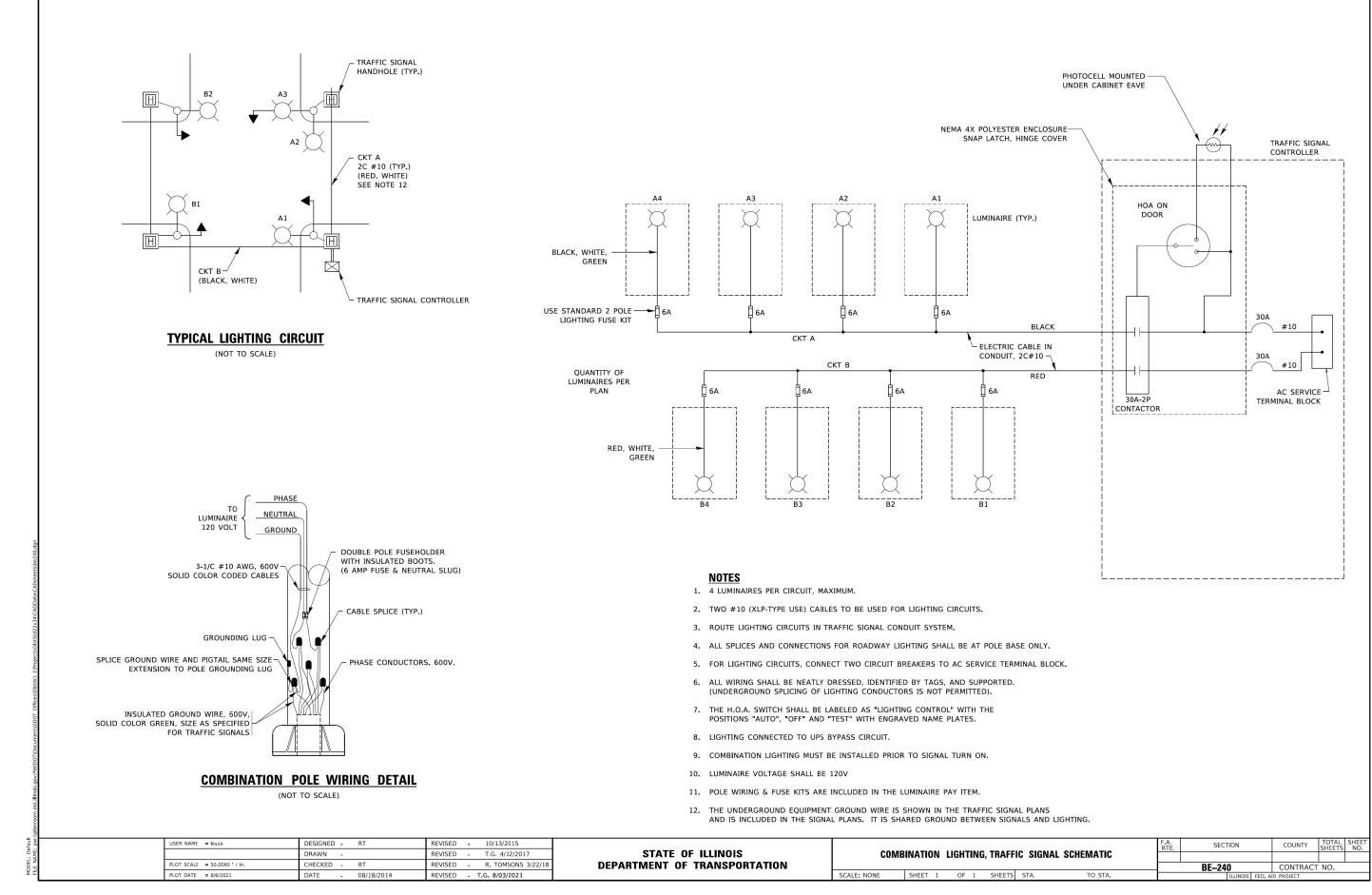
> Р3 EX3

P4

Р6

EX4

Р7



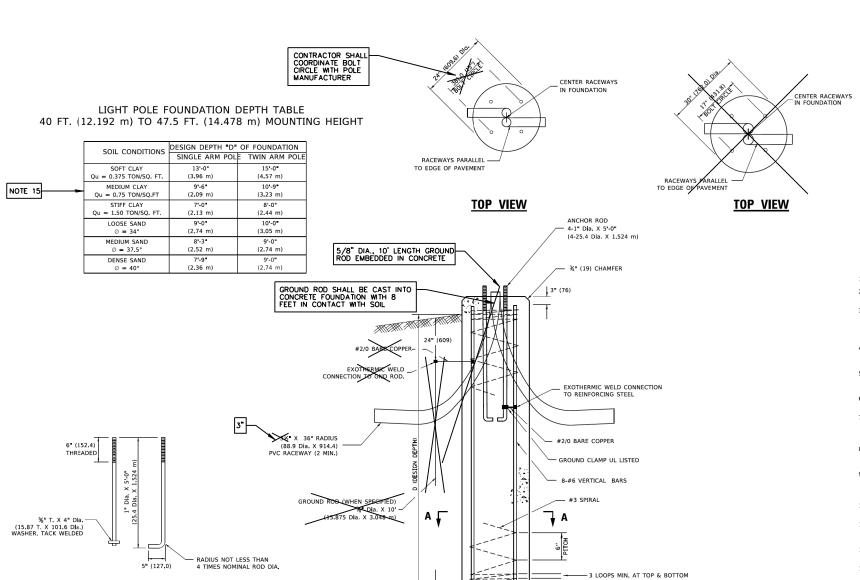
PEN TABLE = \$PENTBLL\$
FILE NAME = pw:\\patrickco-pw.bentle

CHRISTOPHER B. BURKE ENGINES 9575 W. Higgins Road, Sulte 600 Rosemont, Illinois 60018 (847) 823-0500

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

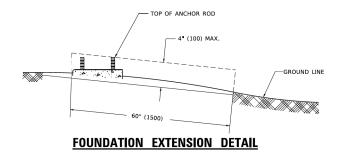
JOHN HUMPHREY DRIVE AT 143RD STREET
LIGHTING DETAILS (5 OF 8)

SCALE: 1" = 50' SHEET OF SHEETS STA. BEGIN TO STA. 75+00

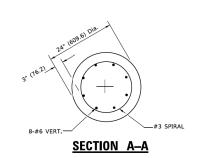


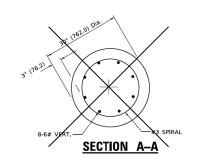
24" (609.6) Dia. **FOUNDATION DETAIL** 

3" (76,2)



**ANCHOR ROD DETAIL** 





### **NOTES**

- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- 2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- 3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH ASSHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4 THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- 6. THE CONCRETE SHALL BE CLASS SI, CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- 7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE, COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- . THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- ANCHOR RODS SHALL PROJECT 23#4\* (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY
  COUPLINGS ARE SPECIFED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD
  PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14 THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- 15. EACH LIGHT POLE FOUNDATION SHALL HAVE A MINIMUM DEPTH OF 10'-0".

PAID FOR UNDER "LIGHT POLE FOUNDATION, 24" DIAMETER".

**IDOT STANDARD BE-301** 

MODIFIED FOR THIS PROJECT

### LIGHT POLE FOUNDATION

DESIGNED -REVISED -DRAWN REVISED -HECKED REVISED DATE REVISED -

STATE OF ILLINOIS

JOHN HUMPHREY DRIVE AT 143RD STREET **LIGHTING DETAILS (6 OF 8)** SCALE: 1" = 50' SHEET SHEETS STA. BEGIN TO STA. 75+00

SECTION 16-00078-00-CH COOK 228 132 CONTRACT NO. 61K89

**DEPARTMENT OF TRANSPORTATION** 

2" (50.8)

|                            | DESIGN DEPTH       | OF FOUNDATION      | R                       | EINFORCEMENT         | IN FOUNDATIO            | DN                            |  |
|----------------------------|--------------------|--------------------|-------------------------|----------------------|-------------------------|-------------------------------|--|
| TYPE OF SOIL               | SINGLE ARM         | TWIN ARM           | SINGLE                  | ARM                  | TWIN ARM                |                               |  |
|                            | D                  | D                  | VERT BARS               | SPIRAL               | VERT BARS               | SPIRAL                        |  |
| SOFT CLAY                  | 13'-0 <b>"</b>     | 15'-0"             | 8-#6X12'-6"             | #3X122'              | 8-#6X14'-3"             | #3X141'                       |  |
|                            | (3.962 m)          | (4.572 m)          | (3.810 m)               | (37.186 m)           | (4.343 m)               | (42.977 m)                    |  |
| MEDIUM CLAY                | 9'-6"              | 10'-9"             | 8-#6X9'-0 <b>"</b>      | #3X90'               | 8-#6X10'-0"             | #3X100'                       |  |
|                            | (2.896 m)          | (3.277 pl)         | (2.743 m)               | (27.432 m)           | (3.048 m)               | (30.480 m)                    |  |
| STIFF CLAY                 | 7'-0"              | 8'-0"              | 8-#6X6'-6"              | #3X66'               | 8-#6X7 6"               | #3X76'                        |  |
|                            | (2.134 m)          | (2.438 m)          | (1.981 m)               | (20.112 m)           | (2.286 m)               | (23.165 m)                    |  |
| LOOSE SAND                 | 9'-0"              | 10 <b>V0"</b>      | 8-#6X8'-6"              | #3X85'               | 8-#6X9'-6"              | #3X94'                        |  |
|                            | (2.743 m)          | (3 <b>0</b> 48 m)  | (2.591 m)               | (25.908 m)           | (2.896 m)               | (28.651 m)                    |  |
| MEDIUM SAND                | 8'-3"<br>(2.515 m) | (2.743\m)          | 8-#6X8'-0"<br>(2.438 m) | #3X78'<br>(23.774 m) | 8-#6X8'-6"<br>(2.591 m) | #3X85'<br>(2 <b>5</b> .908 m) |  |
| DENSE SAND                 | 7'-9"              | 9'-0"              | 8-#6X7'-6"              | #3X73'               | 8-#6X8'-6 <b>"</b>      | #3X85'                        |  |
|                            | (2.362 m)          | (2.743 m)          | (2.286 m)               | (22.250 m)           | (2/591 m)               | (25.908 m)                    |  |
| ROCK OR<br>SOLIDIFIED SLAG | 5'-0"<br>(1.524 m) | 5'-0"<br>(1.524 m) | NONE                    | NONE                 | NONE                    | NONE                          |  |

### OFFSET SCHEDULE

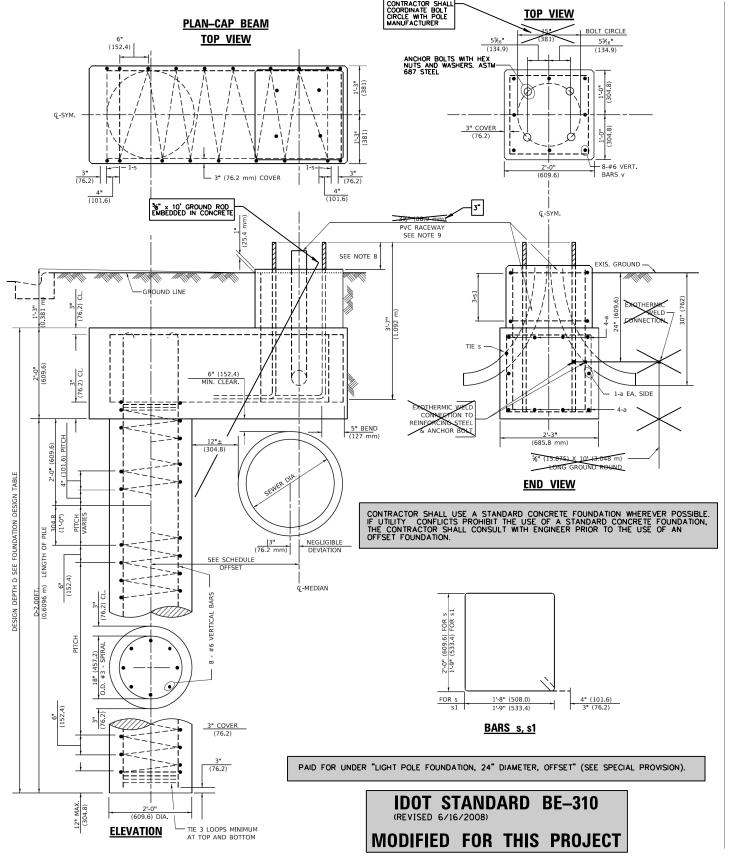
### **BILL OF MATERIAL**

| ı | MARK           | NO. | SIZE           | LENGTH             | SHAPE |
|---|----------------|-----|----------------|--------------------|-------|
|   | MARK           | NO. | SIZE           | LENGIH             | SHAPE |
|   | a              | 10  | 6 SEE<br>BELOW |                    | _     |
|   | s              | 12  | 4              | 8'-0"<br>(2.438 m) | 0     |
|   | s <sub>1</sub> | 3   | 3              | 7'-6"<br>(2.286 m) |       |
|   | v <sub>1</sub> | 8   | 6              | 2'-9"<br>(0.838 m) | -     |
|   | v <sub>2</sub> |     |                | ·                  |       |

| SEWER              | PILE OFFSET   | LENGTH of          |
|--------------------|---------------|--------------------|
| DIAM. d            | from Q-MED'N  | BAR a              |
| IN.                | FT.           | FT.                |
| UP TO 24"          | 3'-3 <b>"</b> | #6 x 5'-3 <b>"</b> |
| (609.6 mm)         | (0.991 m)     | (1.600 m)          |
| 27" (685.8 m)TO    | 3'-9 <b>"</b> | 5'-9"              |
| 36" (914.4 mm)     | (1.143 m)     | (1.753 m)          |
| 42" (1066.8 mm) TO | 4'-6 <b>"</b> | 6'-6"              |
| 48" (1219.2 mm)    | (1.372 m)     | (1.981 m)          |
| 54" (1371.6 mm) TO | 5'-0 <b>"</b> | 7'-0"              |
| 60" (1524.0 mm)    | (1.524 m)     | (2.134 m)          |
| 66" (1676.4 mm) TO | 5'-6 <b>"</b> | 7'-6"              |
| 72" (1828.8 mm)    | (1.676 m)     | (2.286 m)          |

### **NOTES**

- 1, ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ENGINEER SHALL DETERMINE THE CLASS OF SOIL DURING EXCAVATION AND SELECT THE DESIGN DEPTH OF FOUNDATION FROM THE DESIGN TABLE.
- 3. EXCAVATION OF THE POLE FOUNDATION SHALL BE MADE WITH AN AUGER, 24" (609.6 mm) OR 30" (762.0 mm) IN DIAMETER.
- 4. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE, COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- THE ANCHOR BOLTS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
- 6. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105), NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
- 7. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF FOUNDATION WITH THE BREAKAWAY DEVICE MANUFACTURER'S REOUIREMENTS. IF LIGHT POLE IS MOUNTED WITHOUT BREAKAWAY DEVICE. ANCHOR BOLTS SHALL PROJECT 23#4" (69.9 mm) ABOVE TOP OF THE FOUNDATION. THE CONTRACTOR SHALL CONFIRM ANCHOR BOLT EXTENTION WITH ENGINEER.
- 8. RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.
- 9. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE LIGHT IS ERECTED.



### LIGHT POLE FOUNDATION OFFSET

DESIGNED -REVISED -DRAWN REVISED -HECKED -REVISED LOT DATE = 12/3/2024 DATE REVISED

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION JOHN HUMPHREY DRIVE AT 143RD STREET 16-00078-00-CH COOK 228 133 LIGHTING DETAILS (7 OF 8) CONTRACT NO. 61K89 SCALE: 1" = 50' SHEET SHEETS STA. BEGIN TO STA. 75+00





### **Service and Meter Application**

| Switch and Load 1  | niormation Sneet   |
|--|--|
| Please complete a separate sheet   | for each switch – existing or new:   |
| Project Name: 143 <sup>rd</sup> St. & John Humphrey Dr. Street Ligh<br>Site Address: 14325 S. LaGrange Rd<br>Switch Name and Location: Lighting Controller located at  | -  |
|  | phase, 4-wire<br>e 3-wire (B-phase Grounded)<br>e 3-wire (Ungrounded – requires ground detection equip |
| Other Items (check all that apply):  New Construction Sq. Ft. ☐ Underground Building Addition Sq. Ft. ☐ Overhead Se Relocating Existing Service Entrance ☐ Commercial — Hi-Rise/ Vault Service ☐ Residential — | rvice<br>- No. of units  |
| Date of Ground Breaking (est.):<br>Date to Energize:   | Date to Final Grade (est.): Hours of Operation Per Day:   8   12   16   2                              |
|  |  |

Switch Size (amps): 100 (If switchgear is 1,200 Amps or larger, customer must submit drawings for ComEd approval)

(No. of conductors) (Size)

Sets of 1 /C #2

CU or  $\square$  AL

Total Connected Load Information:

(Number)

Switch Rating (percentage): 80%

Secondary Conductors: 3

| ( KW or HP )  | Description: | Conne   | ected Load: |
|---------------|--------------|---------|-------------|
|               |              | 1-phase | 3-phase     |
| Lighting:     | Lighting     | 4.5 Kw  |             |
| VAC:          |              |         |             |
| Receptacle:   |              |         |             |
| Process Heat: |              |         |             |
| Water Heat:   |              |         |             |
| Space Heat:   |              |         |             |
| Motors*:      |              |         |             |
| Welders**:    |              |         |             |
| TOTAL LOAD:   |              | 4.5 Kw  |             |

\*Motor Load Detail included above:

| Description | Quantity | Size<br>(HP) | Efficiency<br>Rating | Phase /<br>Voltage | Nema<br>Code | Starts Per<br>Hr. or Day | Starting<br>Amps | Use |
|-------------|----------|--------------|----------------------|--------------------|--------------|--------------------------|------------------|-----|
|             |          |              |                      |                    |              |                          |                  |     |
|             |          |              |                      |                    |              |                          |                  |     |
|             |          |              |                      |                    |              |                          |                  |     |
|             |          |              |                      |                    |              |                          |                  |     |
|             |          |              |                      |                    |              |                          |                  |     |
|             |          |              |                      |                    |              |                          |                  |     |

\*\*Welder Detail included above

| Description Detail | <br>Size<br>(kVA) | Туре | Max. Inst.<br>Demand | P.F. at<br>Peak | Welds Per<br>Minute | Cycles Per<br>Weld | Hours Per<br>Day Use |
|--------------------|-------------------|------|----------------------|-----------------|---------------------|--------------------|----------------------|
|                    | ()                |      |                      |                 |                     |                    | ,                    |
|                    |                   |      |                      |                 |                     |                    |                      |
|                    |                   |      |                      |                 |                     |                    |                      |

COMED CONTACT: ALLYSEN BEARD (779)-231-0444 (ALLYSEN.BEARD@comed.com)





### **Service and Meter Application Project Information Sheet**

| Project Name: 143rd St. & John Humphrey Dr. Street Lighting               |                   |            |  |  |  |
|---|-------------------|------------|--|--|--|
| Site Address: 14325 S. Lagrange Rd.                                       | City: Orland Park | Zip: 60462 |  |  |  |
| Total Number of Service Entrance Locations (meters/switches) Requested: 1 |                   |            |  |  |  |

|   | Corporation [ | ☐ Partnership | Sole Proprietor | Other: Municipality      |            |
|---|---------------|---------------|-----------------|--------------------------|------------|
| a | x I.D.:       |               |                 | Existing Account Number: | 2371923333 |
|   |               |               |                 |                          |            |

### Principle(s) to Sign Contracts For Service, Easements, Etc.:

Legal Name of Entity (Electric Consumer): Village of Orland Park

Property Owner: Building Owner: Building Manager: George Koczwara Phone: (708) 403-5003

**Mailing Address For Contracts:** 

Company: Khurshid Hoda Phone: (708) 403-6128 Fax: N/A Address: 14700 S. Ravinia Avenue City: Orland Park Zip: 60462

Mailing Address For Electric Bills:

Company: Sam Cooper Phone: (708) 403-6350 Fax: N/A Address: 14700 S. Ravinia Avenue City: Orland Park Zip: 60462

**Project Contacts:** 

Consulting Engineer: Robby Schmieder E-mail: rschmieder@cbbel.com

Firm Name: Christopher Burke Engineering, Ltd. Phone: (773) 682-1570 Fax: (847) 823-0520 Address: 9575 W. Higgins Road, Suite 600 City: Rosemont Zip: 60018

**Electrical Contractor:** 

Consulting Engineer: E-mail: Firm Name: Phone: Fax: Address: Zip: City:

Other:

Consulting Engineer: E-mail:

Firm Name: Fax: Phone: Address: Zip: City:

### The Following Documents May Be Required:

- 1. Plat of Survey with legal description of property (for easement, if required)
- 2. Site Plan showing building relative to property lines mark service entrance location(s)
- 3. Civil drawings (showing water, sewer, gas, phone, electric, pavement, grading, etc.)
- 4. Complete electrical drawings and/or load detail sheets

### **Information Provided By:**

SCALE: 1" = 50'

Print Name: Robby Schmieder

Signature:

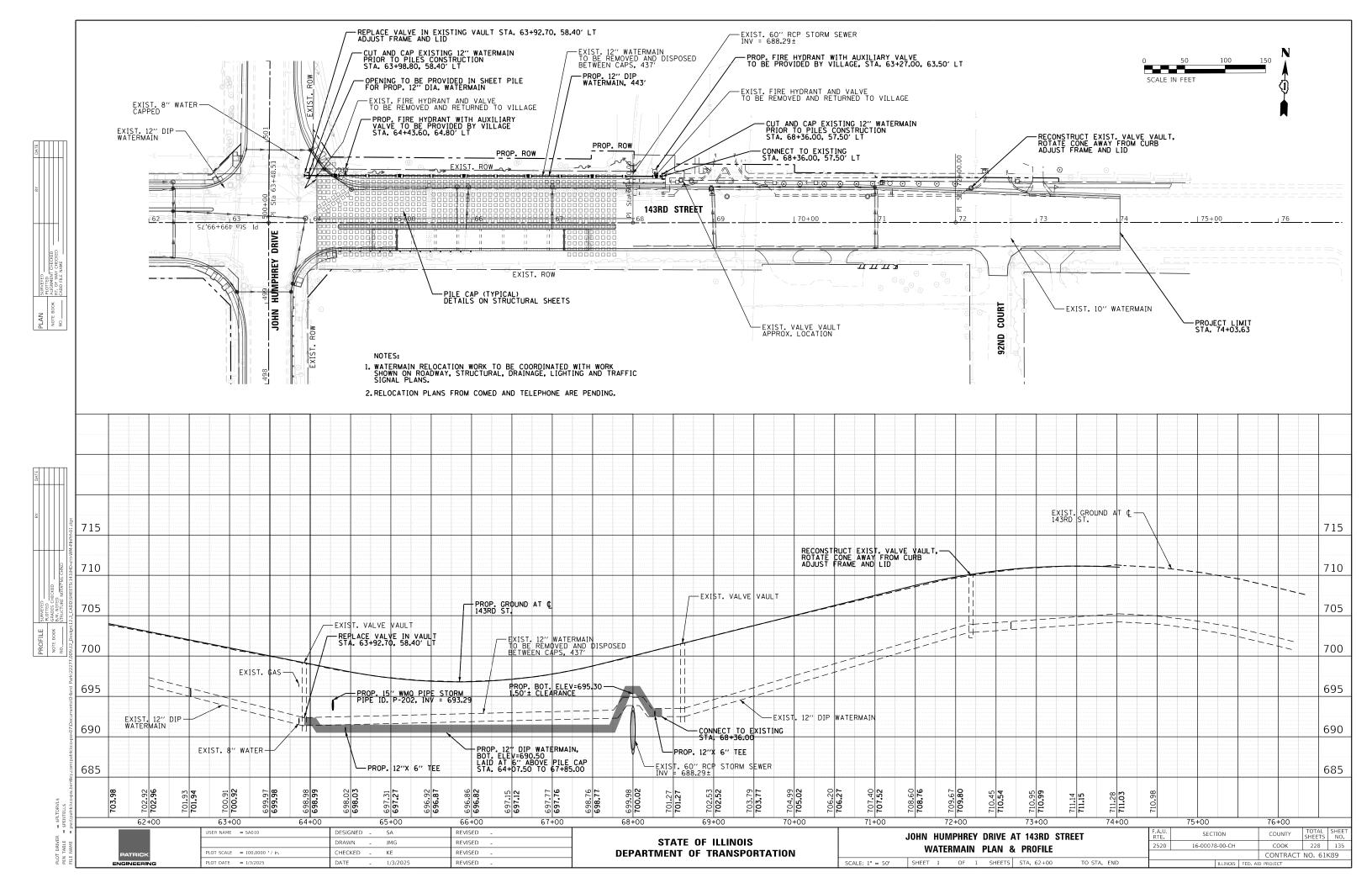
Date: July 12, 2024

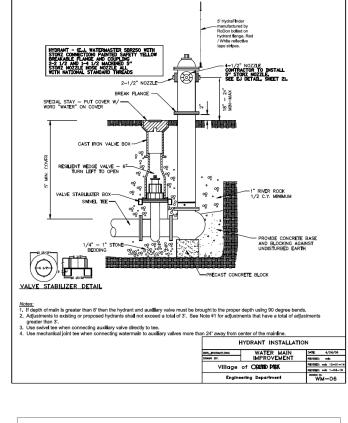
### **ELECTRICAL SERVICE APPLICATION**

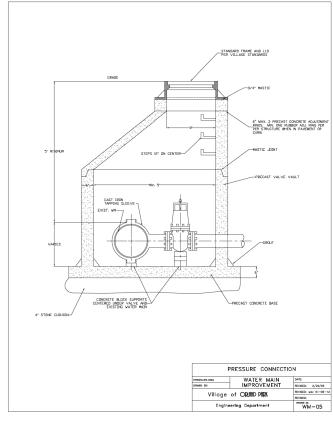
SER NAME = rjezierny DESIGNED -REVISED -DRAWN -REVISED -REVISED PLOT DATE = 8/5/2024 REVISED -DATE -

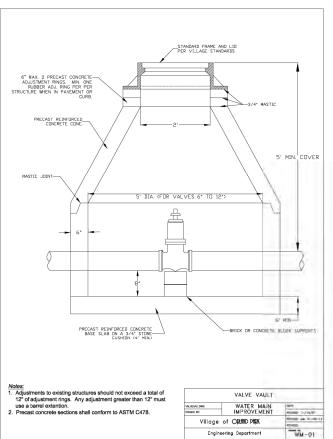
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  JOHN HUMPHREY DRIVE AT 143RD STREET LIGHTING DETAILS (8 OF 8) TO STA. 75+00 STA. BEGIN

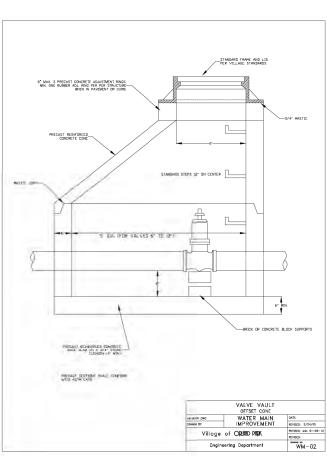
SECTION 16-00078-00-CH COOK 228 134 CONTRACT NO. 61K89

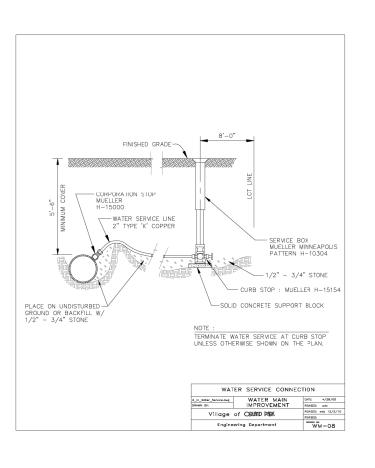




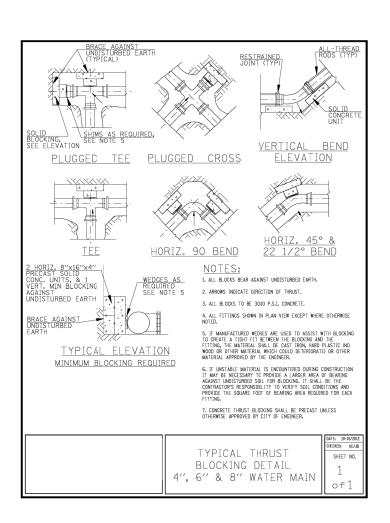








SCALE:



|             | USER NAME = DT004            | DESIGNED -        | REVISED - |
|-------------|------------------------------|-------------------|-----------|
|             |                              | DRAWN - JMG       | REVISED - |
| PATRICK     | PLOT SCALE = 20.0000 ' / in. | CHECKED -         | REVISED - |
| ENGINEERING | PLOT DATE = 12/19/2024       | DATE - 12/02/2024 | REVISED - |

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY JOHN HUMPHREY DRIVE AT 143RD STREET 16-00078-00-CH COOK 228 136 WATERMAIN DETAILS CONTRACT NO. 61K89 SHEET 1 OF 2 SHEETS

- 2. AN IEPA CONSTRUCTION PERMIT MUST BE SECURED PRIOR TO BEGINNING CONSTRUCTION. THE NEW WATER MAIN SHALL NOT BE ACTIVATED UNTIL AN OPERATING PERMIT APPROVED BY THE IEPA HAS BEEN RETURNED TO THE VILLAGE.
- ALL EXISTING VALVES MAINTAINED BY THE VILLAGE OF ORLAND PARK SHALL BE OPERATED BY THE VILLAGE OF ORLAND PARK DEPARTMENT OF PUBLIC WORKS PERSONNEL ONLY.
- MINIMUM COVER FROM FINISHED GRADE TO TOP OF WATER MAIN SHALL BE MINIMUM OF FIVE AND A HALF (5.5) FEET
- FOR WATER MAIN SHUT OFFS, THE CONTRACTOR SHALL GIVE THE VILLAGE A MINIMUM OF 48 HOURS NOTICE. THE VILLAGE SHALL PROVIDE NOTIFICATION FORMS AND DETERMINE THE LIMIT OF THE AFFECTED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISTRIBUTION OF THE NOTIFICATION FORMS TO ALL AFFECTED RESIDENTS, BUSINESSES AND PROPERTY OWNERS.
- ALL WATER MAIN SHUT DOWNS SHALL BE PERFORMED BY THE VILLAGE OF ORLAND PARK DEPARTMENT OF PUBLIC WORKS
- 7. APPROVED RETAINER GLANDS AND THRUST BLOCKING SHALL BE INSTALLED ON WATER MAINS AT ALL BENDS, TEES, ELBOWS, ETC.
- 8. AN ILLINOIS LICENSED PLUMBER IS REQUIRED FOR ANY LIVE WATER MAIN TAP
- 9. ALL DUCTILE IRON WATER MAINS MUST BE POLY-WRAPPED (8 MIL. THICKNESS).

- WHERE ANY SECTION OF A WATER LINE IS PROVIDED WITH CONCRETE THRUST BLOCKING FOR FITTINGS, THE HYDROSTATIC TESTS SHALL NOT BE MADE UNTIL AT LEAST FIVE DAYS AFTER INSTALLATION OF THE CONCRETE THRUST BLOCKING.
- DISPOSAL OF WASTEWATER FROM HYDROSTATIC TESTS, AND FOR DISINFECTION, SHALL BE APPROVED IN ADVANCE BY THE VILLAGE PUBLIC WORKS AND ENGINEERING DEPARTMENTS.
- THE NEW WATER MAINS AND SERVICE LINES. INCLUDING VALVES AND HYDRANTS. SHALL BE SUBJECTED TO A HYDROSTATIC PRESSURE OF 150 PSI. THE TEST PRESSURE SHALL BE HELD FOR A DURATION OF ONE HOUR WITHOUT PRESSURE LOSS OR FURTHER PRESSURE APPLICATION.
- EACH VALVE SHALL BE OPENED AND CLOSED SEVERAL TIMES DURING THE TEST.
- CAREFUL EXAMINATION OF EXPOSED PIPE, JOINTS, FITTINGS, AND VALVES IS REQUIRED.
- JOINTS SHOWING VISIBLE LEAKAGE SHALL BE REMADE OR REPLACED.
- CRACKED PIPE, DEFECTIVE PIPE, AND CRACKED OR DEFECTIVE JOINTS, FITTINGS, AND VALVES SHALL BE REPLACED WITH APPROVED MATERIAL AND THE TEST REPEATED UNTIL RESULTS ARE SATISFACTORY.

#### 11. LEAKAGE TEST.

- A METERED LEAKAGE TEST SHALL BE CONDUCTED AFTER THE PRESSURE TEST HAS BEEN SATISFACTORILY COMPLETED.
- DURATION OF EACH LEAKAGE TEST SHALL BE AT LEAST 24 HOURS. DURING THE TEST, WATER LINES SHALL BE SUBJECTED TO THE NORMAL WATER PRESSURE OF THE VILLAGE WATER SYSTEM.
- MAXIMUM ALLOWABLE LEAKAGE SHALL CONFORM TO CURRENT IEPA LEAKAGE TESTING SPECIFICATIONS.
  SHOULD ANY TEST OF PIPE DISCLOSE LEAKAGE GREATER THAN THE MAXIMUM ALLOWABLE AMOUNT, THE DEFECTIVE JOINT OR JOINTS SHALL BE LOCATED AND REPAIRED AND THE 24-HOUR METERED LEAKAGE TEST REPEATED UNTIL THE LEAKAGE IS

A. AFTER ALL MAINS HAVE BEEN PRESSURE TESTED AND ACCEPTED BY THE VILLAGE, THE CONTRACTOR SHALL PROCEED TO DISINFECT THE MAIN IN ACCORDANCE WITH AWWA STANDARD C-651. THE CHLORINATED WATER SHALL BE RETAINED IN THE MAIN FOR A PERIOD OF AT LEAST 24 HOURS. AT THE END OF THE 24-HOUR PERIOD, THE TREATED WATER SHALL CONTAIN NO LESS THAN 25 MG/L CHLORINE THROUGHOUT THE MAIN. THE CONTRACTOR WILL SAMPLE THE CHLORINATED DISINFECTING SOLUTION TO ASSURE THAT

B. AFTER AN APPLICABLE RETENTION PERIOD. THE HEAVILY CHLORINATED WATER SHALL BE FLUSHED FROM THE MAIN UNTIL THE CHLORINE CONCENTRATION IN THE WATER LEAVING THE MAIN IS NOT HIGHER THAN THAT GENERALLY PREVAILING IN THE SYSTEM. THE CHLORINATED WATER BEING FLUSHED FROM THE SYSTEM SHALL BE DECHLORINATED TO MEET USEPA WATER QUALITY CRITERIA FOR "TOTAL RESIDUAL CHLORINE."

C. AFTER FINAL FLUSHING, AND AS WITNESSED BY THE VILLAGE PUBLIC WORKS DEPARTMENT, TWO SAMPLES OF WATER SHALL BE OBTAINED FROM THE MAIN FOR BACTERIOLOGICAL TESTING. THE DEVELOPER SHALL BE RESPONSIBLE FOR OBTAINING, DELIVERY, AND PAYMENT OF THE SAMPLES FOR TESTING PURPOSES. FOR MAJOR WATER MAIN INSTALLATION, THE NUMBER OF SAMPLES MAY BE INCREASED AS DETERMINED BY THE VILLAGE PUBLIC WORKS DEPARTMENT. A SECOND SERIES OF SAMPLES SHALL BE COLLECTED NO LESS THAN 24 HOURS AFTER THE FIRST SET OF SAMPLES HAS BEEN COLLECTED. THE INDIVIDUAL SETS OF SAMPLES SHALL BE BACTERIOLOGICALLY TESTED TO SHOW THE ABSENCE OF COLIFORM ORGANISMS. IF EITHER, OR BOTH, SETS OF SAMPLES DO NOT PASS THE BACTERIOLOGICAL EXAMINATION, THE CONTRACTOR SHALL AGAIN DISINFECT THE MAIN IN ACCORDANCE WITH PROCEDURES UNTIL SUCH TIME THAT SATISFACTORY SAMPLES ARE COLLECTED. AT THIS TIME A WATER SAMPLE WILL BE TAKEN BY

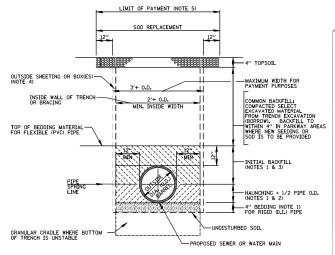
THE CONTRACTOR OR HIS REPRESENTATIVE AND SENT TO A STATE-CERTIFIED WATER LAR OF HIS CHOICE NO PART OF THE PERMITTED WATER SYSTEM SHALL BE PLACED IN SERVICE UNTIL THE VILLAGE OF ORLAND PARK RECEIVES THE

OPERATING PERMIT. UPON RECEIPT OF THE IEPA OPERATING PERMIT. ALL VALVES ON THE SYSTEM SHALL BE OPENED WITH PERMISSION OF THE VILLAGE PUBLIC WORKS DEPARTMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CERTIFYING, IN WRITING TO THE DIRECTOR OF PUBLIC WORKS AND ENGINEERING, THAT HE OR HIS REPRESENTATIVES HAVE WITNESSED THE OPENING OF ALL VALVES PURSUANT TO THE OPERATING PERMIT.

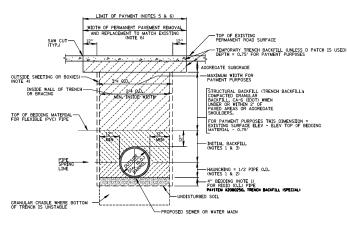
13. THE CONTRACTOR SHALL CONSIDER INCIDENTAL TO THE CONTRACT ANY CHLORINATION AND TESTING OF EXISTING WATER MAIN WHERE CONNECTIONS TO AND CONCLUSION OF SUCH MAINS IS INDICATED ON THE DRAWINGS.

- DUCTILE IRON CLASS 52, CONFORMING TO ANSI/AWWA C151/A21.51
  - CEMENT LINING, CONFORMING TO ANSI/AWWA C104/A21.4
  - MECHANICAL OR PUSH-ON JOINTS SHALL CONFORM TO ANSI/AWWA C111/A21.11. FITTINGS SHALL BE U.L. LISTED CLASS 350 AND SHALL BE MANUFACTURED IN THE UNITED STATES

  - ALL DIP WATER MAINS SHALL BE INCASED IN AN 8 MIL HIGH DENSITY POLYETHYLENE ENCASEMENT WITH IT MATERIAL SPECIFICATION AND INSTALLATION METHOD IN ACCORDANCE WITH ANSI.AWWA
    - C105/A21.5. ASTM A674. USING "METHOD A" INSTALLATION
  - BRASS WEDGES SHALL BE INSTALLED TO PROVIDE ELECTRICAL CONDUCTIVITY



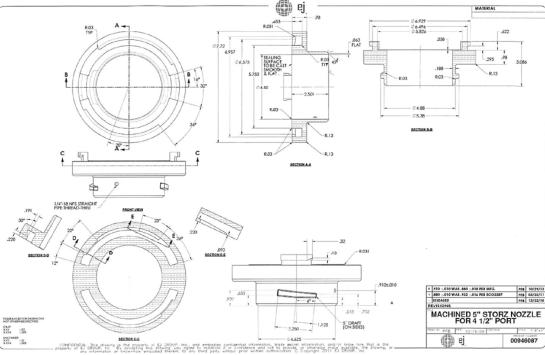
#### WITHIN PARKWAY AREAS (COMMON BACKFILL)



#### WITHIN PAVED, DRIVEWAY OR WALKWAY AREAS (STRUCTURAL BACKFILL)

TRENCH BACKFILL NOTES:

- 1. BEDDING/HAUNCHING/INITIAL BACKFILL:
- A. FOR FLEXIBLE (PVC) PIPE THE BEDDING/HAUNCHING/INITIAL BACKFILL MATERIAL SHALL CONFORM TO IDOT CA-11 OR CA-13 GRADATION.
- B. FOR RIGID (D.L.) PIPE THE BEDDING MATERIAL SHALL BE CA-11, AND THE HAUNCHING/INITIAL BACKFILL SHALL MATCH THE TRENCH BACKFILL MATERIAL
- AFTER BEDDING HAS BEEN PLACED/COMPACTED/BROUGHT TO GRADE, PLACE AND COMPACT HAUNCHING TO PIPE SPRING LINE.
- PLACE INITIAL BACKFILL IN TWO STAGES AS FOLLOWS: 1st STAGE PLACE & COMPACT TO TOP OF PIPE; 2nd STAGE PLACE & COMPACT AT LEAST 12" OVER TOP OF PIPE.
- VOIDS LEFT BY SHEETING/BRACING WHEN REMOVED SHALL BE FILLED WITH FINE SAND AND SHALL BE CONSIDERED INCIDENTAL TO THE WORK.SHEETING TO BE LEFT IN PLACE WHEN SPECIFIED ON THE PLANS.
- CONTRACTOR IS RESPONSIBLE FOR ALL RESTORATION BEYOND THE LIMIT OF PAYMENT AS SHOWN. THE LIMIT OF PAYMENT FOR DRIVEWAY RESTORATION MAY BE MODIFIED AS NOTED BELOW (NOTE 6).
- TRENCH BACKFILL MEETING THE REQUIREMENTS OF ARTICLE 208.02 OF THE IDOT STANDARD SPECIFICATIONS IS REQUIRED FOR ANY OPEN TRENCHES WITHIN COUNTY ROW.
- 7. ALL DISTURBED GRASS AREAS WITHIN COUNTY ROW ARE TO BE RESTORED WITH  $4^{\prime\prime}$  TOPSOIL AND SOD.



# **HPHA™** Specifications

#### HPHA™ Harrington Permanent Hydrant Adapter

Harrington Permanent Hydrant Adapter™: A Metal Face Storz with Female Thread, secured to the male nozzle w/ (2) Set Screws, includes Storz Cap with Reflective Aircraft Cable









|                           | HPHA50-40-XXX/Cap |
|---------------------------|-------------------|
|                           |                   |
| HPHA40-40NH/Cap -4" NH-   | HPHA50-40NH/Cap   |
| HPHA40-45NH/Cap -4.5" NH- | HPHA50-45NH/Cap   |

"ODM" = Outside Diameter of the Male thread. "TPI" = Threads Per Inch

#### HPHA™ SPECIFICATION

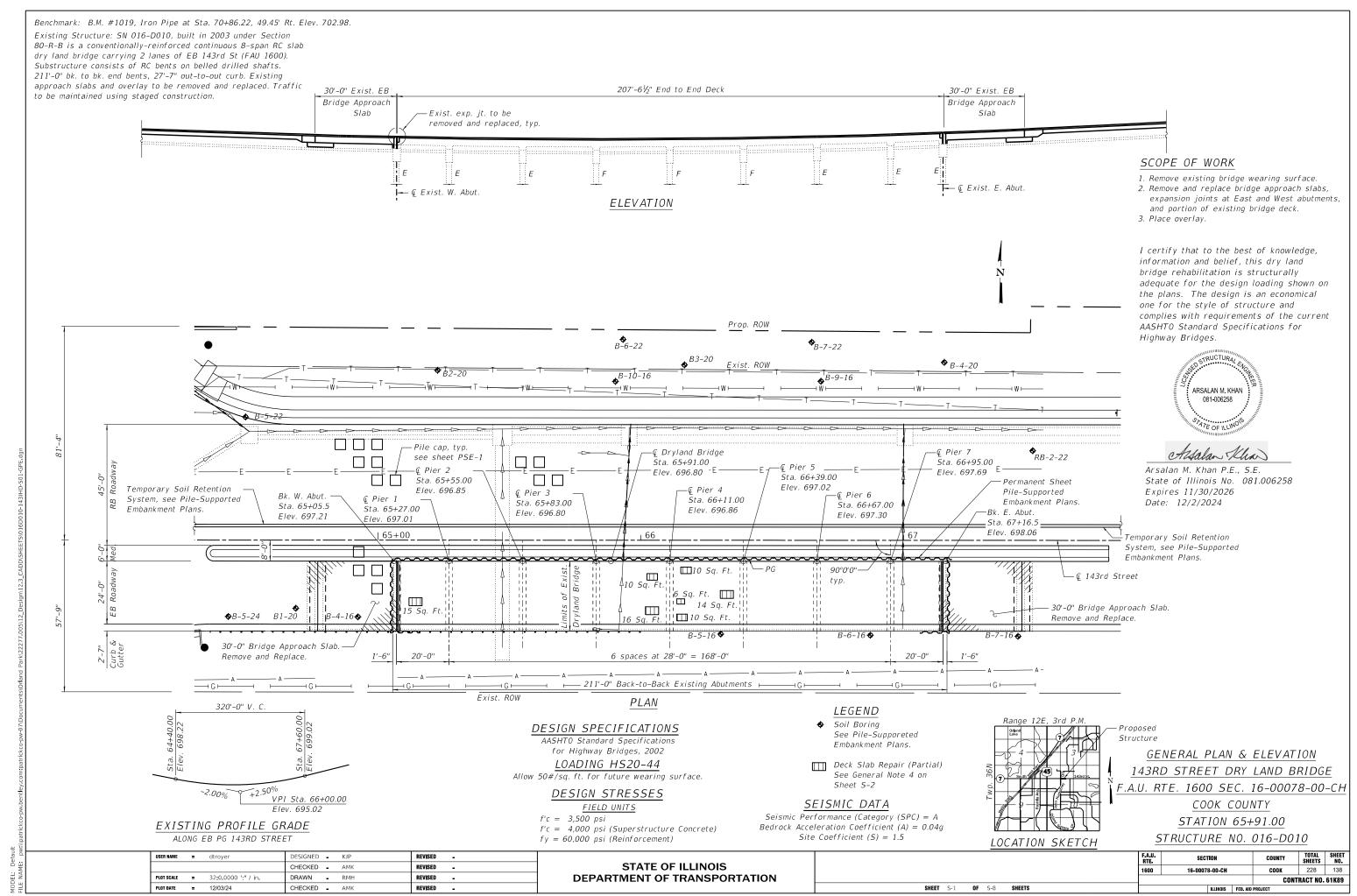
The Storz adapter shall have a hard anodized aluminum metal face seal and hard anodized aluminum Storz ramps and lugs. The adapter's finish shall be hardoxat anodized to Mil-14-8625, Type 3, dark gray. The adapter shall be made in USA from forged 6061-16 aluminum and secured to the nozzle by (2) stainless steel set screws, inserted 180° apart. The female adapter shall contain a flat rubber gasket which seals against the male hydrant nozzle.

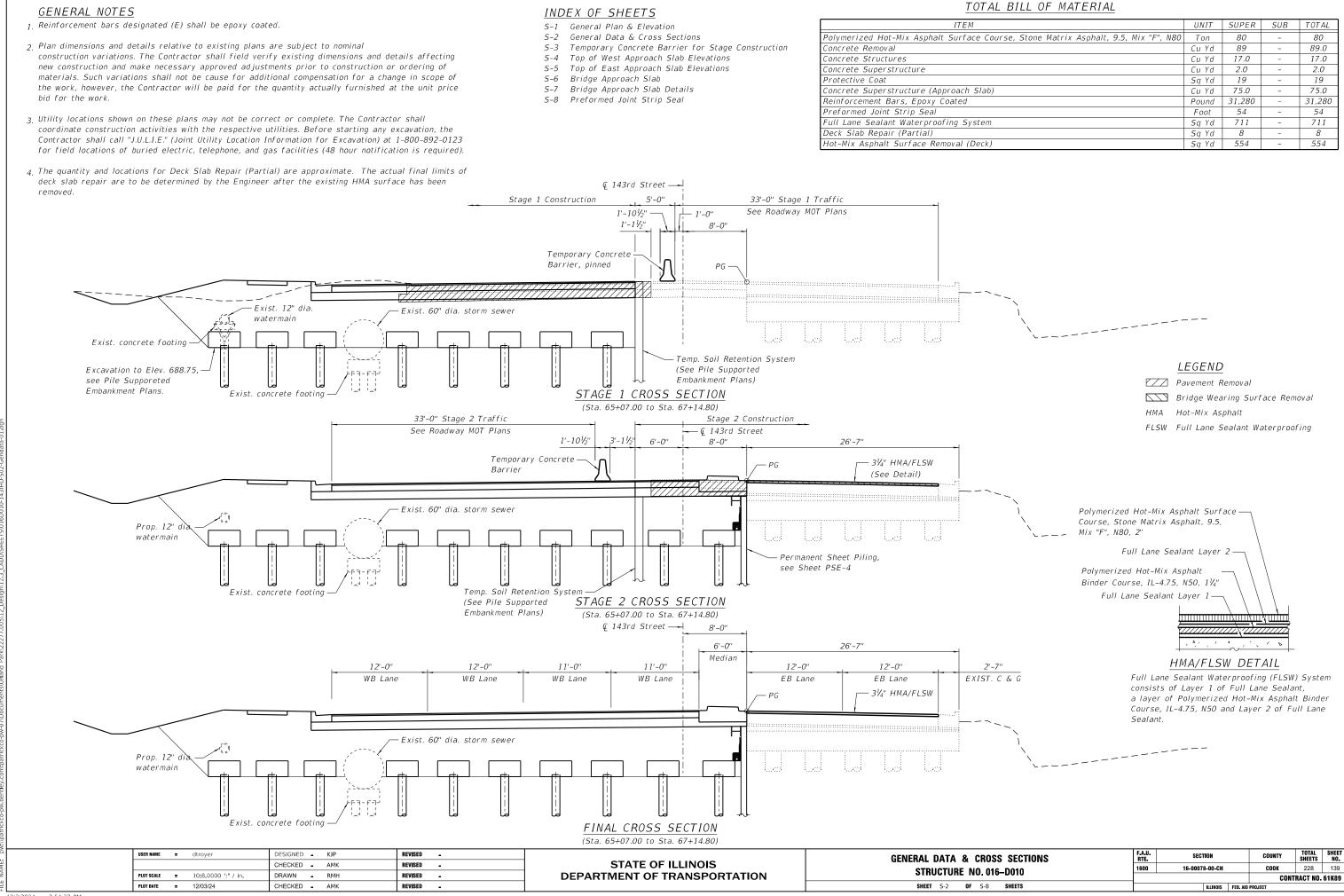
The blind cap shall have hard anodized aluminum Storz ramps and lugs, made of forged 6061-16 aluminum. The cap shall be equipped with a suction seal. The cap shall be conscribed to the adapter or the hydrant with a 0.125° vinyl coated stainless steel aircraft caller. The cache shall be reflective to assist in loading the hydrant and inplift. The high tower cap requires a Sorz spanner wrench for semaval. Once installed, the Permanent Hydrant Adapter with cap extends less than 3° from the hydrant nozzie.

SPECIFY: HARRINGTON "HPHA"

OF 2 SHEETS

| F.A.U.<br>RTE      | SECTION        |  | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
|--------------------|----------------|--|--------|-----------------|--------------|
| 2520               | 16-00078-00-CH |  | соок   | 228             | 137          |
| CONTRACT NO. 61K89 |                |  |        |                 | <89          |
|                    |                |  |        |                 |              |





SECTIONS THRU SLAB OR DECK BEAM

# RAILING CRITERIA

| NCHRP 350 Lest Level | 3   |
|----------------------|-----|
| Railing Weight (plf) | 440 |
|                      |     |

| USER NAME  | = | dtroyer            | DESIGNED | - | KJP | REVISED | - |
|------------|---|--------------------|----------|---|-----|---------|---|
|            |   |                    | CHECKED  | - | AMK | REVISED | • |
| PLOT SCALE | = | 0:2.0000 '." / in. | DRAWN    | - | RMH | REVISED | • |
| PLOT DATE  | _ | 12/03/24           | CHECKED  | _ | AMK | REVISED | _ |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 016-D010

SHEET S-3 OF S-9 SHEETS

1x8 UNC

1" Ø pin -

<u>RESTRAINING PIN</u>

US Std.  $1\frac{1}{16}$ " I.D. x  $2\frac{1}{2}$ " O.D. x approx. 8 gauge thick washer

12/3/2024 2:54:43 PM

o-pw-07\Documents\Orland Park\22277.005\12\_Design\12.3\_CADD\SHEETS\016D010-143JHD-S03-TBAR.dgr

# PG & EB NORTH EDGE OF ROADWAY

| Location                  | Station  | Offset | Theoretical<br>Grade<br>Elevations |  |
|---------------------------|----------|--------|------------------------------------|--|
|                           |          |        |                                    |  |
| W. End of West Appr. Slab | 64+77.00 | 0.00   | 697.58                             |  |
| A1                        | 64+87.00 | 0.00   | 697.44                             |  |
| A2                        | 64+97.00 | 0.00   | 697.31                             |  |
| E. End of West Appr. Slab | 65+07.00 | 0.00   | 697.20                             |  |
|                           |          |        |                                    |  |

# EB SLOPE BREAK LINE

| Location  | Station  | Offset | Theoretical<br>Grade<br>Elevations |
|---|----------|--------|------------------------------------|
| W. End of West Appr. Slab A1 A2 E. End of West Appr. Slab | 64+77.00 | 12.00  | 697.39                             |
|   | 64+87.00 | 12.00  | 697.25                             |
|   | 64+97.00 | 12.00  | 697.12                             |
|   | 65+07.00 | 12.00  | 697.01                             |

# EB SOUTH EDGE OF ROADWAY

| Location  | Station  | Offset | Theoretical<br>Grade<br>Elevations |
|---|----------|--------|------------------------------------|
| W. End of West Appr. Slab A1 A2 E. End of West Appr. Slab | 64+77.00 | 24.00  | 697.14                             |
|   | 64+87.00 | 24.00  | 697.00                             |
|   | 64+97.00 | 24.00  | 696.87                             |
|   | 65+07.00 | 24.00  | 696.76                             |

# EB SOUTH FACE OF CURB

| Location  | Station  | Offset | Theoretical<br>Grade<br>Elevations |
|---|----------|--------|------------------------------------|
| W. End of West Appr. Slab A1 A2 E. End of West Appr. Slab | 64+77.00 | 26.00  | 697.02                             |
|   | 64+87.00 | 26.00  | 696.88                             |
|   | 64+97.00 | 26.00  | 696.75                             |
|   | 65+07.00 | 26.00  | 696.64                             |

#### NOTE

Theoretical Grade Elevations are provided to the top of  $3\frac{1}{4}$ " HMA/FLSW overlay.

|        |                                 | (    | $\widehat{AI}$           | A2)           |                                  |
|--------|---------------------------------|------|--------------------------|---------------|----------------------------------|
|        |                                 |      |                          | Ç 143rd       | Street<br>                       |
|        |                                 |      |                          |               |                                  |
| 8'-0"  |                                 |      |                          |               |                                  |
|        |                                 |      |                          |               | PG & EB North edge<br>of roadway |
| 7      |                                 |      |                          |               |                                  |
|        |                                 |      |                          |               |                                  |
|        | ₩. End of West —<br>Appr. Pav't | -    |                          |               | E. End of West Appr. Pav't       |
|        |                                 |      |                          |               |                                  |
| 0,,    |                                 |      |                          |               | EB slope break line              |
| 26'-0" |                                 |      |                          |               |                                  |
|        | ,.C                             |      |                          |               |                                  |
|        | 12'-0"                          |      |                          |               |                                  |
|        |                                 |      |                          |               | ED Coubb advantage               |
|        | 5,-0,,                          |      |                          |               | — EB South edge of roadway       |
| _      | 2,                              |      |                          |               | EB South face of curb            |
|        |                                 |      |                          |               |                                  |
|        |                                 |      | 3 Spa. at 10'-0" = 30'-0 | a             |                                  |
|        |                                 | WEST |                          |               | $\sum_{\mathbf{k}}$              |
|        |                                 | WEST | APPROACH SLAB I          | <u>- LAIV</u> |                                  |

 USER NAME
 =
 dtroyer
 DESIGNED
 KJP
 REVISED

 CHECKED
 AMK
 REVISED

 PLOT SCALE
 =
 8:0.0000 ':" / in.
 DRAWN
 RMH
 REVISED

 PLOT DATE
 =
 12/03/24
 CHECKED
 AMK
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 016-D010

SHEET S-4 OF S-8 SHEETS

# PG & EB NORTH EDGE OF ROADWAY

| Location  | Station                                      | Offset                       | Theoretical<br>Grade<br>Elevations   |  |  |
|---|--|------------------------------|--------------------------------------|--|--|
| W. End of West Appr. Slab A1 A2 E. End of West Appr. Slab | 64+77.00<br>64+87.00<br>64+97.00<br>65+07.00 | 0.00<br>0.00<br>0.00<br>0.00 | 698.04<br>698.23<br>698.44<br>698.66 |  |  |
|   |  |                              |                                      |  |  |

# EB SLOPE BREAK LINE

| Location                  | Station              | Offset         | Theoretical<br>Grade<br>Elevations |
|---------------------------|----------------------|----------------|------------------------------------|
| W. End of West Appr. Slab | 67+15.00             | 12.00          | 697.85                             |
| A1<br>A2                  | 67+25.00<br>67+35.00 | 12.00<br>12.00 | 698.04<br>698.25                   |
| E. End of West Appr. Slab | 67+45.00             | 12.00          | 698.47                             |

# EB SOUTH EDGE OF ROADWAY

| Location  | Station  | Offset | Theoretical<br>Grade<br>Elevations |
|---|----------|--------|------------------------------------|
| W. End of West Appr. Slab A1 A2 E. End of West Appr. Slab | 67+15.00 | 24.00  | 697.60                             |
|   | 67+25.00 | 24.00  | 697.80                             |
|   | 67+35.00 | 24.00  | 698.00                             |
|   | 67+45.00 | 24.00  | 698.22                             |

# EB SOUTH FACE OF CURB

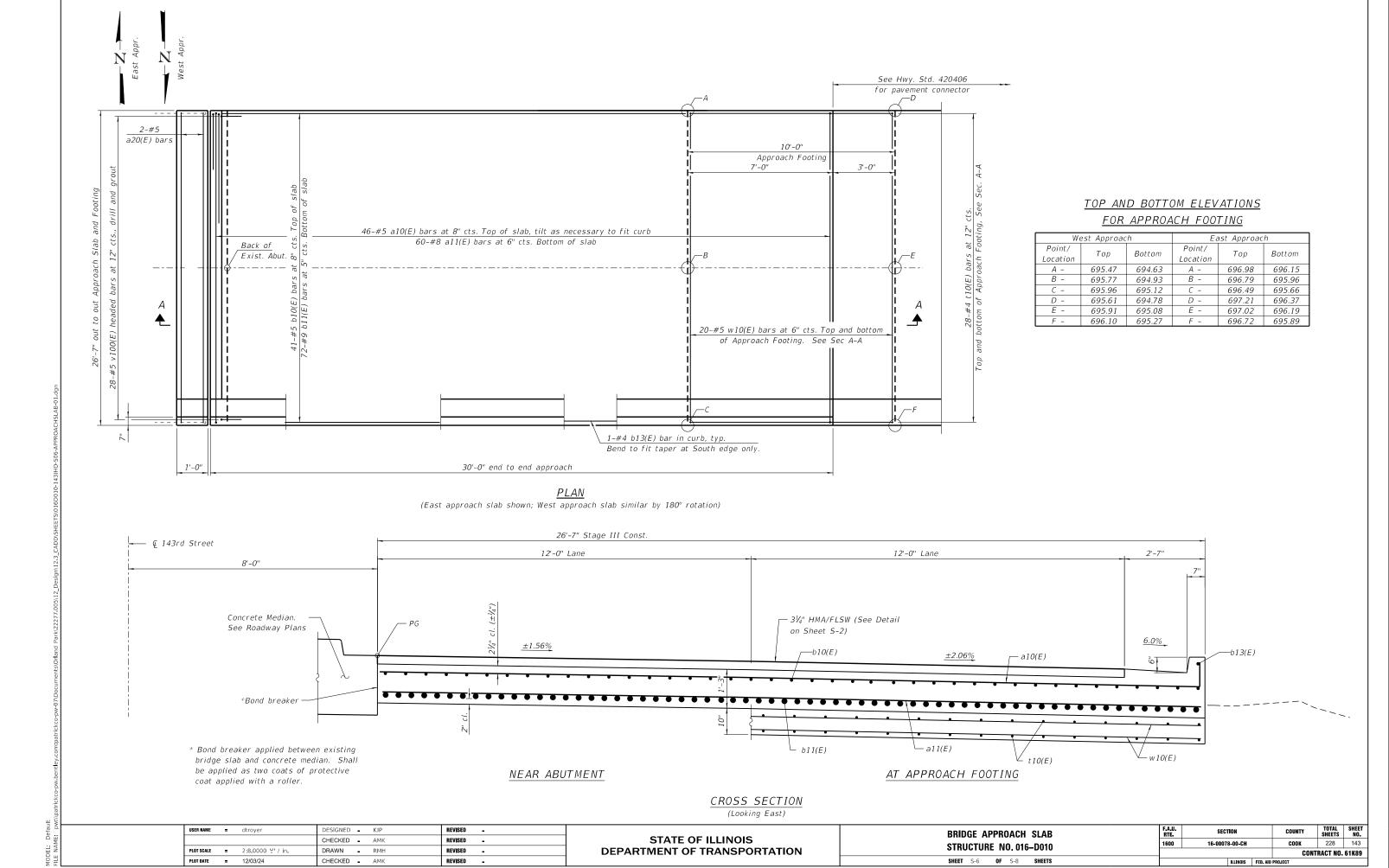
| Location   | Station  | Offset | Theoretical<br>Grade<br>Elevations |
|--|----------|--------|------------------------------------|
| W. End of West Appr. Slab  Al  A2  E. End of West Appr. Slab | 67+15.00 | 26.00  | 697.48                             |
|  | 67+25.00 | 26.00  | 697.68                             |
|  | 67+35.00 | 26.00  | 697.88                             |
|  | 67+45.00 | 26.00  | 698.10                             |

# <u>NOTE</u>

Theoretical Grade Elevations are provided to the top of  $3 lac{1}{4}$ " HMA/FLSW overlay.

|        |                                  | (      | 11) (4)                   | A2)<br>/— € 143rd | Street                           |
|--------|----------------------------------|--------|---------------------------|-------------------|----------------------------------|
|        |                                  |        |                           |                   |                                  |
| 8'-0"  |                                  |        |                           |                   |                                  |
|        |                                  |        |                           |                   | PG & EB North edge<br>of roadway |
| 1      |                                  |        |                           |                   |                                  |
|        | W. End of East ——<br>Appr. Pav't |        |                           |                   | E. End of East<br>Appr. Pav't    |
|        |                                  |        |                           |                   | EB slope break line              |
| 26'-0" |                                  |        |                           |                   |                                  |
|        | 12'-0"                           |        |                           |                   |                                  |
|        |                                  |        |                           |                   |                                  |
|        | 5                                |        |                           |                   | — EB South edge of roadway       |
| _      | 7-0-1                            | II.    |                           |                   | EB South face of curb            |
|        |                                  |        |                           |                   |                                  |
|        |                                  | _      | 3 Spa. at 10'-0" = 30'-0" | •                 |                                  |
|        |                                  | EAST , | APPROACH SLAB P           | <u>PLAN</u>       |                                  |

| USER NAME  | = | dtroyer            | DESIGNED | - | KJP | REVISED | • |  |
|------------|---|--------------------|----------|---|-----|---------|---|--|
|            |   |                    | CHECKED  | - | AMK | REVISED | • |  |
| PLOT SCALE | = | 8:0.0000 ':" / in. | DRAWN    | - | RMH | REVISED | • |  |
| PLOT DATE  | = | 12/03/24           | CHECKED  | - | AMK | REVISED | • |  |



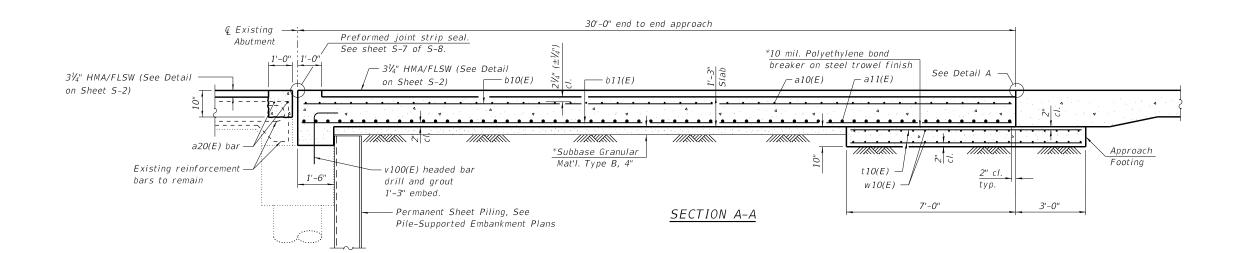
The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications.

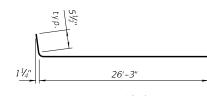
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.





<u>BAR a10(E)</u>



BAR v100(E)
(Headed)

\* Cost included with Concrete Superstructure (Approach Slab).

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 016-D010
SHEET S-7 OF S-8 SHEETS

U. SECTION COUNTY TOTAL SHEETS NO.
0 16-00078-00-CH COOK 228 144

CONTRACT NO. 61K89

TWO APPROACHES
BILL OF MATERIAL

#5

#8

#9

#4

#4

#5

Length Shape

26'-8 1/2"

26'-3"

26'-3"

29'-8"

29'-8"

29'-8"

9'-8"

26'-3"

3'-1"

Cu Yd

Cu Yd

Sq Yd

Cu Yd

17

19

75

No. Size

92

120

4

82

144

112

80

56

Bar

a10(E)

a20(E)

b10(E)

b11(E)

b13(E)

t10(E)

w10(E)

v100(E)

Concrete Removal

Protective Coat

Concrete Structures

(Approach Slab)

Concrete Superstructure

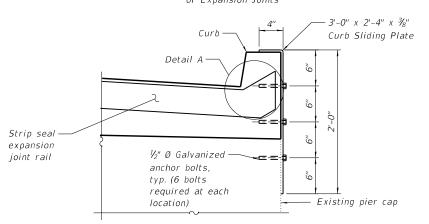
Concrete Superstructure

a11(E)

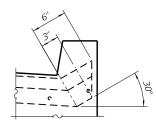
12/3/2024 2:55:05 PM

om:patrickco-pw-07/Documents/Orland Park\222277.005\12\_Design\12.3\_CADD\SHEETS\016D010-143JHD-507-APPROACHSLAB-02.d

PLAN
Typical at S. end
of Expansion Joints



SECTION B-B



DETAIL A

The strip seal shall be made continuous and shall have a minimum thickness of  $V_4$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

Notes:

The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

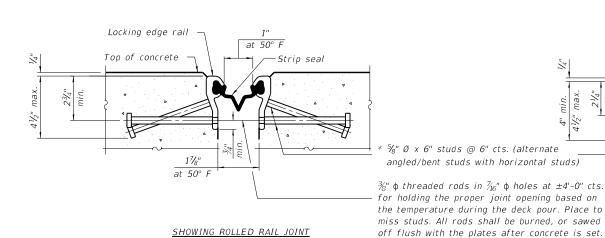
The manufacturer's recommended installation methods shall be followed.

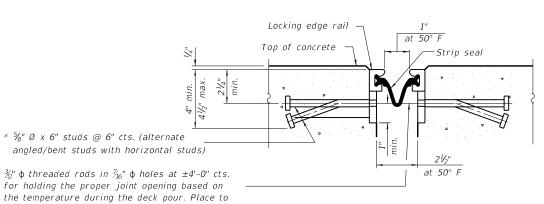
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10" measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

Cost of curb sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed Joint Strip Seal.

The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Slab lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required.

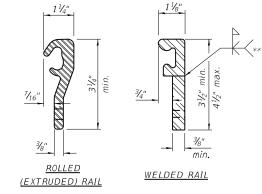




SHOWING WELDED RAIL JOINT

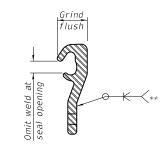
#### SECTION A-A

\* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



### LOCKING EDGE RAILS

\*\* Back gouge not required if complete joint penetration is verified by mock-up.



### LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

#### BILL OF MATERIAL

| Item                       | Unit | Total |
|----------------------------|------|-------|
| PREFORMED JOINT STRIP SEAL | F00T | 54    |
|                            |      |       |

 USER NAME
 =
 dtroyer
 DESIGNED
 KJP
 REVISED

 CHECKED
 AMK
 REVISED

 PLOT SCALE
 =
 0:2,0000 ":" / in.
 DRAWN
 RMH
 REVISED

 PLOT DATE
 =
 12/03/24
 CHECKED
 AMK
 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 016-D010
SHEET S-8 OF S-8 SHEETS

 
 F.A.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 SHEET NO.

 1600
 16-00078-00-CH
 COOK
 228
 145

 CONTRACT NO. 61K89

12/3/2024 2:55:11 PM

#### TOTAL BILL OF MATERIAL

Porous Granular Embankment

Furnishing And Erecting Structural Steel

Furnishing Treated Piles 20.1 To 38 Feet

Reinforcement Bars, Epoxy Coated

Temporary Soil Retention System

Pipe Underdrains For Structures 4"

Concrete Removal

Structure Excavation

Concrete Structures

Reinforcement Bars

Driving Piles

Test Pile Timber

Permanent Sheet Piling

UNIT TOTAL

Pound 22.470

Sq Ft 8,227

4,433

8 609

497.0

25,280

470

19,635

19,635

9,094

273

3,647

Cu Yd

Cu Yd

Cu Yd

Cu Yd

Pound

Pound

Foot

Foot

Fach

Sq Ft

Foot

Sq Yd

#### INDEX OF SHEETS

PSE-1 Pile Layout Plan and General Data PSE-2 Load Transfer Platform Details

E-3 Pile, Cap, and Footing Modification Details

PSE-4 Permanent Sheet Piling

PSE-5 Temporary Soil Retention System

PSE-6 to PSE-32 Soil Boring Logs

#### DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

#### DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi fy = 60,000 psi (Reinforcement) I certify that to the best of knowledge, information and belief, these pile caps, pipe support structures, and permanent sheet pile wall are structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO LRFD Bridge Design Specifications.

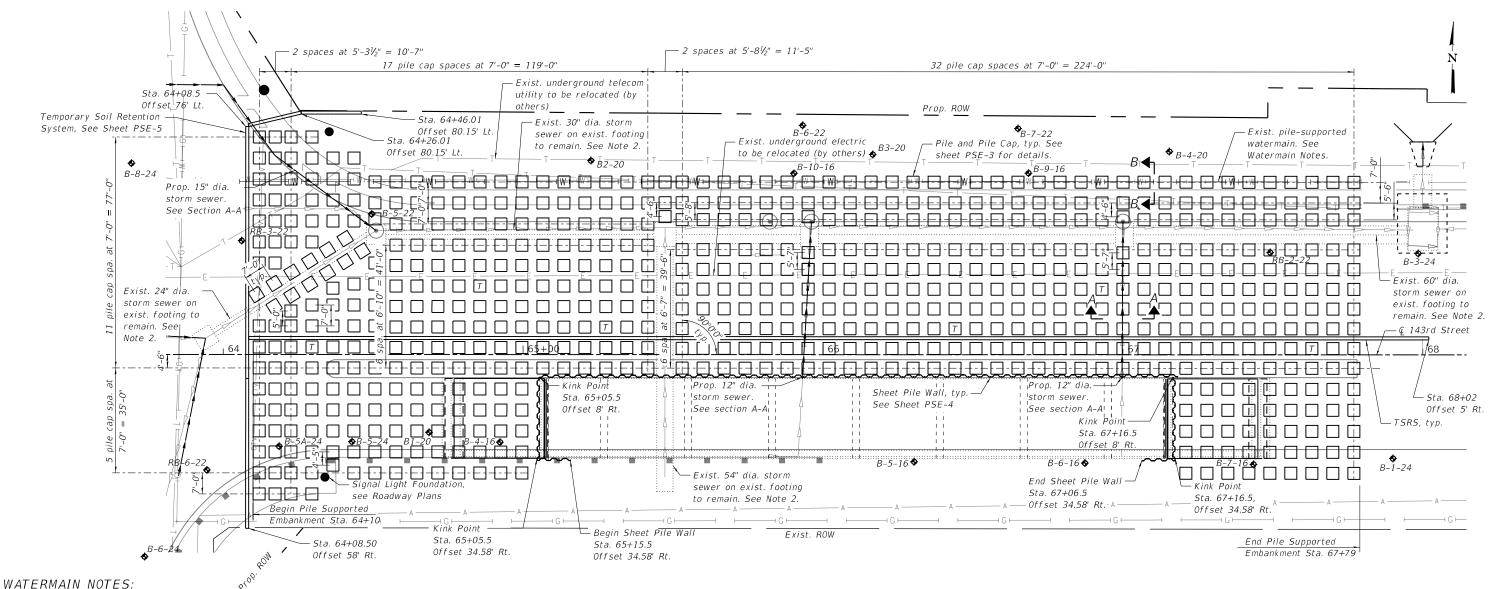


Asalan Klin

Arsalan M. Khan P.E., S.E. State of Illinois No. 081.006258 Expires 11/30/2026 Date: 12/2/2024

Applies to all PSE sheets except

Sheet PSE-2.



1. The existing 12" diameter watermain is supported intermittenly by timber piles. The existing watermain is to be temporarily shut-off, removed, and then re-installed at its current alignment. See Watermain plans.

2. The existing watermain pile supports shall be removed to a depth of 1'-0" below the bottom of proposed pile cap. Cost included with Structure Excavation.

3. Where an existing watermain support pile conflicts with a proposed pile location, the proposed pile location may be field-adjusted as required.

### PILE LAYOUT PLAN

<u>LEGEND</u>

◆ Soil Boring

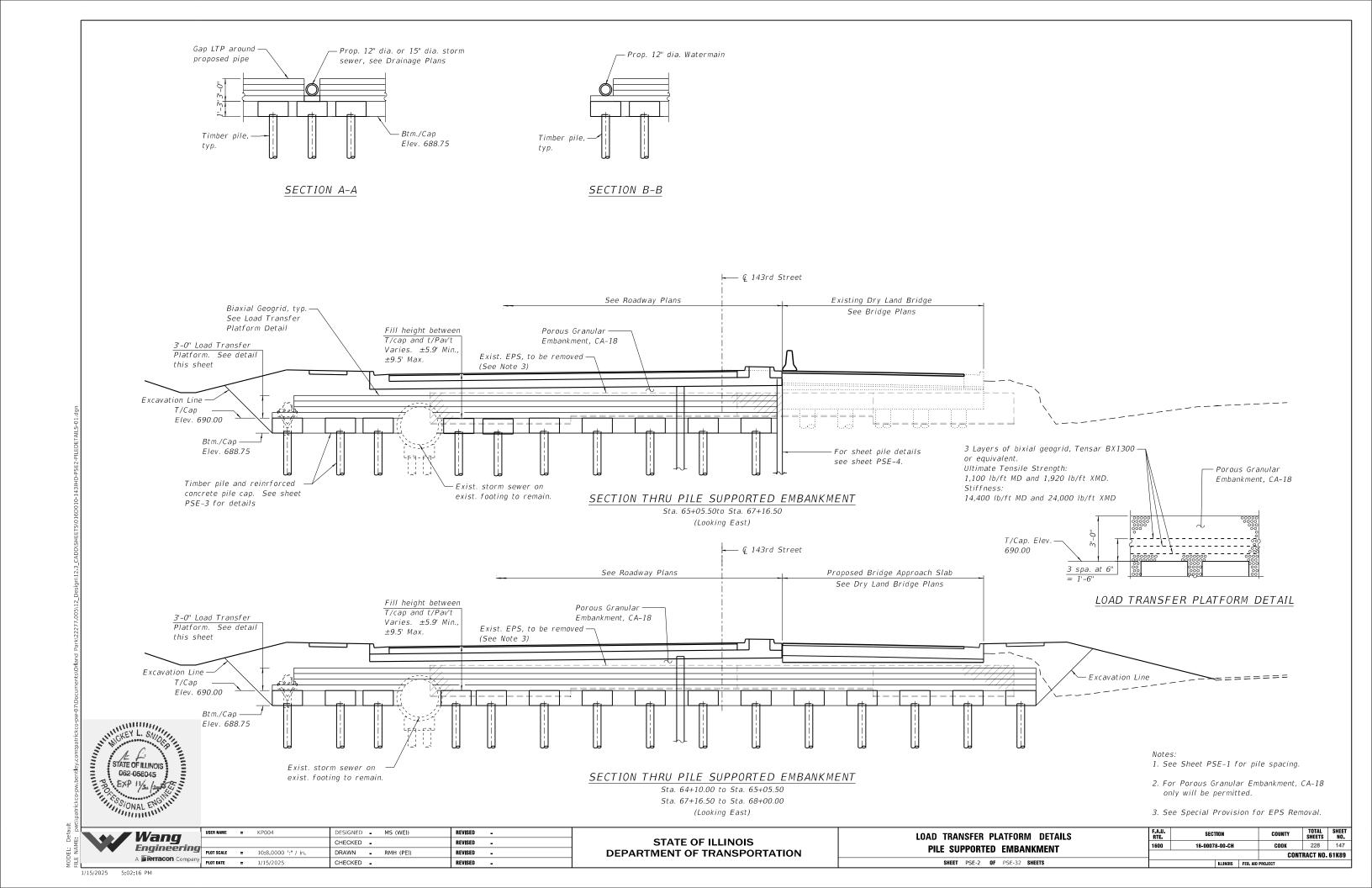
T Test pile, typ.

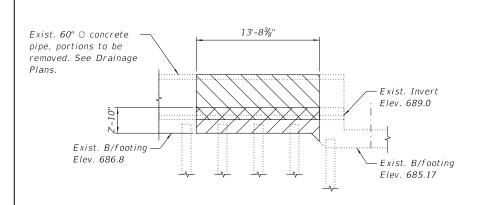
TSRS Temporary Soil Retention System

#### NOTES

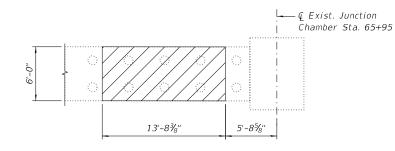
- 1. See sheet PSE-2 for Sections A-A and B-B.
- 2. The existing storm sewer on footings shall be watched and protected during construction. See Special Provision for Status of Utilities.
- 3. See Dry Land Bridge plans for details related to staging.

USER NAME = KP004 DESIGNED - KP REVISED -SECTION COUNTY PILE LAYOUT PLAN AND GENERAL DATA STATE OF ILLINOIS REVISED -CHECKED - AMK 1600 16-00078-00-CH COOK 228 PILE SUPPORTED EMBANKMENT PLOT SCALE = 32:0.0000 ':" / in. DRAWN - RMH REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 61K89 SHEET PSE-1 OF PSE-32 SHEETS PLOT DATE = 1/15/2025 CHECKED . AMK REVISED





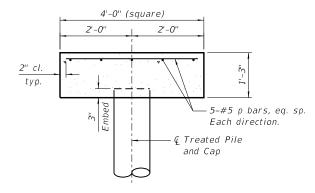
### CONCRETE REMOVAL ELEVATION



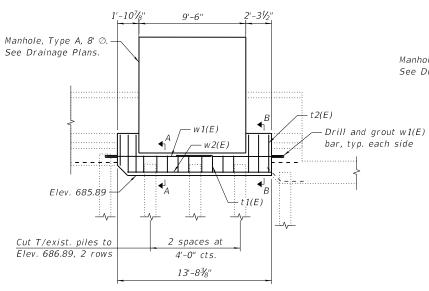
### CONCRETE REMOVAL PLAN

See Drainage Plans Concrete Pipe Removal

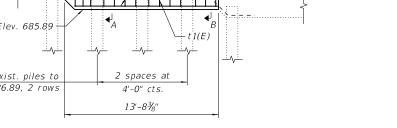
Concrete Footing Removal

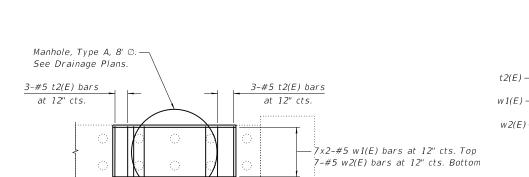


PILE CAP DETAIL



FOOTING ELEVATION





bars at 12" cts. Top and Bottom FOOTING PLAN

9-#5 t1(E)

# PILE DATA

|                                      | Sta. 64+10 to  | Sta. 64+55 to  | Sta. 65+10 to  | Sta. 65+60 to  | Sta. 66+10 to  | Sta. 66+60 to  | Sta. 67+10 to  |
|--------------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                                      | 64+55          | 65+10          | 65+60          | 66+10          | 66+60          | 67+10          | 67+80          |
| Туре                                 | Treated Timber |
| Nominal Required Bearing (kips)      | 142            | 142            | 142            | 142            | 142            | 142            | 142            |
| Factored Resistance Available (kips) | 78             | 78             | 78             | 78             | 78             | 78             | 78             |
| Estimated Length (ft)                | 27             | 24             | 31             | 31             | 35             | 34             | 32             |
| No. Production Piles                 | 118            | 114            | 72             | 69             | 69             | 69             | 144            |
| No. Test Piles                       | 1              | 1              | 1              | 1              | 1              | 1              | 1              |

# PILE CAP BILL OF MATERIAL

(For 661 caps)

| Bar       | No.       | Size  | Length  | Shape |
|-----------|-----------|-------|---------|-------|
| р         | 6610      | #5    | 3'-8"   |       |
|           |           |       |         |       |
| Concrete  | Structure | 5     | Cu. Yd. | 490   |
| Reinforce | ment bars | Pound | 25,280  |       |

# DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition

### DESIGN STRESSES

FIELD UNITS

Manhole, Type A, 8' ∅. —

t2(E) -

w2(E)

50" ⊘ Concrete Pipe. —

See Drainage Plans.

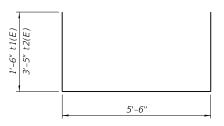
---- w 1(E)

SECTION A-A

SECTION B-B

See Drainage Plans.

 $f'c = 3,500 \ psi$ fy = 60,000 psi (Reinforcement)



## BARS t1(E) and t2(E)

# FOOTING MODIFICATION BILL OF MATERIAL

| Bar      | No.      | Size       | Length | Shape |
|----------|----------|------------|--------|-------|
| t1(E)    | 18       | #5         | 7'-0"  |       |
| t2(E)    | 6        | #5         | 8'-11" |       |
|          |          |            |        |       |
| w1(E)    | 14       | #5         | 14'-1" |       |
| w2(E)    | 7        | #5         | 12'-9" |       |
|          |          |            |        |       |
| CONCRET  | E REMOV  | 4 <i>L</i> | CUYD   | 7     |
| CONCRET  | E STRUCT | CUYD       | 7      |       |
| REINFORG | CEMENT E | POUND      | 470    |       |
| EPOXY CO | DATED    |            |        |       |

#### NOTES:

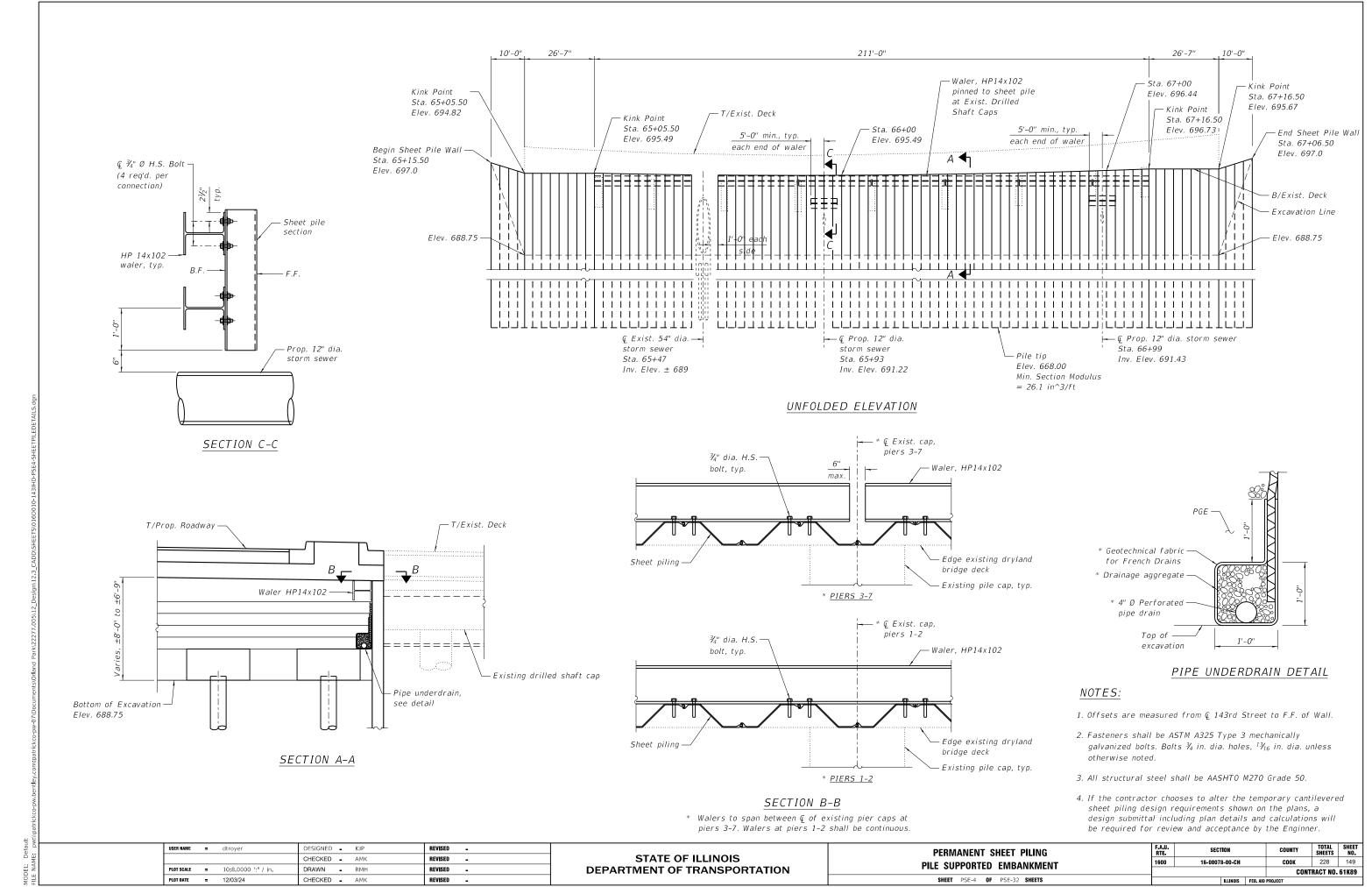
- 1. Reinforcement bars designated (E) shall be epoxy coated.
- 2. Plan dimensions and details relative to the existing structure have been taken from existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

| USER NAME  | = | dtroyer             | DESIGNED | - | KJP | REVISED | - |
|------------|---|---------------------|----------|---|-----|---------|---|
|            |   |                     | CHECKED  | - | AMK | REVISED | • |
| PLOT SCALE | = | 10:8.0000 ':" / in. | DRAWN    | - | RMH | REVISED | • |
| PLOT DATE  | = | 12/03/24            | CHECKED  | - | AMK | REVISED | • |
|            |   |                     |          |   |     |         |   |

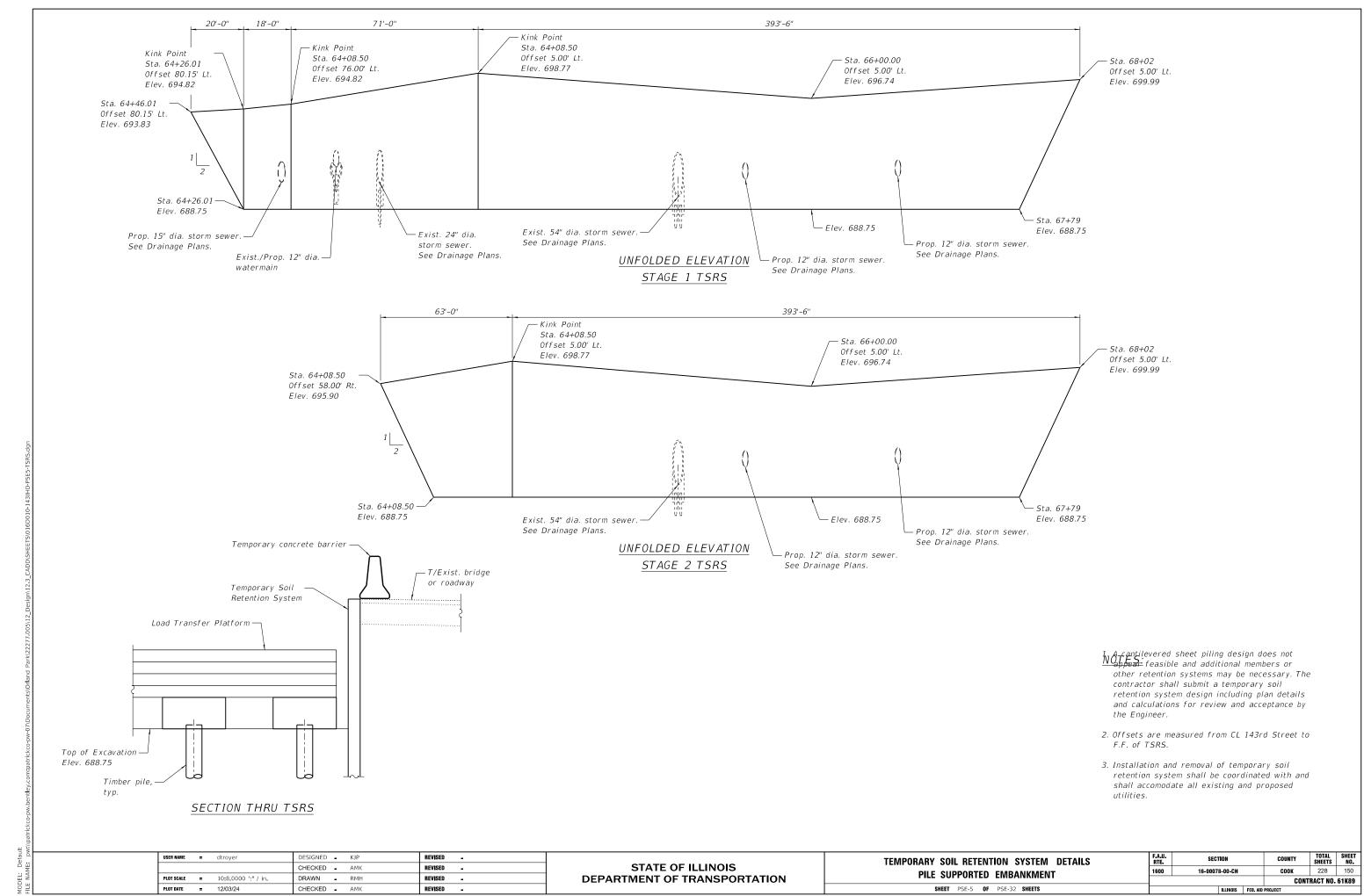
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  PILE, CAP, AND FOOTING MODIFICATIONS DETAILS PILE SUPPORTED EMBANKMENT SHEET PSE-3 OF PSE-32 SHEETS

| A.U. | SECT    | rion    | COUNTY | TOTAL<br>SHEETS | SHEET<br>NO. |
|------|---------|---------|--------|-----------------|--------------|
| 600  | 16-0007 | 8-00-CH | COOK   | 228             | 148          |
|      |         |         | CONT   | RACT NO.        | 61K89        |
|      |         |         | <br>   |                 |              |

12/3/2024 2:55:28 PM



12/3/2024 2:55:35 PM

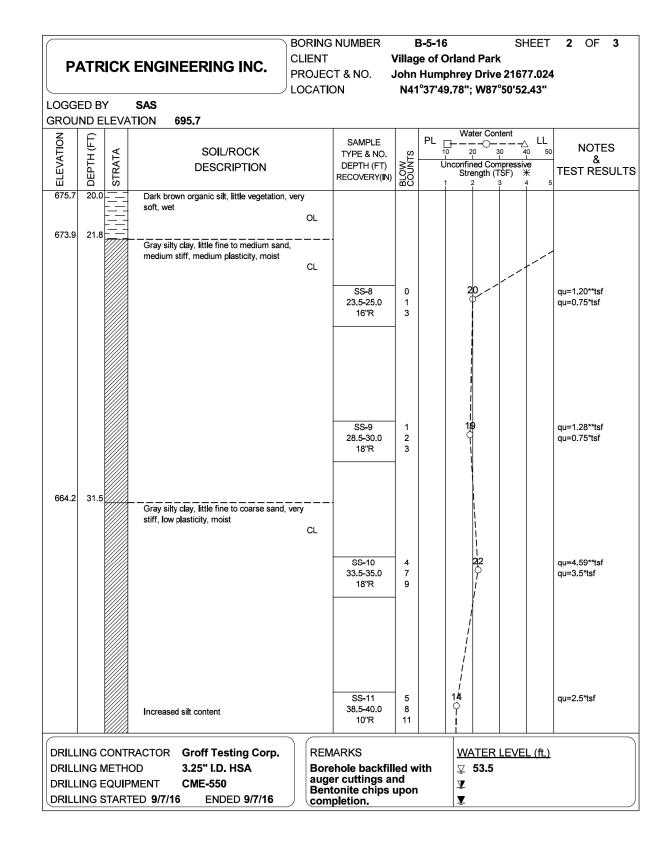


BORING NUMBER SHEET 1 OF 1 B-4-16 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N41°37'49.81"; W87°50'54.25" LOGGED BY SAS GROUND ELEVATION 695.2 Water Content **DEPTH (FT)** ELEVATION SAMPLE NOTES SOIL/ROCK TYPE & NO.
DEPTH (FT)
RECOVERY(IN) TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DESCRIPTION TEST RESULTS 695.2 5.5" asphalt, 18.5" concrete, 1.25" rebar at Cored pavement with 17.5" 8.0" core barrel to depth of 24.0" 693.2 2.0 Sand and gravel base, dense, moist GP Lightweight Styrofoam 692.4 FILL 3.5-5.0 4"R SS-2 6.0-7.5 2"R 686.5 SS-3 Black peat, very soft, moist 8.5-10.0 <sup>™</sup>WC=177% 4"R 711/2 SS-4 Cave in after drilling a 11.0-12.5 Ф11.0' 11/ 9"R WC=611% Dark brown 11/ SS-5 11/ 13.5-15.0 Little wood ₩C=597% 6"R 680.2 15.0 🗤 End of Boring at 15.0' DRILLING CONTRACTOR Groff Testing Corp. REMARKS WATER LEVEL (ft.) 3.25" I.D. HSA DRILLING METHOD Borehole backfilled with ☑ Dry auger cuttings and DRILLING EQUIPMENT CME-550 Ā Bentonite chips, and DRILLING STARTED 9/7/16 ENDED 9/8/16 patched with cold patch upon completion.

| P#                         | ATF            | RICK         | ENGINEERING INC.   | BORING<br>CLIENT<br>PROJEC<br>LOCATION | T & NO.  | Villaç<br>John | B-5-16 SHEET 1 OF 3 ge of Orland Park n Humphrey Drive 21677.024 1°37'49.78"; W87°50'52.43" |   |  |  |
|----------------------------|----------------|--------------|--|--|--|----------------|---|---|--|--|
| LOGGE<br>GROUI             |                |              | SAS<br>ATION 695.7   |  |  |                |   |   |  |  |
| ELEVATION                  | ОЕРТН (FT)     | STRATA       | SOIL/ROCK<br>DESCRIPTION   |  | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)     | BLOW           | PL Water Content 10 20 30 40 5 Unconfined Compressive Strength (TSF) # 1 2 3 4              | NOTES<br>&<br>TEST RESULT                     |  |  |
| 695.7                      | 0.0            | 7,7,7        | Brown topsoil, trace roots, trace grave  | ıl                                     | AU-1<br>0.0-1.0  |                | 12<br>Q   |   |  |  |
| 694.4                      | 1.3            |              | Dark brown silty clay, some fine to coatrace gravel, stiff, low plasticity, moist  |  | SS-1<br>1.0-2.5<br>13"R                                | 3<br>8<br>5    | 77  | qu=1.25*tsf                                   |  |  |
| 691.2                      | 4.5            | i            | Gravel fill Lightweight Styrofoam fill   |  | SS-2<br>3.5-5.0<br>5"R                                 | 26<br>56/3"    | 8/  | Membrane in spoor                             |  |  |
|                            |                |              | Eigitweight Grynddall IIII   | FILL                                   | SS-3<br>6.0-7.5<br>4"R                                 | 1 2 2          |   |   |  |  |
|                            |                |              |  |  | SS-4<br>8.5-10.0<br>1"R                                | 0 1 1          |   | Cave in after drilling 8.0'                   |  |  |
| 684.5                      | 11.2           |              | Dark brown organic silt, very soft, wet  | OL                                     | - SS-5<br>11.0-12.5<br>12"R                            | W<br>O<br>H    |   | <sup>©</sup> WC=496%                          |  |  |
|                            |                |              |  |  | SS-6<br>13.5-15.0<br>9"R                               | W<br>O<br>H    |   | qu=<0.25*tsf<br>WC=407%                       |  |  |
| 675.7                      | 20.0           |              |  |  | ST-7<br>18.0-20.0<br>24"R                              | P U S H        |   | qu=0.1tsf<br>WC=108%<br>C <sub>c</sub> =1.325 |  |  |
| DRILLI<br>DRILLI<br>DRILLI | ING (<br>ING I | CONT<br>METH | RACTOR Groff Testing Corp. OD 3.25" I.D. HSA PMENT CME-550 TED 9/7/16 ENDED 9/7/16 | Bore<br>auge<br>Ben                    | IARKS chole backfiler cuttings a tonite chips pletion. | nd             | 7.  | 1   |  |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

nui konton cominatifico nui Alfaccimentel Odina Britis a 17006113 Arcinal a CADAICELEETCIA 14010 14010 BEEK B



|                                    |                |                       | ENGINEERING INC.  | BORING<br>CLIENT<br>PROJEC<br>LOCATIO | T & NO.   | Villag<br>John | B-5-16 SI<br>ge of Orland Park<br>Humphrey Drive 2167<br>1°37'49.78"; W87°50'52 |   |
|------------------------------------|----------------|-----------------------|---|---------------------------------------|---|----------------|---|---|
| LOGGE<br>GROUI                     |                |                       | SAS<br>TION 695.7   |                                       |   |                |   |   |
| ELEVATION                          | DEPTH (FT)     | STRATA                | SOIL/ROCK<br>DESCRIPTION                                      |                                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)      | BLOW           | PL Water Content  10 20 30 7  Unconfined Compressi Strength (TSF)  1 2 3        |   |
| 055.7                              | 40.0           |                       | Trace gravel  |                                       | SS-12<br>43.5-45.0<br>18"R                              | - 4<br>5<br>9  | 13<br>CF  | qu=4.0*tsf<br>qu=4.96*tsf<br>LL=24<br>PL=15<br>PI=9 |
|                                    |                |                       |   |                                       | SS-13<br>48.5-50.0<br>0"R                               | 6<br>10<br>14  |   |   |
| 642.2                              | 53.5           |                       | ⊽   |                                       | SS-14<br>53.5-55.0<br>12"R                              | 4<br>10<br>13  | 14  | qu=3.25*tsf   |
|                                    |                |                       |   |                                       |   |                |   | Difficult drilling<br>56.0'-58.0'                   |
| 637.7<br>635.7                     | 58.0<br>60.0   |                       | Gray silt, little sand, medium dense,  End of Boring at 60.0' | wet ML                                | SS-15<br>58.5-60.0<br>14"R                              | 4<br>6<br>8    | <b>25</b>   | 16.0% sand<br>81.6% silt<br>2.5% clay               |
| DR <b>I</b> LLI<br>DR <b>I</b> LLI | ING N<br>Ing e | METH<br>QU <b>I</b> F |   | Bore<br>auge<br>Bent                  | IARKS  chole backfiler cuttings a tonite chips pletion. | nd             | -   | <u>L (ft.)</u>                                      |

MODEL: Default FILE NAME: pw:\\patrickco-pw.be

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER SHEET 1 OF 3 B-6-16 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 N41°37'49.79"; W87°50'51.68" LOCATION LOGGED BY SAS GROUND ELEVATION 696.6 Water Content **DEPTH (FT)** ELEVATION SAMPLE NOTES STRATA SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 696.6 Brown topsoil, trace roots, trace gravel 0.0 7.7. 7. 0.0-1.0 695.5 Brown silty clay, some sand and gravel, medium 1.0-2.5 stiff, low plasticity, moist 14"R 693.7 2.9 Gravel fill, dense, dry, fill GP SS-2 20 692.6 3.5-5.0 16 Lightweight Styrofoam fill 2"R FILL Cave in after drilling at SS-3 6.0-7.5 2"R 687.8 Dark brown organic silt, very soft, wet 8.5-10.0 ₩C=481% 11"R SS-5 qu=0.25\*\*tsf 11.0-12.5 ₩C=442% 18"R SS-6 31.0% organics 13.5-15.0 <sup>₩</sup>WC=286% 18"R 677.7 18.9 SS-7 qu=0.41\*\*tsf Gray silty clay, little sand, soft, low plasticity, 18.5-20.0 qu=0.25\*tsf 676.6 20.0 DRILLING CONTRACTOR Groff Testing Corp. REMARKS WATER LEVEL (ft.) 3.25" I.D. HSA **∑** 48.9 DRILLING METHOD Borehole backfilled with auger cuttings and Bentonite chips upon DRILLING EQUIPMENT CME-550 Ā DRILLING STARTED 9/7/16 ENDED 9/7/16 completion.

|            |            |          |  | BORING    | NUMBER                     | E        | B-6-16                                 | SHEET 2 OF 3                                  |
|------------|------------|----------|--|-----------|----------------------------|----------|--|---|
| D          | ΔΤΕ        | ICK      | ENGINEERING INC.                                     | CLIENT    |                            | _        | je of Orland Park                      |   |
| P/         | ~11        |          | LITORIALLIMING INC.                                  |           |                            |          | <b>Humphrey Drive 21</b>               |   |
|            |            |          |  |           | NC                         | N41      | 1°37'49.79"; W87°50                    | <b>'51.68"</b>                                |
| _OGG       |            |          | SAS  |           |                            |          |  |   |
| GROU       | IND E      | LEVA     | ATION 696.6  |           | 1                          | 1        | \\\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\- |   |
| ELEVATION  | E          |          |  |           | SAMPLE                     |          | PL Water Content                       | -A LL NOTES                                   |
| 'AT        | E          | ΙΨ       | SOIL/ROCK  |           | TYPE & NO.                 | /<br>ITS | Unconfined Compre                      | i   |
| Ē          | ОЕРТН (FT) | STRATA   | DESCRIPTION  |           | DEPTH (FT) RECOVERY(IN)    | BLOW     | Strength (TSF)                         | ssive   p_oc                                  |
| ш<br>676.6 | l          |          | One with the little and act level                    | -41-14.   |                            | шç       | 1 2 3                                  | 4 5 DI -4C                                    |
| 0,0.0      | 20.0       |          | Gray silty clay, little sand, soft, low pla<br>moist | asticity, |                            |          |  | PL=16<br>PI=13                                |
|            |            |          |  | CL        |                            |          |  | WC=203%                                       |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            | ↓ _      |  |   |
|            |            |          |  |           | ST-8<br>23.0-25.0          | P<br>U   | 20                                     | qu=0.41**tsf                                  |
| 672.6      | 24.0       |          | Gray silty clay, little fine to coarse san           | d, trace  | 20"R                       | S        |  | qu=0.66*tsf<br>qu=0.74**tsf                   |
|            |            |          | gravel, medium stiff, low plasticity, mo             | oist      |                            | Н        |  | 4- 5  |
|            |            |          |  | CL        |                            | 1        |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          | <del> </del>                           |   |
|            |            |          |  |           | SS-9                       | 3        | 22                                     | qu=2.31**tsf                                  |
|            |            |          | Very stiff   |           | 28.5 <b>-</b> 30.0<br>18"R | 6        |  | qu=3.0*tsf                                    |
|            |            |          |  |           | 10 K                       |          | /  /                                   |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            | 1        |  |   |
|            |            |          |  |           |                            | 1.       |  |   |
|            |            |          | Trace gravel   |           | SS-10<br>33.5-35.0         | 10       | 16<br>                                 | qu=2.93**tsf<br>qu=2.75*tsf                   |
|            |            |          | Trace gravel   |           | 18"R                       | 6        |  | 7. 21.0 10.                                   |
|            |            |          |  |           |                            | 1        |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           |                            |          |  |   |
|            |            |          |  |           | SS-11                      | 5        | 1/5                                    | qu=3.22**tsf                                  |
|            |            |          |  |           | 38.5-40.0<br>18"R          | 5<br>8   |  | qu=2.75*tsf                                   |
|            | <u> </u>   |          |  |           | 1011                       |          |  |   |
| ייוםר      | INIC       | CALT     | RACTOR Groff Testing Corp.                           | DEM       | IVDRG                      |          | \A/ATED ! C                            | \/EL (#\)                                     |
|            |            | METH     | •  | 1 1       | IARKS<br>ehole backfil     | lod w    | <u>WATER LE</u> \ vith                 | <u>v =                                   </u> |
|            |            |          | PMENT CME-550  | auge      | er cuttings a              | nd       | 7                                      |   |
|            |            |          | TED 9/7/16 ENDED 9/7/16                              | Ben       | tonite chips               | upon     | <b>▼</b>                               |   |
| >1 \ILL    |            | > 1771 \ | LIVE SITTO   | Com       | pielion.                   |          | <u>+</u>                               |   |

MODEL. Derault FILE NAME: pw:\\patrickco-pw.bentle

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING NUMBER SHEET 3 OF 3 B-6-16 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N41°37'49.79"; W87°50'51.68" LOGGED BY SAS GROUND ELEVATION 696.6 Water Content ОЕРТН (FT) ELEVATION PL Water Content
10 20 30 40 50 SAMPLE NOTES SOIL/ROCK TYPE & NO.
DEPTH (FT)
RECOVERY(IN) TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DESCRIPTION TEST RESULTS 656.6 40.0 Gray silty clay, little fine to coarse sand, trace gravel, very stiff, low plasticity, moist qu=4.75\*\*tsf 43.5-45.0 qu=4.25\*tsf qu=3.51\*\*tsf qu=4.5\*tsf 647.7 48.9 48.5-50.0 18"R qu>4.5\*tsf 53.5-55.0 18"R 637.8 58.8 25 Gray silt, little sand, medium dense, wet 58.5-60.0 10 17"R 636.6 60.0 End of Boring at 60.0' DRILLING CONTRACTOR Groff Testing Corp. REMARKS WATER LEVEL (ft.) 3.25" I.D. HSA **∑** 48.9 DRILLING METHOD Borehole backfilled with auger cuttings and Bentonite chips upon DRILLING EQUIPMENT CME-550 Ā DRILLING STARTED 9/7/16 ENDED 9/7/16 completion.

|                                  |                   |        |             | SINEERI          | NG INC.                                       | CLIENT                   | CT & NO.   | Villag<br>John    |    | Orland<br>phrey   | Drive              |          |           | 1                                | OF <b>2</b>                       |
|----------------------------------|-------------------|--------|-------------|------------------|---|--------------------------|--|-------------------|----|-------------------|--------------------|----------|-----------|----------------------------------|-----------------------------------|
| LOGG!<br>GROU!                   |                   |        | SAS<br>TION | 697.7            |   |                          |  |                   |    |                   |                    |          |           |                                  |                                   |
| ELEVATION                        | <b>DEPTH (FT)</b> | STRATA |             |                  | DIL/ROCK<br>SCRIPTION                         |                          | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW              | 1  | Jnconfir<br>Stre  | ned Cor<br>ength ( | npressiv | 0 50<br>e | TEST                             | NOTES<br>&<br>RESULTS             |
| 697.7                            | 0.0               | 7.77.7 | Brow        | n topsoil, trace | roots   |                          | AU-1<br>0.0-1.0                                    |                   |    | 18<br>,0          | 3                  |          |           |                                  |                                   |
| 696.6                            |                   |        | Grav        |                  | nd, little fines, ve                          | ry dense,<br>GP          | SS-1<br>1.0-2.5<br>13"R                            | 12<br>13<br>50/4" | 6∕ |                   |                    |          |           |                                  |                                   |
| 694.7                            | 3.0               | 00]    | Light       | weight Styrofo   | am, fill                                      | FILL                     | SS-2<br>3.5-5.0<br>2"R                             | 1 2 2             |    |                   |                    |          |           |                                  |                                   |
|                                  |                   |        |             |                  |   |                          | SS-3<br>6.0-7.5<br>2"R                             | 2<br>2<br>2<br>1  |    |                   |                    |          |           |                                  | rane in spoon<br>n after drilling |
| 687.7                            | 10.0              |        |             |                  | - <del></del> -                               | <del>-</del>             | SS-4<br>8.5-10.0<br>3"R                            | 1<br>1<br>1       |    |                   |                    |          |           |                                  |                                   |
|                                  |                   |        | Dark        | brown organic    | silt, very soft, m                            | OL                       | SS-5   | w                 |    |                   |                    |          |           |                                  |                                   |
| 685.5                            | 12.2              |        |             | silty clay, trac | e fine to medium                              | sand, very               | 11.0-12.5<br>15"R                                  | ОН                |    |                   |                    |          |           | WC=4                             | 42%                               |
|                                  |                   |        |             |                  |   | CL                       | SS-6<br>13.5-15.0<br>18"R                          | W<br>O<br>H       |    | 17<br><del></del> | <u>~</u>           |          |           | qu=0.2<br>LL=21<br>PL=14<br>PI=7 |                                   |
| 678.9                            | 18.8              |        |             |                  | fine to coarse sa<br>f, low plasticity, m     |                          | SS-7<br>18.5-20.0<br>18"R                          | 0 2 3             |    | 140-              |                    |          |           | qu=0.9<br>qu=0.7                 |                                   |
| DRILL<br>DRILL<br>DRILL<br>DRILL | ING N<br>Ing e    | /IETHO | DD<br>MENT  | 3.25" I<br>CME-5 | Testing Corp<br>.D. HSA<br>i50<br>NDED 9/8/16 | REM<br>Bor<br>aug<br>Ben | ARKS ehole backfiler cuttings attonite chips       | nd                |    |                   | ATER<br>Dry        | LEVE     | L (ft.)   |                                  |                                   |

12

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER

B-7-16

SHEET 2 OF 2

| PA                      | ATR        | ICK                          | ENGINEERING INC.   | CLIENT         | T & NO.  | Villag<br>John | B-9-16 SHEET<br>ge of Orland Park<br>Humphrey Drive 21677.024<br>1°37'50.74"; W87°50'51.96" | 1 OF 1                                     |
|-------------------------|------------|------------------------------|--|----------------|--|----------------|---|--|
| LOGGE<br>GROUI          |            |                              | <b>SAS</b><br>TION <b>694.5</b>                            |                |  |                |   |  |
| ELEVATION               | DEPTH (FT) | STRATA                       | SOIL/ROCK<br>DESCRIPTION                                   |                | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)   | BLOW<br>COUNTS | PL  | NOTES<br>&<br>TEST RESULT                  |
| 694.5<br>693.6          |            | 7. 7.7.<br>7.7. 7.           | Brown topsoil, trace gravel                                |                | AU-1<br>0.0-1.0                                      |                | 29  |  |
|                         |            |                              | Gray gravel fill, some sand, very dens                     | se<br>GP       | SS-1<br>1.0-2.5<br>2"R                               | 50/3"          |   |  |
|                         |            |                              | Some silt<br>Wet at 4.6'                                   |                | SS-2<br>3.5-5.0<br>16"R                              | 11<br>9<br>7   | 34  |  |
| 689.0                   | 5.5        |                              | Gray silty clay, trace sand, very soft, i                  | medium         |  |                |   |  |
| 687.8                   | 6.7        | 77 7<br>7 77<br>77 7         | plasticity, moist  Black peat, trace roots, very soft, moi | CL<br>st<br>PT | SS-3<br>6.0-7.5<br>13"R                              | 0 0 1          | 28  |  |
|                         |            | 77 7<br>77 7<br>77 7         |  |                | SS-4<br>8.5-10.0<br>18"R                             | W<br>O<br>H    |   | )<br>WC=201%                               |
|                         |            | 77 7<br>77 7<br>77 7<br>77 7 |  |                | SS-5<br>11.0-12.5<br>18"R                            | 0<br>0<br>2    |   | Cave in after drilling<br>10.5'<br>WC=409% |
| 679.5                   | 15.0       | 7                            |  |                | SS-6<br>13.5-15.0<br>18"R                            | 0<br>1<br>1    |   | )<br>WC=472%                               |
|                         |            |                              | End of Boring at 15.0'                                     |                |  |                |   |  |
| DRILL<br>DR <b>I</b> LL | ING N      | /IETH                        |  | Bore           | IARKS<br>ehole backfill<br>er cuttings u<br>pletion. |                | water level (ft.)  Dry  T   |  |

USER NAME = dtroyer DESIGNED - KJP REVISED -REVISED -CHECKED - AMK PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -PLOT DATE = 12/03/24 CHECKED - AMK REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY SOIL BORING LOG (5 OF 27) 1600 COOK 228 155 16-00078-00-CH PILE SUPPORTED EMBANKMENT CONTRACT NO. 61K89 SHEET PSE-10 OF PSE-32 SHEETS

12/3/2024 2:56:32 PM

BORING NUMBER

PROJECT & NO.

CLIENT

PATRICK ENGINEERING INC.

B-10-16

Village of Orland Park

John Humphrey Drive 21677.024

SHEET 1 OF 1

| PA             | ATR        | ICK                                   | ENGINEERING INC.   | CLIENT                |   | John         | -    | hrey Drive |                    | 24                          |
|----------------|------------|---------------------------------------|--|-----------------------|---|--------------|------|------------|--------------------|-----------------------------|
| LOGG           |            |                                       | BR<br>TION 698.0   |                       |   |              |      |            |                    |                             |
|                | DEPTH (FT) | STRATA                                | SOIL/ROCK<br>DESCRIPTION   |                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)                  | BLOW         | PL [ |            | 30 40<br>mpressive | LL NOTES & TEST RESULT      |
| <b>697</b> :8  | 9:9        | 808080                                | √3"asphalt   |                       |   |              |      |            |                    |                             |
| 696.9          | 1.1        |                                       | 10"concrete  |                       | 00.4  |              |      |            |                    |                             |
| 696.3          | 1.7        | .0.                                   | 8" gravel  | GW                    | SS-1<br>1.0-2.5   | 23<br>21     |      |            |                    |                             |
|                |            |                                       | Lightweight Styrofoam  |                       | R=15"   | 15           |      |            |                    |                             |
|                |            |                                       |  | FILL                  |   |              |      |            |                    |                             |
| 693.0          | 5.0        |                                       | ¥  |                       | SS-2<br>3.5-5.0<br>R=0"   | 1 1 1        |      |            |                    |                             |
|                |            |                                       |  |                       | SS-3<br>6.0-7.5<br>R=0"   | 1 2 3        |      |            |                    |                             |
| C00 F          | 0.5        |                                       |  |                       |   |              |      |            |                    |                             |
| 689.5          | 8.5        | 77 7<br>77 7<br>77 7                  | Dark brown peat, soft, moist   | PT                    | SS-4<br>8.5-10.0<br>R=4"  | WOH          | *    |            |                    | qu=0.25*tsf<br>qu=0.52**tsf |
|                |            | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ |  |                       | SS-5<br>11.0-12.5<br>R=18"  | WOH          |      |            |                    |                             |
|                |            | V VV<br>V VV<br>V VV                  |  |                       | SS-6<br>13.5-15.0<br>R=18"  | W O H        | *    |            |                    | qu=0.25*tsf<br>qu=0.25**tsf |
| 678.5<br>678.0 |            |                                       | Light grey clay, soft, moist   |                       | SS-7<br>18.5-20.0<br>R=18"  | WOH          | *    |            |                    | qu=0.25*tsf<br>qu=0.37**tsf |
| DRILL<br>DRILL | .ING I     | METH(<br>EQUIP                        | RACTOR RDC<br>DD 3.25" ID HSA<br>MENT ATV CME-550<br>"ED 8/24/20 ENDED 8/24/20 | Bore<br>cutti<br>grou | MARKS  chole backfill  ings @1.5' be  und surface ,  crete to surfa | elow<br>then |      |            | While I            | Drilling                    |

USER NAME = dtroyer DESIGNED - KJP REVISED -CHECKED - AMK REVISED -PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -CHECKED . AMK PLOT DATE = 12/03/24 REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY SOIL BORING LOG (6 OF 27) 1600 16-00078-00-CH COOK PILE SUPPORTED EMBANKMENT CONTRACT NO. 61K89 SHEET PSE-11 OF PSE-32 SHEETS

228

12/3/2024 2:56:44 PM

BORING NUMBER B1-20 SHEET 2 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 698.0 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 678.0 20.0 CL Stiff SS-8 22.5-24.0 R=17" qu=1.5\*tsf qu=1.65\*\*tsf 2 3 4 669.5 28.5 SS-9 28.5-30.0 R=18" Very stiff, trace gravel qu=4.0\*tsf qu=2.64\*\*tsf SS-10 33.5-35.0 R=15" qu=4.25\*tsf qu=4.38\*\*tsf . 10 SS-11 38.5-40.0 R=16" qu=4.5\*tsf qu=4.17\*\*tsf DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) 3.25" ID HSA DRILLING METHOD DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/24/20 ENDED 8/24/20

|                |                 |                                     | GINEERING INC.                    | CLIENT               | CT & NO.  | John          | B1-20<br>Humpl<br>I°37'50. |        |        | 21677                  |            | 3            | OF               | 4  |
|----------------|-----------------|-------------------------------------|-----------------------------------|----------------------|---|---------------|----------------------------|--------|--------|------------------------|------------|--------------|------------------|----|
|                | ED BY<br>ND ELI | <b>BR</b><br>EVATION                | 698.0                             |                      |   |               |                            |        |        |                        |            |              |                  |    |
| • ETEV • 658.0 | DEPTH (FT)      | STRATA                              | SOIL/ROCK<br>DESCRIPTION          |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)              | BLOW          | PL 10 Und                  | confin | ed Con |                        | 0 50<br>ve | TEST         | NOTE<br>&<br>RES |    |
| 654.5          | 43.5            | 3883                                | ey clayey silt, very stiff<br>-ML |                      | SS-12<br>43.5-45.0<br>R=18"                                     | 5<br>8<br>11  |                            |        |        | *                      |            | qu=3<br>qu=3 | .5*tsf<br>22**ts | if |
| 649.5          | 48.5            | ⊽                                   |                                   |                      | SS-13<br>48.5-50.0<br>R=18"                                     | 7<br>15<br>18 |                            | >      | €      |                        |            | qu=2<br>qu=1 | 0*tsf<br>45**ts  | if |
|                |                 |                                     |                                   |                      | SS-14<br>53.5-55.0<br>R=18"                                     | 9 10 9        |                            |        | *      |                        |            | qu=2<br>qu=2 | .5*tsf<br>56**ts | if |
| 639.5          | 58.5            |                                     | ey silt, medium dense             | ML                   | SS-15<br>58.5-60.0<br>R=18"                                     | 1<br>8<br>10  | *                          |        |        |                        |            | qu=0<br>qu=N |                  |    |
| DRILL<br>DRILL | .ING ME         | ONTRACT<br>ETHOD<br>QUIPMENTARTED 8 |                                   | Bord<br>cutt<br>grou | MARKS ehole backfille ings @1.5' be und surface, crete to surfa | low<br>then   |                            |        | 48.5   | LEVE<br>While<br>After |            | ing          |                  |    |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

.com:natrickco-nw-07\Documents\Orland Park\22277.005\12 Design\12.3 CADD\SHEETS\016D010-143\tHD-PS=12

CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 698.0 Water Content PL Vater Content LL 10 20 30 40 5 SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 638.0 60.0 634.5 63.5 SS-16 63.5-65.0 R=18" 10 18 23 qu=1.75\*tsf Silt to clayey silt, stiff qu=1.32\*\*tsf 629.5 68.5 SS-17 10 68.5-70.0 18 R=18" 21 Trace gravel, Stiff qu=1.0\*tsf qu=0.16\*\*tsf SS.18 73.5-75.0 R=18" 10 14 15 qu=1.75\*tsf qu=0.33\*\*tsf 623.0 75.0 End of boring @75' DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) 3.25" ID HSA DRILLING METHOD DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/24/20 ENDED 8/24/20

BORING NUMBER

B1-20

SHEET 4 OF 4

| P              | PATRICK ENGINEERING INC. |                                       |  | CL<br>PR | .IENT                 |  | John           |         | hrey D   |         | SHEET<br>677.024<br>51.72"               | 1 OF 4                      |
|----------------|--------------------------|---------------------------------------|--|----------|-----------------------|--|----------------|---------|----------|---------|--|-----------------------------|
|                |                          |                                       |  |          | , , , , , ,           |  |                | 0, 00   |          | 0. 00   | · <u>-</u>                               |                             |
| GROU           | IND E                    | LEV                                   | ATION <b>696.4</b>   |          |                       | T  | 1              |         | Mata     | Content |  |                             |
| ELEV.          | DEPTH<br>(FT)            | STRATA                                | SOIL/ROCK<br>DESCRIPTION   |          |                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)           | BLOW<br>COUNTS | PL [10] | confined | O       | LL<br>40 50<br>essive                    | &<br>TEST RESULTS           |
| 695:4          | 8:8                      | 71 1/V                                | 0.5' topsoil   |          |                       |  |                |         |          |         |  |                             |
|                |                          |                                       | Dark brown clay with trace g<br>trace sand, very stiff<br>FILL                   | jravel   | ,                     | SS-1<br>1.0-2.5<br>R=12"                                     | 9<br>8<br>7    |         |          |         | *  | qu=4.5+*tsf<br>qu=N/A       |
| 692.9<br>691.4 | 3.5<br>5.0               |                                       | Stiff <b>⊻</b>   |          |                       | SS-2<br>3.5-5.0<br>R=12"                                     | 6<br>5<br>5    |         | *        |         |  | qu=1.5*tsf<br>qu=N/A        |
| 690.4          | 6.0                      | * * * * * * * * * * * * * * * * * * * | Grey peat, moist,medium sti  | iff P    | Т                     | SS-3<br>6.0-7.5<br>R=14"                                     | WOF<br>1<br>2  | *       |          |         |  | qu=0.75*tsf<br>qu=0.66**tsf |
| 687.9          |                          | <u>, ,,,</u>                          | Dark brown peat, soft, moist   | i        |                       | SS-4<br>8.5-10.0<br>R=14"                                    | WOH            | *       |          |         |  | qu=0.25*tsf<br>qu=0.50**tsf |
| 685.4          | 11.0                     |                                       | Medium stiff   |          |                       | SS-5<br>11.0-12.5<br>R=15"                                   | W<br>O<br>H    | *       |          |         |  | qu=0.5*tsf<br>qu=0.95**tsf  |
|                |                          | 2                                     |  |          |                       | SS-6<br>13.5-15.0<br>R=18"                                   | W<br>O<br>H    | *       |          |         |  | qu=0.5*tsf<br>qu=0.37**tsf  |
| 677.4          |                          |                                       | Light grey clay, medium stiff  |          |                       | SS-7<br>18.5-20.0<br>R=18"                                   | 1 1 2          | *       |          |         |  | qu=0.5*tsf<br>qu=1.33**tsf  |
| DRILL<br>DRILL | LING N                   | METH<br>EQUIF                         | RACTOR RDC<br>IOD 3.25" ID HSA<br>PMENT ATV CME-550<br>TED 8/24/20 ENDED 8/25/20 |          | Bore<br>cutti<br>grou | IARKS hole backfillings @1.5' be nd surface , crete to surfa | ed wi          |         |          | 3.5 W   | VEL (ft.)<br>'hile Drill<br>fter Drillii | ing                         |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

co-pw.bentley.com:patrickco-pw-07\Documents\Orland Park\22277.005\12\_Design\12.3\_CADD\SHEETS\016D01

BORING NUMBER B2-20 SHEET 2 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 696.4 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 676.4 20.0 CL 672.9 23.5 SS-8 23.5-25.0 R=14" Stiff qu=1.5\*tsf qu=0.85\*\*tsf 667.9 28.5 SS-9 28.5-30.0 R=17" qu=2.75\*tsf Very stiff qu=2.56\*\*tsf SS-10 33.5-35.0 R=0" SS-11 38.5-40.0 R=0" DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/24/20 ENDED 8/25/20

| P/             | ATRI   | CK            | ENGINEERING INC.                                 | CLIENT               |   | John           | 32-20<br>Humpl<br>°37'50. |       |      | 21677                                 |   | 3 OF 4                      |
|----------------|--------|---------------|--|----------------------|---|----------------|---------------------------|-------|------|---------------------------------------|---|-----------------------------|
|                | ED BY  |               | BR<br>TION 696.4                                 |                      |   |                |                           |       |      |                                       |   |                             |
| · \AETE 656.4  |        | STRATA        | SOIL/ROCK<br>DESCRIPTION                         |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)                | BLOW           | PL                        | onfin |      | tent<br>^<br>o 4<br>opressir<br>SF) 3 |   | NOTES<br>&<br>TEST RESULT   |
| 652.9          | 43.5   | 1             | ☑<br>Grey clayey silt, hard, satura<br>CL-ML     | ted                  | SS-12<br>43.5-45.0<br>R=14"                                       | 9<br>18<br>11  |                           |       |      |                                       | * | qu=4.5+*tsf<br>qu=2.69**tsf |
|                |        |               |  | ·                    | SS-13<br>48.5-50.0<br>R=11"                                       | 11<br>17<br>11 |                           |       |      |                                       | * | qu=4.5+*tsf<br>qu=1.86**tsf |
| 642.9          | 53.5   |               | Very stiff, saturated                            |                      | SS-14<br>53.5-55.0<br>R=16"                                       | WO⊦<br>1<br>11 | 4                         |       | *    |                                       |   | qu=2.5*tsf<br>qu=1.24**tsf  |
| 637.9          | 58.5   |               | Medium dense to dense clay<br>to silt, saturated | vey silt             | SS-15<br>58.5-60.0<br>R=18"                                       | 5<br>10<br>11  |                           | *     |      |                                       |   | qu=1.5*tsf<br>qu=0.37**tsf  |
| DRILL<br>DRILL | ING MI | ETHO<br>QUIPI |  | Bore<br>cutt<br>grou | MARKS  chole backfillings @1.5' be  und surface ,  crete to surfa | low<br>then    |                           |       | 43.5 | LEVE<br>While<br>After                |   | ling                        |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER B2-20 SHEET 4 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 696.4 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 636.4 60.0 CL-ML/ML SS-16 63.5-65.0 R=18" 9 11 15 qu=1.25\*tsf qu=0.78\*\*tsf SS-17 68.5-70.0 R=18" qu=1.5\*tsf Qu=0.74\*\*tsf SS.18 73.5-75.0 R=18" qu=1.5\*tsf 11 14 23 qu=0.95\*\*tsf 621.4 75.0 End of boring @75' DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with soil cuttings @1.5' below ground surface , then concrete to surface DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/24/20 ENDED 8/25/20

| PA             | ATR          | ICK  | ENGINEERING INC.   | CLIENT                |  | John                        |                  | hrey Drive<br>.52" W 87° | SHEET<br>21677.024<br>50'51.72"           |                             |
|----------------|--------------|--|--|-----------------------|--|-----------------------------|------------------|--------------------------|---|-----------------------------|
| LOGGI<br>GROU  |              |  | BR<br>ATION 694.3  |                       |  |                             |                  |                          |   |                             |
| ELEV.          | DEPTH (FT)   | STRATA                                       | SOIL/ROCK<br>DESCRIPTION   |                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)                   | BLOW                        | PL _<br>10<br>Un | Water Cor<br>            | Depressive                                | NOTES<br>&<br>TEST RESULT   |
| 694.3<br>693.3 | 0.0          | 7. 7.7.                                      | topsoil  |                       |  |                             |                  |                          |   |                             |
| 000.0          | 1.0          |  | Dark brown clay,<br>very hard, moist   | FILL                  | SS-1<br>1.0-2.5<br>R=0"  | 14 <sup>3</sup><br>19<br>15 | *                |                          |   | qu=N/A                      |
| 689.3          | 5.0          |  |  |                       | SS-2<br>3.5-5.0<br>R=5"  | 4 2 2                       |                  | *                        |   | qu=2.25*tsf<br>qu=N/A       |
| 686 8          | 7.           |  | Very soft  |                       | SS-3<br>6.0-7.5<br>R=8"  | WOH<br>WOH                  | *                |                          |   | qu=0.05*tsf<br>qu=N/A       |
|                | 7.5          |  | Soft   |                       | SS-4<br>8.5-10.0<br>R=8"   | WOH                         | *                |                          |   | qu=0.25*tsf<br>qu=0.25**tsf |
| 684.3          | 10.0         |  | Ā  |                       |  |                             |                  |                          |   |                             |
| 683.3          | 11.0         | 7 7 7<br>7 7<br>7 7<br>7 7<br>7 7            | Dark brown peat, soft  | PT                    | SS-5<br>11.0-12.5<br>R=18"   | WOH                         | *                |                          |   | qu=0.25*tsf<br>qu=0.20**tsf |
| 680.8          | 13.5         | 7 7 7<br>7 7 7<br>7 7 7<br>7 7 7<br>7 7 7    | Medium stiff   |                       | SS-6<br>13.5-15.0<br>R=18"   | W O H                       | *                |                          |   | qu=0.5*tsf<br>qu=0.87**tsf  |
| 675.8          | 18.5         | 7 27<br>7 77<br>7 77<br>7 77<br>7 77<br>7 77 | Grey clay, soft  | CL                    | SS-7<br>18.5-20.0<br>R=18"   | WOH                         | *                |                          |   | qu=0.25*tsf<br>qu=0.41**tsf |
| DRILL<br>DRILL | .ING<br>.ING | METH<br>EQUIF                                | RACTOR <b>RDC</b> OD <b>3.25" ID HSA</b> PMENT <b>ATV CME-550</b> TED <b>8/25/20</b> ENDED <b>8/25/2</b> | Bore<br>cutti<br>grou | MARKS  chole backfille  ings @1.5' be  ind surface ,  crete to surfa | low<br>then                 |                  | 1                        | LEVEL (ft.)<br>While Dril<br>After Drilli | ling                        |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| SOIL BORING LOG (10 OF 27) | F.A.J. | SECTION | COUNTY | RTE. | SECTION | COUNTY | RTE. | SECTION | COUNTY | COOK | COUNTY | COOK | C

228

CONTRACT NO. 61K89

BORING NUMBER B3-20 SHEET 2 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 694.3 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 674.3 20.0 SS-8 23.5-25.0 R=18" \_\_woH\* qu=0.25\*tsf qu=0.98\*\*tsf 665.8 28.5 SS-9 WOH 28.5-30.0 WOH qu=0.5\*tsf Light grey clay, medium stiff qu=0.41\*\*tsf R=18" 660.8 33.5 SS-10 33.5-35.0 R=15" qu=4.0\*tsf Hard, trace gravel qu=3.35\*\*tsf 655.8 38.5 SS-11 38.5-40.0 R=18" qu=3.25\*tsf Very stiff qu=2.87\*\*tsf DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with soil cuttings @1.5' below ground surface, then DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/25/20 ENDED 8/25/20 concrete to surface

| .OGG                                   | ED BY           | K ENGINEERING INC.  BR VATION 694.3   | PROJEC<br>LOCATI      |  |                | Humph<br>37'50. | -           |        |                        |            |                  |                     |
|--|-----------------|---|-----------------------|--|----------------|-----------------|-------------|--------|------------------------|------------|------------------|---------------------|
| · \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | OOP (FT) STRATA | 2011/2001/  |                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW           | PL 10 Uno       | 2<br>confin | ed Con |                        | 0 50<br>ve | TEST             | OTES<br>&<br>RESULT |
| 650.8                                  | 43.5            | Grey clayey silt, hard, trace   | e gravel              | SS-12<br>43,5-45.0                                 | 5 8 2          |                 |             |        |                        | *          | qu=4.5<br>qu=3.0 | 5+*tsf<br>05**tsf   |
| <b>64</b> 5. <b>6</b>                  | 48.5            | CL-ML  ☑ Very stiff, saturated  |                       | SS-13<br>48.5-50.0<br>R=13"                        | 6<br>8<br>22   |                 | >           | €      |                        |            | qu=2.9<br>qu=2.9 | 0+*tsf<br>54**tsf   |
| 640.8                                  | 53.5            | Very stiff  |                       | SS-14<br>53.5-55.0<br>R=17"                        | 14<br>20<br>23 |                 |             | *      |                        |            | qu=2.2<br>qu=1.  | 25*tsf<br>19**tsf   |
| 635.8                                  | 58.5            | Light grey clayey silt to silt,   | stiff                 | SS-15<br>58.5-60.0<br>R=18"                        | 686            |                 | *           |        |                        |            | qu=1.9<br>qu=0.6 | 5*tsf<br>66**tsf    |
| DRILL<br>DRILL                         | ING MET         | NTRACTOR RDC  THOD 3.25" ID HSA  JIPMENT ATV CME-550  RTED 8/25/20 ENDED 8/25/2 | Bore<br>cutti<br>grou | IARKS chole backfille ngs @1.5' be ind surface ,   | low<br>then    | th soil         |             | 48.5   | LEVE<br>While<br>After |            | ing              |                     |

FILE NAME: pw:\\patrickco-pw.ben

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER B3-20 SHEET 4 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 694.3 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 634.3 60.0 CL-ML/ML SS-16 6 63.5-65.0 16 R=18" 23 qu=1.25\*tsf qu=1.07\*\*tsf SS-17 7 68.5-70.0 16 R=18" 22 qu=1.0\*tsf qu=1.24\*\*tsf 620.8 73.5 SS.18 73.5-75.0 R=18" ML qu=0.5\*tsf Medium dense silt qu=0.33\*\*tsf 619.3 75.0 End of boring @75' DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with soil cuttings @1.5' below ground surface, then DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/25/20 ENDED 8/25/20 concrete to surface

| PA               | ATRICK                           | ENGINEERING INC.                           | CLIENT               | CT & NO.   | John                  |           |               | SHEET<br>21677.024<br>50'51.72"          |                             |
|------------------|----------------------------------|--|----------------------|--|-----------------------|-----------|---------------|--|-----------------------------|
| LOGGE            | ED BY<br>ND ELEV                 | BR<br>Ation 695.4                          |                      |  |                       |           |               |  |                             |
|                  | DEPTH (FT) STRATA                | SOIL/ROCK<br>DESCRIPTION                   |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN              | BLOW<br>COUNTS        | PL 10 Unc | Water Cor<br> | LL<br>30 40 50<br>mpressive              | *<br>TEST RESULT            |
| 695:4            | 9.9 2.7                          | 6" topsoil                                 |                      |  |                       |           |               |  |                             |
|                  |                                  | Coarse to fine gravel, very d              | ense<br>GP           | SS-1<br>1.0-2.5<br>R=7"  | 20<br>50<br>3         |           |               |  |                             |
| 691.9<br>690.4   | 3.50                             | Brown clay with trace gravel, medium stiff | FILL                 | SS-2<br>3.5-5.0<br>R=9"  | 8<br>8<br>10          | *         |               |  | qu=0.75*tsf<br>qu=N/A       |
|                  |                                  |  |                      | SS-3<br>6.0-7.5<br>R=13"                                       | 3 2 2                 | *         |               |  | qu=0.75*tsf<br>qu=0.66**tsf |
| 686.9            | 8.5                              | Black peat, moist, medium s                | tiff<br>PT           | SS-4<br>8.5-10.0<br>R=12"                                      | 2<br>push             | *         |               |  | qu=0.75*tsf<br>qu=0.85**tsf |
|                  | 2                                |  |                      | SS-5<br>11.0-12.5<br>R=15"                                     | WOH                   | *         |               |  | qu=0.75*tsf<br>qu=0.45**tsf |
|                  | 7 7 7<br>7 7 7<br>7 7 7<br>7 7 7 |  |                      | SS-6<br>13.5-15.0<br>R=18"                                     | WOH<br>WOH<br>1       |           |               |  | qu=0.75*tsf<br>qu=0.62**tsf |
| 676.9            | 18.5 ½ ½ ½                       | Grey clay,soft, trace gravel               | CL                   | SS-7<br>18.5-20.0<br>R=17"                                     | WOH                   | *         |               |  | qu=0.25*tsf<br>qu=0.21**tsf |
| DRILLI<br>DRILLI | ING METH<br>ING EQUII            |  | Bore<br>cutt<br>grou | MARKS ehole backfill ings @1.5' be und surface, crete to surfa | led w<br>elow<br>then |           | <u>WATER</u>  | LEVEL (ft.<br>While Dril<br>After Drilli | ling                        |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SOIL BORING LOG (12 OF 27)
 F

 PILE SUPPORTED EMBANKMENT
 1

 SHEET PSE-17 OF PSE-32 SHEETS
 5

BORING NUMBER B4-20 SHEET 2 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 695.4 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 675.4 20.0 671.9 23.5 SS-8 23.5-25.0 R=12" Stiff, trace gravel qu=1.25\*tsf qu=0.83\*\*tsf 666.9 28.5 SS-9 28.5-30.0 R=15" Very stiff qu=3.0\*tsf qu=2.56\*\*tsf \* SS-10 33.5-35.0 R=6" qu=2.5\*tsf 12 11 qu=N/A 656.9 38.5 SS-11 38.5-40.0 R=8" qu=2.75\*tsf Grey sandy clay, moist, very stiff, qu=2.56\*\*tsf DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with soil cuttings @1.5' below ground surface , then concrete to surface DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/25/20 ENDED 8/25/20

| OGG<br>SROU    |               |        | BR<br>TION 6              | 95.4                      |                |  |                | 1               | \Ma     | ter Con | tont |             | I                            |  |
|----------------|---------------|--------|---------------------------|---------------------------|----------------|--|----------------|-----------------|---------|---------|------|-------------|------------------------------|--|
| ELEV.          | DEPTH<br>(FT) | STRATA |                           | SOIL/ROCK<br>DESCRIPTION  |                | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW<br>COUNTS | PL [<br>1<br>Ur | nconfin | ed Con  |      | io 50<br>ve | TEST RESU                    |  |
| 655.4<br>651.9 | 40.0<br>43.5  |        | Grey cla<br>gravel        | iyey silt, moist, hard,   | trace<br>CL-ML | SS-12<br>43.5-45.0<br>R=18"                        | 7<br>11<br>14  |                 |         |         |      | *           | qu=4.5+*tsf<br>qu=3.76**tsf  |  |
| 646.9          | 48.5          |        | Very stil                 | f                         |                | SS-13<br>48.5-50.0<br>R=18"                        | 568            |                 |         |         | *    |             | qu=3.75+*tsf<br>qu=2.64**tsf |  |
| 641.9          | 53.5          |        | Hard, lit                 | tle gravel                |                | SS-14<br>53.5-55.0<br>R=18"                        | 4<br>6<br>13   |                 |         |         | ÷    | €           | qu=4.0*tsf<br>qu=3.10**tsf   |  |
| 636.9          | <b>58</b> .5  |        | ∑<br>Grey sil<br>saturate | , dense to very dens<br>d | se,            | SS-15<br>58.5-60.0<br>R=18"                        | 10<br>18<br>24 |                 | *       |         |      |             | qu=1.75*tsf<br>qu=1.74**tsf  |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

.com:natrickco-nw-07/Documents/Orland Park/22277.005\12 Design\12.3 CADD\SHEFTS\016D010-143\HD-PSF18-R

BORING NUMBER B4-20 SHEET 4 OF 4 CLIENT PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive 21677.024 LOCATION N 41°37'50.52" W 87°50'51.72" LOGGED BY BR GROUND ELEVATION 695.4 Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 635.4 60.0 ML SS-16 63.5-65.0 R=18" qu=1.25\*tsf 9 12 25 qu=1.49\*\*tsf SS-17 68.5-70.0 R=18" 8 20 36 qu=1.25\*tsf qu=1.41\*\*tsf SS.18 18 73.5-75.0 23 R=18" 37 qu=1.5\*tsf qu=0.83\*\*tsf 620.4 75.0 End of boring @ 75' DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with soil cuttings @1.5' below ground surface , then concrete to surface DRILLING METHOD 3.25" ID HSA DRILLING EQUIPMENT ATV CME-550 DRILLING STARTED 8/25/20 ENDED 8/25/20

|                                  |            |           | ENGINEERING INC.  | CLIENT<br>PROJEC<br>LOCATIO | T & NO. C  | John<br>143rd  | street          | nrey [     | Orive           |            |          | 277.005   |
|----------------------------------|------------|-----------|---|-----------------------------|--|----------------|-----------------|------------|-----------------|------------|----------|---|
| LOGG<br>GROU                     |            |           | BG<br>Ation 697.8   |                             |  |                | 0701N<br>48557W | ,          |                 |            |          |   |
| ELEV.                            | DEPTH (FT) | STRATA    | SOIL/ROCK<br>DESCRIPTION                                  |                             | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW<br>COUNTS | PL 10 Und       | onfine     | d Com           | <b></b> -△ | 50<br>re | NOTES<br>&<br>TEST RESULT                           |
| 697.8                            |            | 7, 1, 7,  | black, organic, CLAY, soft, i                             | moist                       |  |                |                 |            |                 |            |          |   |
| 696.8                            | 1.0        | 4 34      | _ <b>T</b>  | OPSOIL /-                   |  |                |                 |            |                 |            |          |   |
|                                  |            |           | crushed, CONCRETE   | FILL                        | SS-1<br>1.0-2.5<br>R=10"                           | 9<br>10<br>25  | 5 0             |            |                 |            |          |   |
| 694.8                            | 3.0        |           |   |                             |  |                | '               |            |                 |            |          |   |
|                                  |            |           | EPS GEOFOAM   | FILL                        | SS-2<br>3.5-5.0<br>R=0"                            | 2 2 1          | \\\\\\\\        |            |                 |            |          |   |
|                                  |            |           |   |                             |  |                |                 |            |                 |            |          |   |
|                                  |            |           |   |                             | SS-3<br>6.0-7.5<br>R=0"                            | 1 1 2          |                 | ,<br>,<br> |                 |            |          |   |
| 689.8                            | 8.0        |           | crushed, GRAVEL, dense, r                                 | noist                       |  |                |                 | <i>i</i>   |                 |            |          |   |
|                                  |            |           | ordshed, Grovell, dense, i                                | FILL                        | SS-4<br>8.5-10.0<br>R=12"                          | 22<br>20<br>11 |                 | <b>18</b>  |                 |            |          |   |
| 687.3                            | 10.5       | $\bowtie$ |   |                             |  |                |                 | 1          |                 |            |          |   |
|                                  |            |           | gray, GRAVEL, loose to ver                                | y loose,                    |  |                |                 | 1          |                 |            |          |   |
|                                  |            |           | moist   |                             | SS-5<br>11.0-12.5                                  | 14<br>  4      |                 | a          | ,               |            |          |   |
|                                  |            |           |   | FILL                        | R=12"  | 2              |                 | \$         |                 |            |          | Switch to rotary drilling using bentonite mud at    |
|                                  |            |           |   |                             | SS-6<br>13.5-15.0<br>R=9"                          | 6<br>3<br>WOH  | •               |            | 3               | 0          |          | 12 feet.  |
| 682.3                            | 15.5       |           |   |                             |  |                |                 |            | į               |            |          |   |
|                                  |            |           | gray, CLAY, very soft, moist                              | t<br>CL                     | SS-7<br>16.0-17.5<br>R=14"                         | WOH            |                 | <u>~</u>   | /<br>2≱<br>Ş— € |            |          | qu*=0.25tsf<br>qu**=0.41tsf<br>Bulk Ut              |
| 679.8                            | 18.0       |           | gray, CLAY, medium stiff, m                               | <br>noist<br>CL             | ST-1   |                |                 |            | ;<br>!          |            |          | Wt=133.6<br>Dry Ut Wt=109.9<br>LL=29 PL=17<br>PI=12 |
|                                  |            |           |   |                             | 18.5-20.0<br>R=12"                                 |                |                 |            |                 |            |          | qu=0.78 tsf<br>LL=41, PL=16                         |
| DR <b>I</b> LL<br>DR <b>I</b> LL |            |           | RACTOR STRATA OD HSA/Rotary                               | Bore                        | IARKS  |                |                 | <u>WA</u>  | TER             | LEVE       | L (ft.)  |   |
| DRILL                            | .ING       | EQUIF     | PMENT <b>CME-75</b> TED <b>4/4/22</b> ENDED <b>4/4/22</b> | bags                        | of bentonite<br>cuttings                           |                |                 | ▲<br>Ā     |                 |            |          |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

.bentley.com.patrickco-pw-07\Documents\Orland Park\22277.005\12\_Design\12.3\_CADD\SHEETS\016D010

BORING NUMBER SHEET 2 OF 5 B-5-22 **CLIENT** Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY 41.630701N BG GROUND ELEVATION 697.8 -87.848557W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 Ö 677:8 20:9 LL=41, PL=16 gray, CLAY, trace sand, medium stiff, moist P**I**=25 SS-9 21.0**-**22.5 qu\*=1.0tsf CL R=14" qu\*\*=0.82tsf 674.8 23.0 dark brown, CLAY, trace gravel, very stiff, moist SS-10 23.5-25.0 R=12" qu\*=3.0tsf 4 5 6 qu\*\*=1.48tsf Bulk Ut Wt=140.3 Dry Ut Wt=121.6 LL=25, PL=13 672.3 25.5 dark brown, CLAY, trace gravel, P**I=**12 stiff, moist SS-11 26.0-27.5 R=14" 16 qu\*=1.25tsf qu\*=1.90tsf 5 9 28.5-30.0 R=5" 665.8 32.0 dark brown, silty CLAY, trace gravel, hard, moist CL SS-13 33.5-35.0 R=16" qu\*=4.5tsf qu\*\*=4.12tsf Bulk Ut Wt=146.6 Dry Ut Wt=127.1 LL=23, PL=13 PI=10 SS-14 38.5-40.0 qu\*>4.5tsf R=18" qu\*\*=4.95tsf 657.8 40.0 DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) DRILLING METHOD **HSA/Rotary** Borehole backfilled with 3 □ ▽ bags of bentonite chips and y DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/4/22 ENDED 4/4/22

|                |                  |        | ENGINEERING INC.  | CLIENT   | CT & NO.<br>ON                                    | Villaç<br>John<br>143rc | ge of Orland Park<br>Humphrey Drive Ph<br>d street, Orland Park |                                 |                            |
|----------------|------------------|--------|---|----------|---|-------------------------|---|---------------------------------|----------------------------|
| LOGG<br>GROU   |                  |        | BG<br>TION 697.8  |          |   |                         | 80701N<br>48557W  |                                 |                            |
| ELEV.          | DEPTH<br>(FT)    | STRATA | SOIL/ROCK<br>DESCRIPTION  |          | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | JW<br>JNTS              | Water Content   | LL<br>40 50<br>sive<br>#<br>4 5 | NOTES<br>&<br>TEST RESULTS |
| 657.8          | 40.0<br>42.0     |        | dark brown, silty CLAY, trace<br>gravel, hard, moist            | e<br>CL  |   |                         |   |                                 |                            |
| 655.8          | 42.0             |        | dark brown, silty CLAY, trace<br>gravel, very stiff, moist      | CL       | SS-15<br>43.5-45.0                                | 5 8                     | 113   |                                 | qu*=3.25tsf                |
| 650.8          | 47.0             |        |   |          | R=6"  | 11<br>                  |   |                                 | 4u -3.20181                |
| 000.0          | 47.0             |        | dark brown, SILT, medium d<br>saturated                         | ense,    | SS-16<br>48.5-50.0                                | 6 10                    | 118<br>118  |                                 | Bulk Ut Wt=125.4           |
| 645.8          | 52.0             |        |   |          | R=16"   | 14                      |   |                                 | Dry Ut Wt=106.6            |
|                |                  |        | brown, SILT, dense, saturat                                     | ed<br>ML | SS-17<br>53.5-55.0                                | 8<br>16                 | 18<br>0   |                                 |                            |
|                |                  |        |   |          | R=18"   | 25                      |   |                                 |                            |
| 637.8          | 60.0             |        |   |          | SS-18<br>58.5-60.0<br>R=18"                       | 19<br>19<br>20          | 1 <sub>18</sub>   |                                 |                            |
| DRILL<br>DRILL | .ING M<br>.ING E | IETH(  | RACTOR STRATA DD HSA/Rotary MENT CME-75 TED 4/4/22 ENDED 4/4/22 | Boro     | IARKS  chole backfi  s of bentoni  cuttings       |                         |   | EL (ft.)                        |                            |

FILE NAME: pw:\\patrickco-pw.ber

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SOIL BORING
 LOG
 (15
 OF
 27)
 FAJJ, RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 NO.

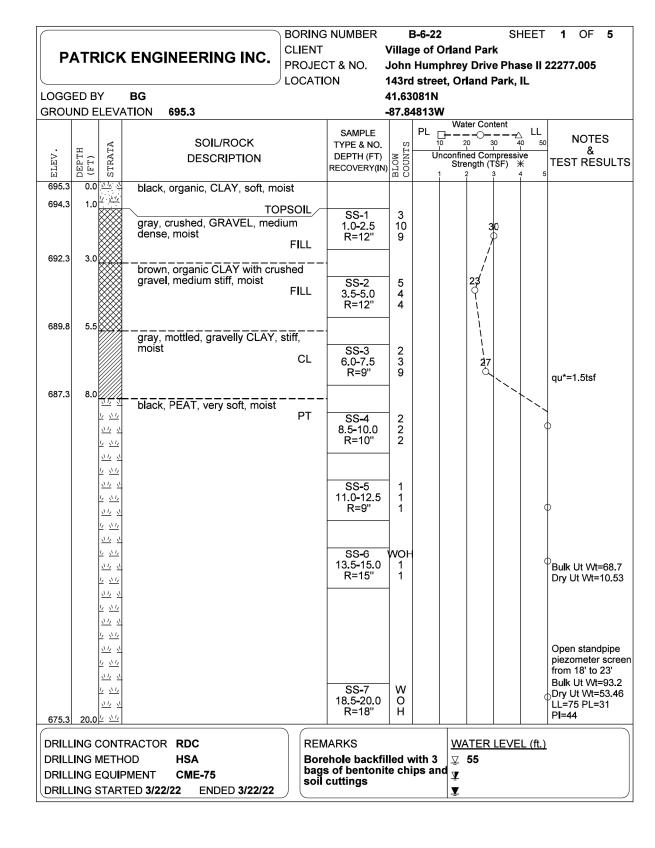
 PILE SUPPORTED
 EMBANKMENT
 1600
 16-00078-00-CH
 COOK
 228
 165

 SHEET
 PSE-20
 PSE-32
 SHEETS
 ILLINGS
 FEB. ALID PROJECT
 61RAD PROJECT

BORING NUMBER B-5-22 SHEET 4 OF 5 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630701N GROUND ELEVATION 697.8 -87.848557W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 등 637.8 60.0 brown, SILT, dense, saturated ML SS-19 63.5-65.0 R=18" 12 19 18 630.8 67.0 brown, SILT, very dense, saturated SS-20 21 68.5-70.0 35 R=18" 38 625.8 72.0 brown, SILT, dense, saturated SS**-**21 73.5**-**75.0 R=18" 21 19 23 SS-22 19 78.5-80.0 20 R=18" 23 617.8 80.0 DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) Borehole backfilled with 3 bags of bentonite chips and soil cuttings **HSA/Rotary** DRILLING METHOD DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/4/22 ENDED 4/4/22

|                |            |                        |            | NEERING INC.                            | CLIENT | CT & NO.<br>ON                                    | Villag<br>John<br>143rd | 3-5-22<br>ge of Orland Pa<br>Humphrey Dri<br>I street, Orland | ve Phase   |            |                      | 5 |
|----------------|------------|------------------------|------------|---|--------|---|-------------------------|---|------------|------------|----------------------|---|
| LOGG<br>GROU   |            |                        | BG<br>TION | 697.8                                   |        |   |                         | 0701N<br>48557 <b>W</b>                                       |            |            |                      |   |
| ELEV.          | DEPTH (FT) | STRATA                 |            | SOIL/ROCK<br>DESCRIPTION                |        | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | W<br>JNTS               | PL Water C  | L<br>30 40 | 50         | NOTES<br>&<br>T RESI |   |
| 617.8          | 80.0       |                        | brown      | SILT, dense, saturate                   |        |   |                         |   |            |            |                      |   |
| 615.8          | 82.0       |                        |            |   | ML     |   |                         |   |            |            |                      |   |
| 010.0          | 02.0       |                        | brown      | SILT, very dense, sat                   | urated |   |                         |   |            |            |                      |   |
|                |            |                        |            |   | ML     | SS-23<br>83.5-85.0                                | 26<br>29                | 20<br>20  |            |            |                      |   |
|                |            |                        |            |   |        | R=18"   | 30                      |   |            |            |                      |   |
|                |            |                        |            |   |        | SS-24<br>88.5-90.0<br>R=18"                       | 27<br>33                | 20  |            |            |                      |   |
| 607.8          | 90.0       |                        | End of     | boring at 90'                           |        | K-10  | 35                      |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   |                         |   |            |            |                      |   |
|                |            |                        |            |   |        |   | <u></u>                 | 13  |            |            |                      |   |
| DR <b>I</b> LL | ING N      | IETH(<br>QU <b>I</b> P |            | STRATA HSA/Rotary CME-75 2 ENDED 4/4/22 | Bore   | IARKS<br>chole backfi<br>s of bentoni<br>cuttings | lled v<br>te chi        | with 3  | R LEVEL (f | <u>t.)</u> |                      |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



|                         |            |                                  |                      | INEERING INC.            | CLIENT           | OT & NO.   | Villag<br>John<br>143rd | d street       | hrey       | Driv   | k<br>e Pha |                    | 2 OF 5<br>22277.005        |
|-------------------------|------------|----------------------------------|----------------------|--------------------------|------------------|--|-------------------------|----------------|------------|--------|------------|--------------------|----------------------------|
| LOGG<br>GROU            |            |                                  | <b>BG</b><br>TION    | 695.3                    |                  |  |                         | 8081N<br>4813W |            |        |            |                    |                            |
| ELEV.                   | DEPTH (FT) | STRATA                           |                      | SOIL/ROCK<br>DESCRIPTION |                  | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN                          | W<br>JNTS               | PL [           | Wat        | ed Cor |            | 10 50<br><b>ve</b> | NOTES<br>&<br>TEST RESULT  |
| 675.3<br>668.3          | 20.0       |                                  |                      | PEAT, very soft, moist   | PT               | SS-8<br>23.5-25.0<br>R=7"<br>SS-9<br>28.5-30.0                             | 1 2 2 2 3               |                | 190<br>190 | 24/    |            |                    | qu*=0.5tsf<br>qu**=2.89tsf |
| 663.3                   | 32.0       |                                  | gray,<br>moist       | CLAY, trace gravel, ven  | −−y stiff,<br>CL | SS-10<br>33.5-35.0<br>R=6"   | 3 5 7                   |                |            |        |            |                    | qu = 2.30tsf               |
| DRILL<br>DRILL<br>DRILL | ING N      | CONTE<br>METHO<br>EQU <b>I</b> P | RACTOR<br>DD<br>MENT | HSA<br>CME-75            | Boro             | SS-11<br>38.5-40.0<br>R=4"<br>MARKS<br>ehole backfis<br>of bentonicuttings |                         |                | $\nabla$   |        | LEVE       | :L (ft.)           |                            |

12.

 USER NAME
 =
 dtroyer
 DESIGNED
 KJP
 REVISED

 CHECKED
 AMK
 REVISED

 PLOT SCALE
 =
 0:2,0000 '." / in.
 DRAWN
 RMH
 REVISED

 PLOT DATE
 =
 12/03/24
 CHECKED
 AMK
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG (17 OF 27)
PILE SUPPORTED EMBANKMENT

SHEET PSE-22 OF PSE-32 SHEETS

BORING NUMBER SHEET 3 OF 5 B-6-22 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL 41.63081N LOGGED BY BG GROUND ELEVATION 695.3 -87.84813W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 등 gray, CLAY, trace gravel, very stiff, moist 655.3 40.0 653.3 42.0 gray, CLAY, trace gravel, hard, moist qu\*=4.5tsf qu\*\*=4.12tsf Bulk Ut Wt=143.5 Dry Ut Wt=127.6 SS-12 43.5-45.0 R=14" 5 13 28 LL=22, PL=14 P**i**=8 648.3 47.0 suspected GRAVEL, medium dense GP SS-13 48.5**-**50.0 9 15 R=0" 643.3 52.0<sup>0</sup> gray, CLAY, some gravel with rock fragments, hard, wet SS-14 53.5-55.0 R=16" 14 21 18 qu\*>4.5tsf 640.3 55.0 638.3 57.0 dark brown, SILT, medium dense, saturated SS-15 WOH 58.5-60.0 3 R=18" 8 DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) DRILLING METHOD Borehole backfilled with 3 □ 55 bags of bentonite chips and y DRILLING EQUIPMENT CME-75 DRILLING STARTED 3/22/22 ENDED 3/22/22

| P                                | ATR           | ICK    | ENGINEERING INC.   | CLIENT               | CT & NO.  | Villaç<br>John | B-6-22 SHEET 4 OF 5 age of Orland Park n Humphrey Drive Phase II 22277.005 rd street, Orland Park, IL |
|----------------------------------|---------------|--------|--|----------------------|---|----------------|---|
| LOGG<br>GROU                     |               |        | <b>BG</b><br>TION <b>695.3</b>                                   |                      |   |                | 3081N<br>84813W   |
| ELEV.                            | DEPTH<br>(FT) | STRATA | SOIL/ROCK<br>DESCRIPTION   |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | W<br>JNTS      | Water Content PL  |
| 635.3                            | 60.0          |        | dark brown, SILT, medium o<br>saturated                          | dense,<br>ML         | SS-16<br>63.5-65.0<br>R=18"                       | WOH<br>5<br>14 |   |
| 628.3                            | 67.0          |        | dark brown, SILT, dense, sa                                      | aturated<br>ML       | SS-17<br>68.5-70.0<br>R=18"                       | 7<br>20<br>21  |   |
| 623.3                            | 72.0          |        | dark brown, SILT, medium o<br>saturated                          | dense,<br>ML         | SS-18<br>73.5-75.0<br>R=18"                       | 6<br>13<br>15  |   |
| 618.3<br>615.3                   | 77.0          |        | dark brown, SILT, very dens<br>saturated                         | se,<br>ML            | SS-19<br>78.5-80.0<br>R=18"                       | 16<br>23<br>29 | β   |
| DR <b>I</b> LL<br>DR <b>I</b> LL | ING N         | /IETH  | RACTOR RDC<br>DD HSA<br>MENT CME-75<br>TED 3/22/22 ENDED 3/22/22 | Bord<br>bags<br>soil | IARKS<br>ehole backfi<br>s of bentoni<br>cuttings |                |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SOIL BORING LOG (18 OF 27)
 FAJURE LOG (18 OF 27)
 SECTION RTE.
 SECTION SECTION
 COUNTY SHEET NO.
 SHEET NO.

 PILE SUPPORTED
 EMBANKMENT
 1600
 16-00078-00-CH
 COOK
 228
 168

 SHEET
 PSE-23
 OF PSE-32
 SHEETS
 ILLINOIS
 FEB.JUP PROJECT
 FEB.JUP PROJECT
 FEB.JUP PROJECT
 FEB.JUP PROJECT
 TONTACT NO. 61K89

BORING NUMBER B-6-22 SHEET 5 OF 5 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.63081N GROUND ELEVATION 695.3 -87.84813W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) H 등 615.3 80.0 dark brown, SILT, very dense, saturated SS-20 11 83.5-85.0 26 R=18" 32 608.3 87.0 dark brown, SILT, dense, saturated SS-21 88.5**-**90.0 3 12 29 R=18" SS-22 93.5-95.0 R=18" 10 18 28 598.3 97.0 dark brown, SILT, medium dense, saturated SS-23 98.5-100.0 13 R=18" 15 End of boring at DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) Borehole backfilled with 3 bags of bentonite chips and soil cuttings DRILLING METHOD DRILLING EQUIPMENT CME-75 DRILLING STARTED 3/22/22 ENDED 3/22/22

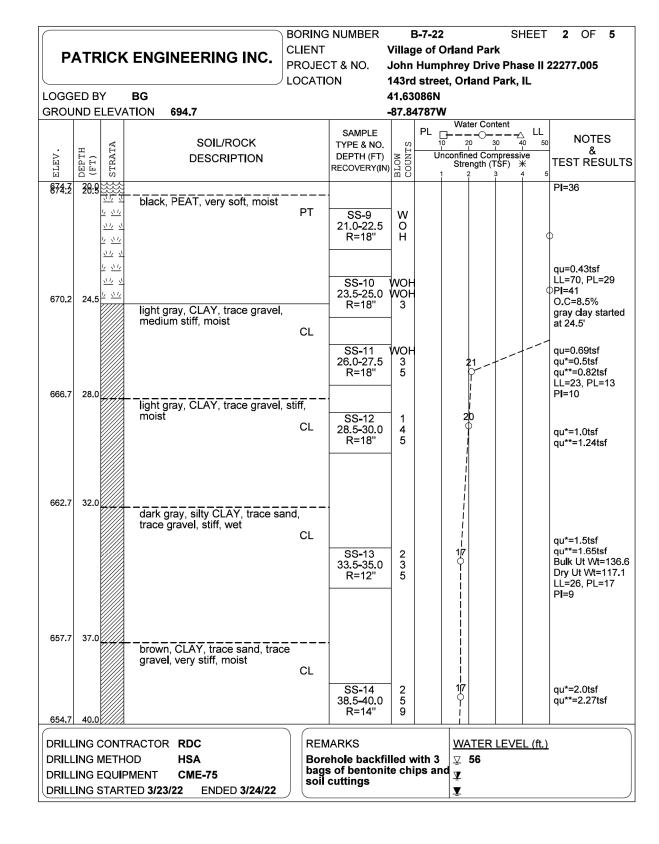
| P/<br>LOGG     |                  |            | ENGINEERING INC.   | CLIENT                 | CT & NO.  | B-7-22 SHEET 1 OF 5 Village of Orland Park John Humphrey Drive Phase II 22277.005 143rd street, Orland Park, IL 41,63086N |                             |                |                        |                                       |  |  |
|----------------|------------------|------------|--|------------------------|---|---|-----------------------------|----------------|------------------------|---------------------------------------|--|--|
| GROU           |                  |            |  |                        |   |   | 4787W                       |                |                        |                                       |  |  |
| ELEV.          | DEPTH (FT)       | STRATA     | SOIL/ROCK<br>DESCRIPTION   |                        | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | W<br>JNTS   | PL                          | ter Conter<br> | LL<br>40 50<br>ressive | &<br>TEST RESULTS                     |  |  |
| 694.7          | 0.0              | 11. 14. 17 | black, organic, CLAY, soft, me                                   | oist                   |   |   |                             |                |                        |                                       |  |  |
| 693.7          |                  | ¥ <u>*</u> | brown, CLAY, trace gravel, ve<br>stiff, moist                    | PSOIL /<br>ery<br>FILL | SS-1<br>1.0 <b>-</b> 2.5<br>R=12"                 | 2<br>4<br>4   |                             | 29             |                        | qu*=4.5tsf<br>qu**=2,89tsf            |  |  |
| 691.7          | 3.0              |            | brown, mottled black, sandy (<br>trace gravel, very stiff, moist | FILL                   | SS-2<br>3.5-5.0<br>R=16"                          | 2<br>14<br>15   | 15/<br> <br> <br> <br> <br> | /              |                        | qu*=3.5tsf<br>qu**=2.68tsf            |  |  |
| 689.2          | 5.5              |            | brown, clayey GRAVEL, med<br>dense, wet                          | ium<br>F <b>I</b> LL   | SS-3<br>6.0-7.5<br>R=7"                           | 3<br>11<br>12   | <br>   <br>   <br>  15      |                |                        |                                       |  |  |
| 686.7          | 8.0              |            | No recovery, suspected GRA<br>layer                              | VEL<br>FILL            | SS-4<br>8.5-10.0<br>R=0"                          | 8<br>10<br>6  |                             |                |                        |                                       |  |  |
| 684.2          | 10.5             |            | black, organic CLAY, grass ro<br>soft, moist                     | oot,<br>OH             | SS-5<br>11.0-12.5<br>R=10"                        | 1 2 3   | 110                         | •<br>          |                        |                                       |  |  |
| 681.7          | 13.0             |            | black, organic CLAY, grass rovery soft, moist                    | oot,<br>OH             | SS-6<br>13.5-15.0<br>R=8"                         | 1 1 2   |                             |                |                        |                                       |  |  |
| 679.2          | 15.5             |            | black, PEAT, very soft, moist                                    | <br>РТ                 | SS-7<br>16.0-17.5<br>R=18"                        | 1 1 2   |                             |                |                        | qu=0.21tsf                            |  |  |
| 676.7          | 18.0             | 1          | brown, organic CLAY, soft, m                                     | oist<br>OH             | SS-8<br>18.5-20.0<br>R=18"                        | 1 1 1   |                             |                |                        | O.C=32%<br>qu=0.35tsf<br>LL=69, PL=33 |  |  |
| DRILL<br>DRILL | .ING N<br>.Ing e | /IETHO     | RACTOR RDC DD HSA MENT CME-75 TED 3/23/22 ENDED 3/24/22          | Bor<br>bag             | MARKS ehole backfi s of bentoning                 |   | vith 3                      |                | EVEL (ft.)             |                                       |  |  |

USER NAME = dtroyer DESIGNED - KJP REVISED -CHECKED - AMK REVISED -PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -PLOT DATE = 12/03/24 CHECKED . AMK REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY SOIL BORING LOG (19 OF 27) 1600 16-00078-00-CH COOK 228 PILE SUPPORTED EMBANKMENT CONTRACT NO. 61K89 SHEET PSE-24 OF PSE-32 SHEETS

12/3/2024 2:59:14 PM



|                |                |                         |               | INEERING INC.  | CLIENT               | CT & NO.<br>ON                                    | Villaç<br>John<br>143rc | d street       | hrey             | Drive  |       | e II 2   | 3 OF<br>22277.005  | 5                  |
|----------------|----------------|-------------------------|---------------|--|----------------------|---|-------------------------|----------------|------------------|--------|-------|----------|--|--------------------|
| LOGG<br>GROU   |                |                         | BG<br>TION    | 694.7  |                      |   |                         | 8086N<br>4787W |                  |        |       |          |  |                    |
| ELEV.          | DEPTH (FT)     | STRATA                  | ···········   | SOIL/ROCK<br>DESCRIPTION                                       |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | 70                      | PL [3          | Wa               | ed Con | tent  | LL<br>50 | NOTE<br>&<br>TEST RES  |                    |
| 654.7          | 40.0           |                         | brow<br>grave | n, CLAY, trace sand, tra<br>el, very stiff, moist              | ce<br>CL             |   |                         |                |                  |        |       |          |  |                    |
| 652.7          | 42.0           |                         | susp          | ected GRAVEL, medium   | dense<br>GP          |   |                         |                |                  |        |       |          |  |                    |
|                |                |                         |               |  |                      | SS-15<br>43.5-45.0<br>R=0"                        | 4<br>7<br>12            |                |                  |        |       |          |  |                    |
| 647.7          | 47.0           |                         | brow          | n, CLAY, trace sand, tra<br>el, stiff, moist                   | <br>ce               |   |                         |                |                  |        |       |          |  |                    |
|                |                |                         | grave         | a, suii, iiiuist   | CL-ML                | SS-16<br>48.5-50.0<br>R=10"                       | 4<br>7<br>14            | 1              | B   - - - -      |        |       |          | qu*=1.75tsf<br>qu**=1.65ts<br>Bulk Ut Wt=<br>Dry Ut Wt='<br>LL=20, PL=<br>PI=5 | f<br>:138<br>122.6 |
| 642.7          | 52.0           |                         | trace         | n, CLAY, some silt, trace<br>gravel, with rock fragme<br>moist | e sand,<br>ent,      |   |                         |                |                  |        |       |          |  |                    |
| 640.2          | 54.5           |                         | brow          | n, S <b>I</b> LT, medium dense,                                | CL                   | SS-17<br>53.5-55.0<br>R=16"                       | 1<br>13<br>22           | 111            | <br>             |        |       |          | qu*>4.5tsf<br>qu**=3.71ts  | f                  |
| 638.7          | 56.0           |                         | satur<br>⊻    | ated   | ML                   |   |                         |                | \<br>\<br>\<br>\ |        |       |          | Open stand<br>piezometer<br>from 55'-65'                                       | scree              |
| 60.4           | 60.0           |                         |               |  |                      | SS-18<br>58.5-60.0<br>R=18"                       | 1<br>3<br>12            |                | \<br>\<br>!      | 210    |       |          | Silt started a   | at 54.             |
| DRILL<br>DRILL | ING (<br>ING I | /IETH<br>EQU <b>I</b> F |               | R RDC<br>HSA<br>CME-75<br>3/22 ENDED 3/24/22                   | Bore<br>bags<br>soil | IARKS chole backfi s of bentoni cuttings          | lled v                  | with 3         | $\nabla$         |        | LEVEL | (ft.)    |  |                    |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER SHEET 4 OF 5 B-7-22 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.63086N GROUND ELEVATION 694.7 -87.84787W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 등 634.7 60.0 brown, SILT, medium dense, saturated 632.7 62.0 brown, SILT, dense, saturated MLSS-19 63.5-65.0 R=18" 9 28 SS-20 8 68.5-70.0 20 R=18" 28 SS-21 73.5-75.0 R=18" 9 19 20 620.7 brown, silty CLAY, hard, saturated qu\*>4.5tsf qu\*\*=6.18tsf Silty clay started at 74' qu\*>4.5tsf qu\*\*=7.42tsf Bulk Ut Wt=144.3 SS-22 78.5-80.0 R=18" 17 8 21 24 Dry Ut Wt=123.8 LL=23, PL=15 PI=8 DRILLING CONTRACTOR RDC REMARKS WATER LEVEL (ft.) DRILLING METHOD Borehole backfilled with 3 □ 56 bags of bentonite chips and y DRILLING EQUIPMENT CME-75 DRILLING STARTED 3/23/22 ENDED 3/24/22

|                                  |                  |                        |                   | INEERING INC.                                | CLIENT               | CT & NO.  | Villag<br>John<br>143rd | ge of Orland Park<br>Humphrey Drive Ph<br>d street, Orland Park |                          |                            |
|----------------------------------|------------------|------------------------|-------------------|--|----------------------|---|-------------------------|---|--------------------------|----------------------------|
| LOGG<br>GROU                     |                  |                        | <b>BG</b><br>TION | 694.7  |                      |   |                         | 8086N<br>4787W  |                          |                            |
| ELEV.                            | DEPTH (FT)       | STRATA                 |                   | SOIL/ROCK<br>DESCRIPTION                     |                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN | W<br>JNTS               | Water Content   | LL<br>40 50<br>sive<br># | NOTES<br>&<br>TEST RESULTS |
| 614.7                            | 80.0             |                        | brow              | n, silty CLAY, hard, satu                    | urated<br>CL         | SS-23<br>83.5-85.0<br>R=18"                       | 10<br>21<br>31          | 160   |                          | qu*>4.5tsf<br>qu**=4.53tsf |
| 604.7                            | 90.0             |                        | End               | of boring at 90'                             |                      | SS-24<br>88.5-90.0<br>R=18"                       | 10<br>18<br>25          | 1<br>1<br>1<br>1199   |                          | qu*=4.5tsf                 |
|                                  |                  |                        |                   |  |                      |   |                         |   |                          |                            |
| DR <b>I</b> LL<br>DR <b>I</b> LL | .ING M<br>.ING E | IETHO<br>QU <b>I</b> P | DD                | R RDC<br>HSA<br>CME-75<br>3/22 ENDED 3/24/22 | Bore<br>bags<br>soil | IARKS  chole backfi s of bentonicuttings          | lled v<br>te ch         | with 3 $\bigcirc$ 56 ips and $\bigcirc$                         | EL (ft.)                 |                            |

DESIGNED - KJP REVISED -USER NAME = dtroyer CHECKED - AMK REVISED -PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -CHECKED . AMK PLOT DATE = 12/03/24 REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY SOIL BORING LOG (21 OF 27) 1600 16-00078-00-CH COOK PILE SUPPORTED EMBANKMENT SHEET PSE-26 OF PSE-32 SHEETS

TOTAL SHEET NO.

228 171

CONTRACT NO. 61K89

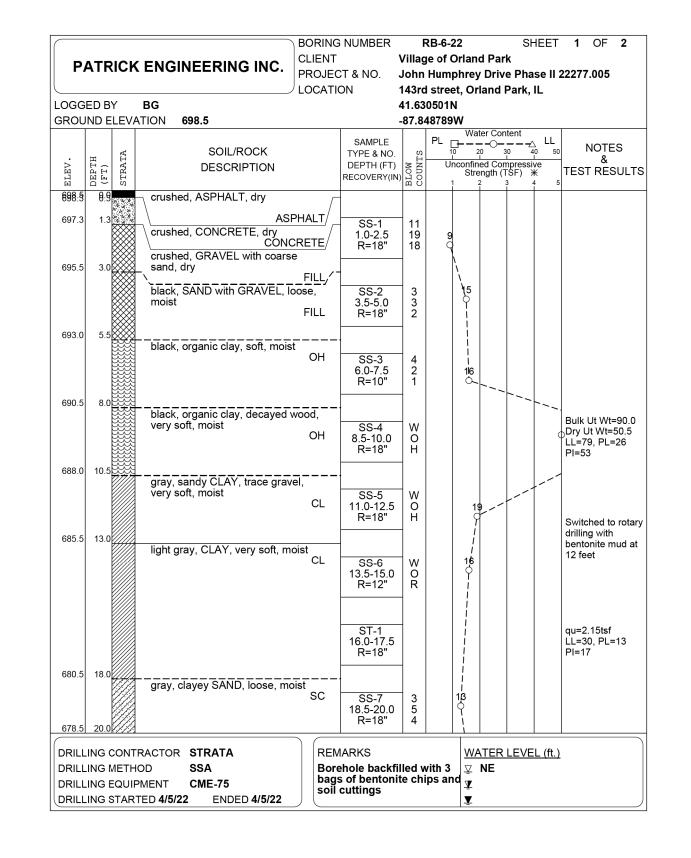
BORING NUMBER RB-2-22 SHEET 1 OF 1 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630744N GROUND ELEVATION 698.3 -87.847372W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 널 등 black,TOPSOIL, grass roots, medium stiff, moist 698.3 SS-1 0.0-2.0 R=18" 0.0 2 2 10 13 697.0 1.3 36.3 694.3 4.0 690.3 8.0 688.3 10.0 TOPSOIL crushed, CONCRETE with gravel SS-2 2.0-4.0 R=8" 13 3 3 and sand FILL SS-3 4.0-6.0 R=0" EPS GEOFOAM FILL SS-4 6.0-8.0 R=0" black, gravelly CLAY, some sand, stiff, moist SS-5 8.0-10.0 R=18" End of boring at 10' DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) Borehole backfilled with soil 

NE DRILLING METHOD cuttings DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/5/22 ENDED 4/5/22

| .OGG           | ED B       |                | BG TION 698.5  | PROJEC<br>LOCATION                   | ON & TO  | John<br>143rd<br>41.63  | je of Orland Park<br>Humphrey Drive Ph<br>I street, Orland Park<br>0717N<br>488W |   |  |
|----------------|------------|----------------|--|--------------------------------------|--|-------------------------|--|---|--|
| ELEV.          | DEPTH (FT) | STRATA         | SOIL/ROCK<br>DESCRIPTION   |                                      | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | WC<br>UNIS              | Water Content PL   | LL NOTES  40 50 sive & TEST RESULT  |  |
| 698.5          | 0.0        |                | crushed, CONCRETE  | FILL                                 | SS-1<br>1.0-2.5<br>R=12"                           | 6<br>7<br>15            |  |   |  |
| 695.5          | 3.0        | 3.0 - 4.5      | 3.0  | crushed, EPS GEOFOAM wit<br>concrete | fh   | SS-2<br>3.5-5.0<br>R=0" | 1 1 1  |   |  |
| 690.5          | ₿.0        |                | <sup>▽</sup>   |                                      | SS-3<br>6.0-7.5<br>R=0"                            | 1<br>1<br>1<br>1        |  |   |  |
| 688.0          | 10.5       |                | brown, mottled, CLAY, trace servery soft, wet                                | CL                                   | SS-4<br>8.5-10.0<br>R=12"                          | WOH<br>WOH<br>2         |  | qu*<0.5tsf<br>Bulk Ut Wt=137.<br>Dry Ut Wt=120.3<br>LL=24, PL=13<br>PI=11 |  |
|                |            |                | gravel, very soft, saturated   | CL                                   | SS-5<br>11.0-12.5<br>R=12"                         | WOH<br>1<br>2           | 18<br>18   |   |  |
| 683.0          | 15.5       |                |  |                                      | ST-1<br>13.5-15.0<br>R=12"                         | _                       |  | qu*=0.75 tsf<br>Bulk Ut Wt=127.<br>Dry Ut Wt=100<br>LL=47, PL=19<br>PI=28 |  |
|                |            |                | gray, CLAY, trace sand, trace<br>gravel, medium stiff to stiff,<br>saturated | CL                                   | SS-7<br>16.0-17.5<br>R=18"                         | 1 1 3                   | 19   | qu*=0.5tsf<br>qu**=1.38tsf  |  |
| 678.5          | 20.0       |                |  |                                      | SS-8<br>18.5-20.0<br>R=18"                         | 2<br>5<br>7             | 10'  | qu*=0.75tsf<br>qu**=1.48tsf   |  |
| DRILL<br>DRILL | ING I      | METH(<br>EQUIP | RACTOR STRATA  DD HSA  MENT CME-75  TED 3/29/22 ENDED 3/29/22                | Bore                                 | IARKS  chole backfile  couttings                   |                         |  | <u>'EL (ft.)</u>  |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET 2 OF 2 **BORING NUMBER** RB-3-22 **CLIENT** Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630717N GROUND ELEVATION 698.5 -87.8488W Water Content PL 10 20 30 40 SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 678.5 20.0 gray, CLAY, trace sand, trace gravel, very stiff, saturated CL SS-9 qu\*=2.25tsf 21.0-22.5 qu\*\*=4.33tsf R=8" 675.5 23.0 gray, CLAY, trace sand, trace shelby tube twisted gravel, hard, saturated ST-2 Bulk Ut Wt=148.9 Dry Ut Wt=131.7 23.5-25.0 R=12" 673.5 25.0 LL=21, PL=12 End of boring at 25' PI=9 WATER LEVEL (ft.) DRILLING CONTRACTOR STRATA REMARKS DRILLING METHOD bags of bentonite chips and DRILLING EQUIPMENT CME-75 DRILLING STARTED 3/29/22 ENDED 3/29/22



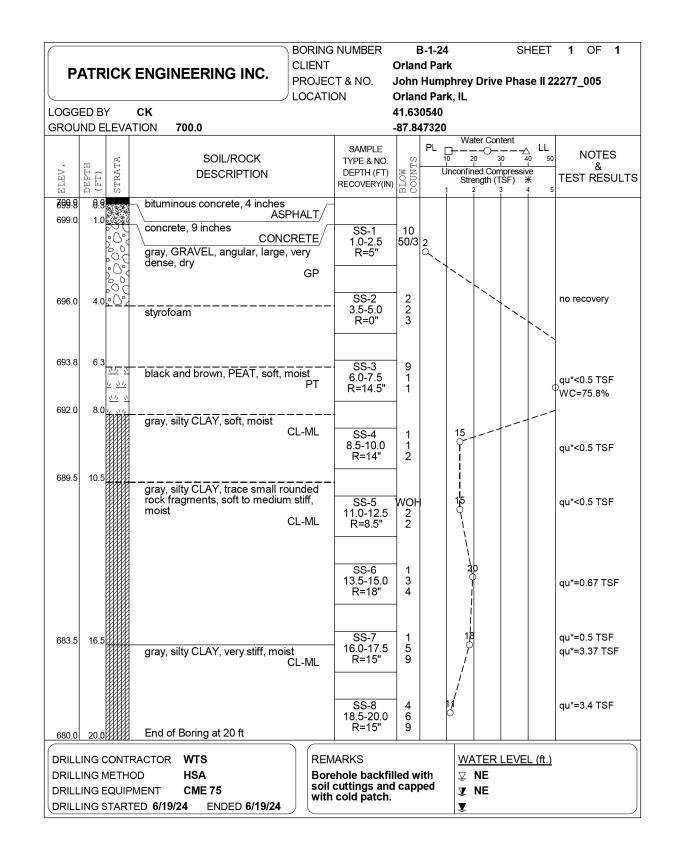
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 SOIL BORING
 LOG
 (23 OF 27)
 FA.U. RTE.
 SECTION
 COUNTY
 TOTAL SHEET NO.

 PILE SUPPORTED
 EMBANKMENT
 1600
 16-00078-00-CH
 COOK
 228
 173

 SHEET
 PSE-28
 0F
 PSE-32
 SHEETS
 LUINOIS
 FED. AND PROJECT

**BORING NUMBER** SHEET 2 OF 2 RB-6-22 **CLIENT** Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630501N GROUND ELEVATION 698.5 -87.848789W Water Content PL 10 20 30 40 5 SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) **DESCRIPTION** TEST RESULTS RECOVERY(IN) 걸 ; 678.5 20.0 gray, CLAY, trace gravel, medium stiff to stiff, moist SS-8 21.0-22.5 qu\*=0.75tsf qu\*\*=1.75tsf R=14" ST-2 23.5-25.0 R=12" qu=1.47tsf LL=21, PL=12 PI=9 673.5 25.0 End of boring at 25' WATER LEVEL (ft.) DRILLING CONTRACTOR STRATA REMARKS Borehole backfilled with 3 □ NE DRILLING METHOD bags of bentonite chips and DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/5/22 ENDED 4/5/22



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

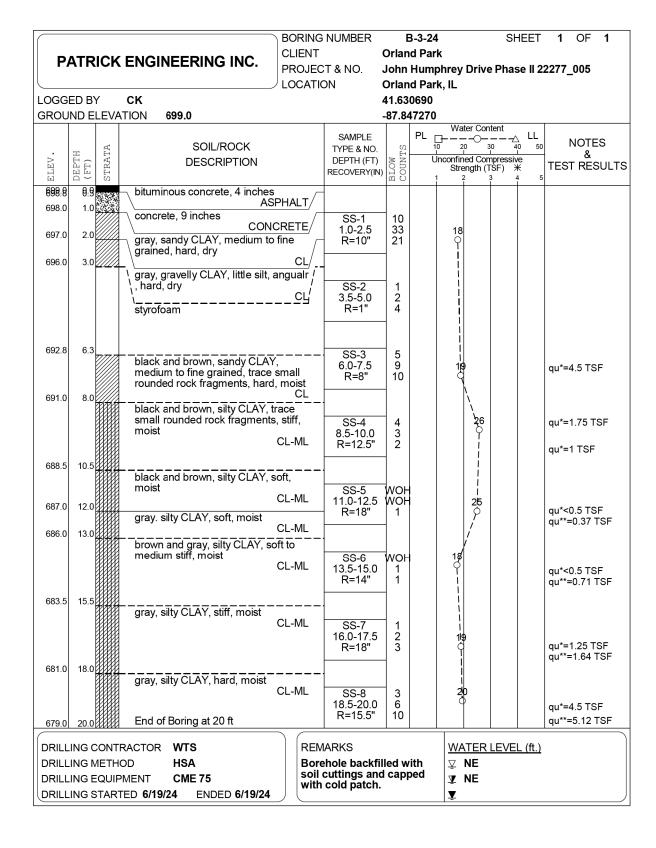
 SOIL BORING LOG (24 OF 27)
 F.A.U. RTE.
 SEC

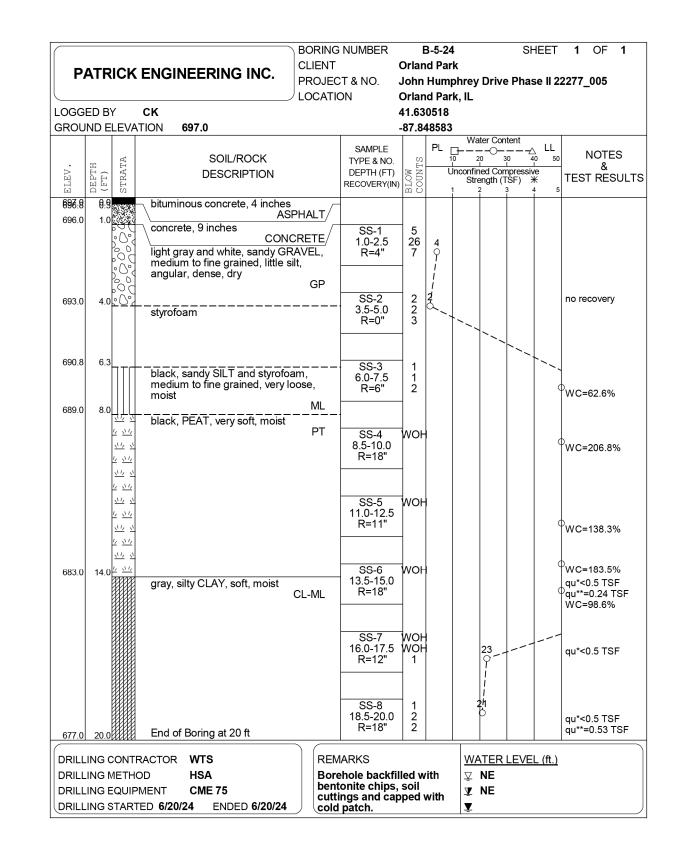
 PILE SUPPORTED EMBANKMENT
 1600
 16-000

 SNEET
 PSE-29
 OF PSE-32
 SHEETS

U. SECTION COUNTY TOTAL SHEET NO.
10 16-00078-00-CH COOK 228 174

CONTRACT NO. 61K89





USER NAME = dtroyer DESIGNED - KJP REVISED CHECKED - AMK REVISED PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED PLOT DATE = 12/03/24 CHECKED - AMK REVISED

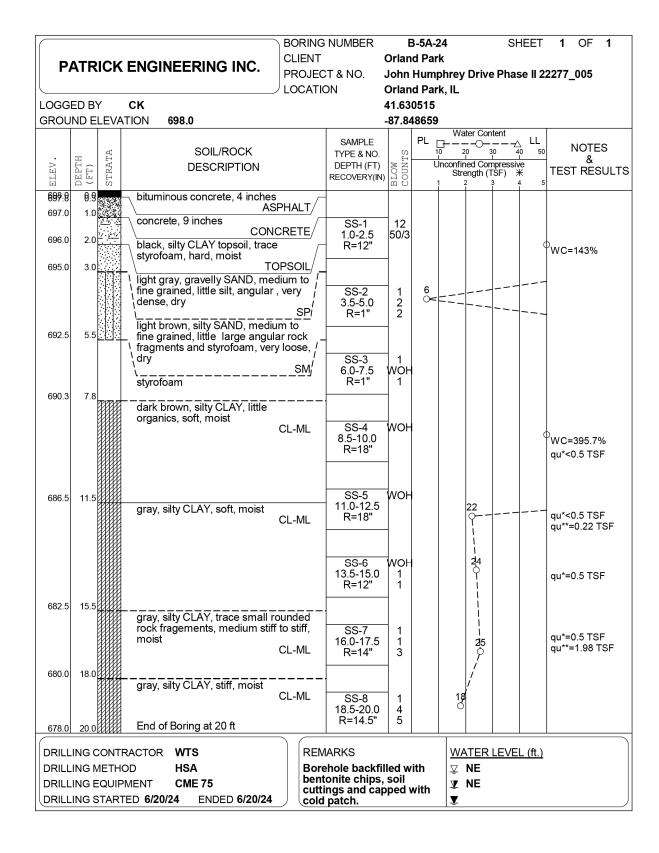
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

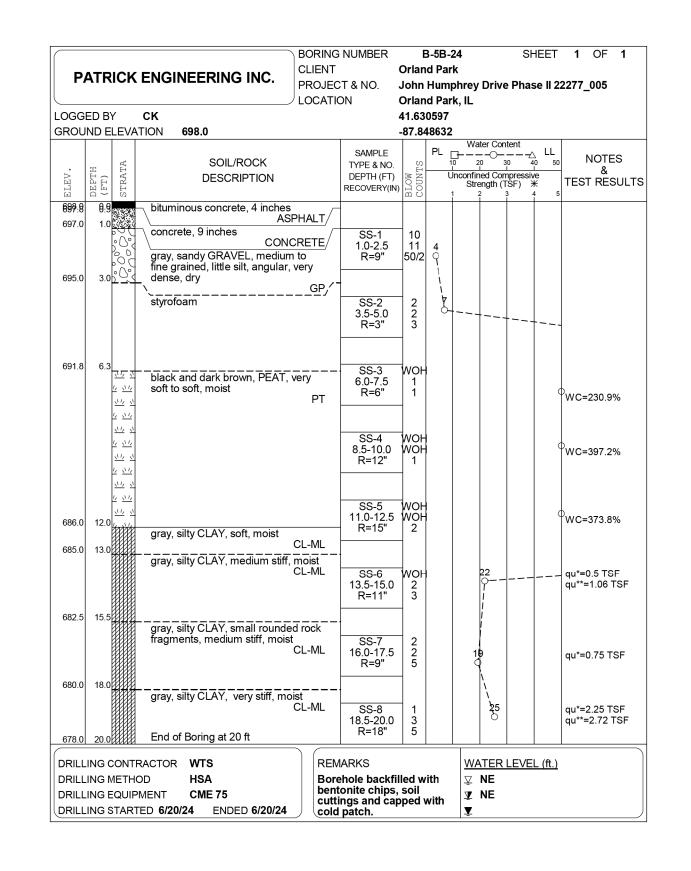
SECTION COUNTY SOIL BORING LOG (25 OF 27) 1600 16-00078-00-CH COOK PILE SUPPORTED EMBANKMENT CONTRACT NO. 61K89 SHEET PSE-30 OF PSE-32 SHEETS

TOTAL SHEETS

228

12/3/2024 3:00:42 PM



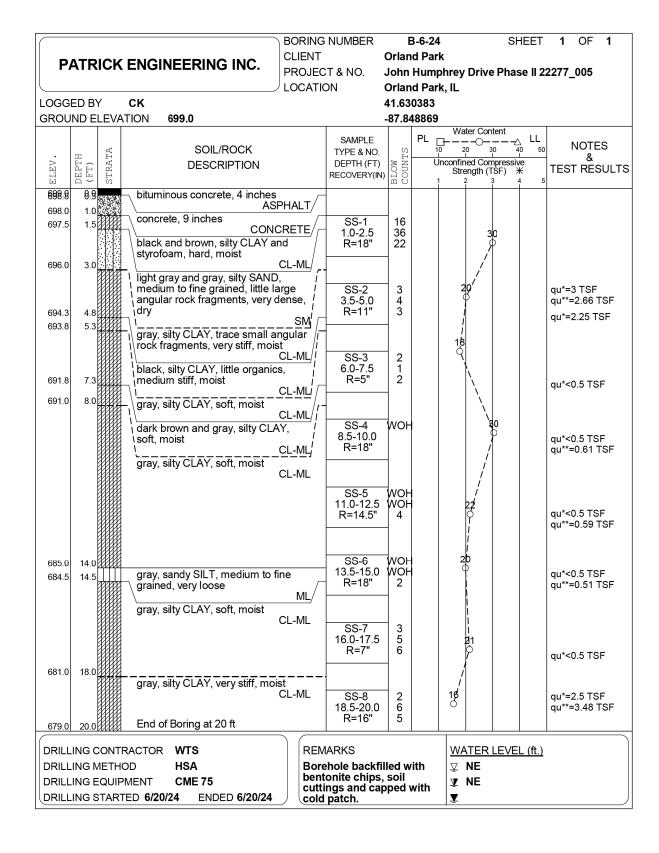


USER NAME = dtroyer DESIGNED - KJP REVISED REVISED -CHECKED - AMK PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED PLOT DATE = 12/03/24 CHECKED - AMK REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

TOTAL SHEETS SECTION COUNTY SOIL BORING LOG (26 OF 27) 1600 16-00078-00-CH COOK 228 PILE SUPPORTED EMBANKMENT CONTRACT NO. 61K89 SHEET PSE-31 OF PSE-32 SHEETS

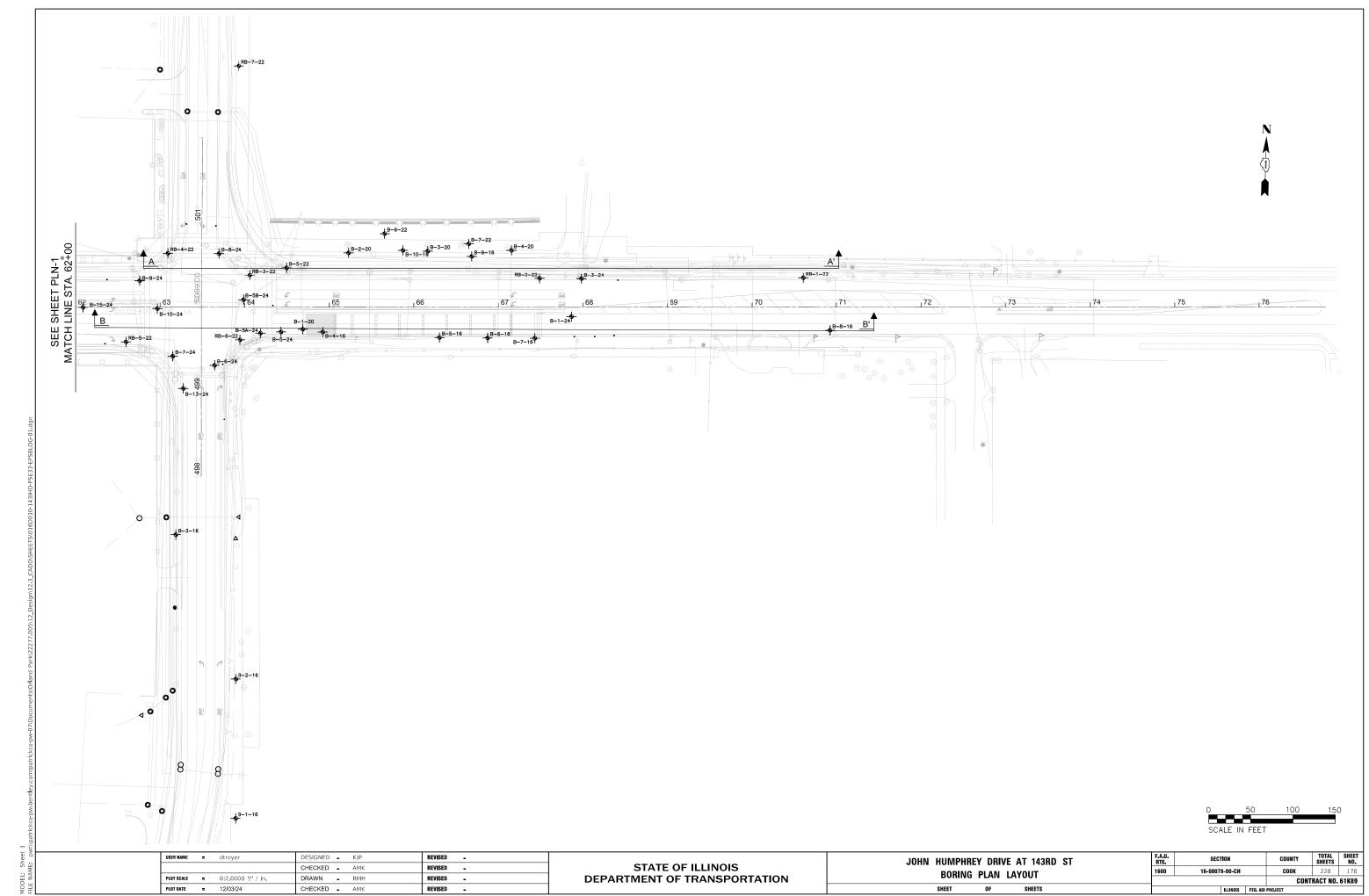
12/3/2024 3:00:56 PM



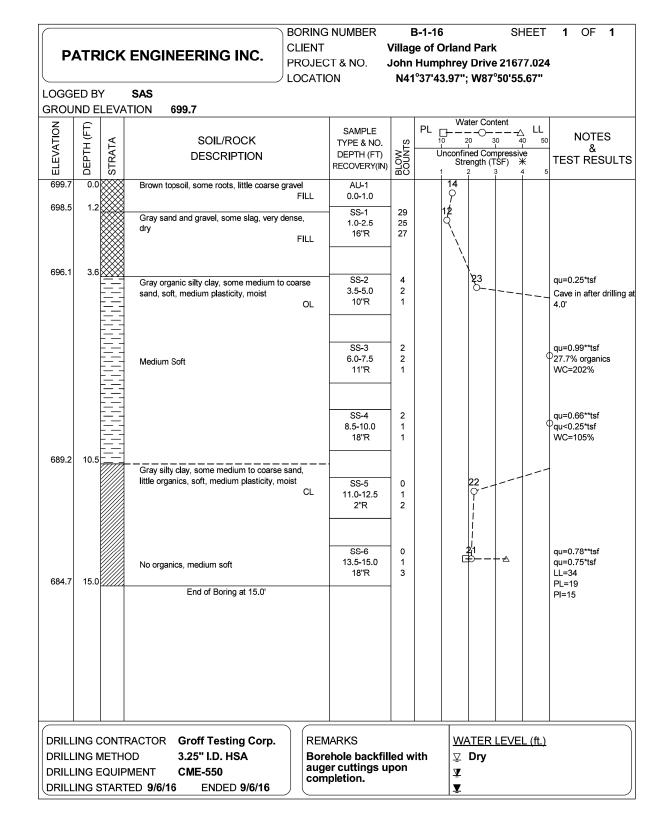
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOG (27 OF 27)
PILE SUPPORTED EMBANKMENT

SHEET PSE-32 OF PSE-32 SHEETS



12/3/2024 3:01:19 PM



| PA             | ATR            | ICK           | ENGINEERING INC  | CLIENT               | CT & NO.   | Villag<br>John   | Humph     |                                |                     |              | <b>1</b> OF                                 | 2 |
|----------------|----------------|---------------|--|----------------------|--|------------------|-----------|--------------------------------|---------------------|--------------|---|---|
| LOGGI<br>GROU  |                |               | SAS<br>ATION 699.5   |                      |  |                  |           |                                |                     |              |   |   |
| ELEVATION      | ОЕРТН (FT)     | STRATA        | SOIL/ROCK<br>DESCRIPTION   | I                    | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)   | BLOW             | PL 10 Uno | 20                             | 30 40<br>ompressive | •            | TEST RE                                     |   |
| 699.5          | 0.0            |               | Asphalt pavement   |                      | AU-1<br>0.0-1.0  |                  |           |                                |                     |              |   |   |
| 697.6          | 1.9            |               | Gray sand and gravel, little slag, o   | lense, moist<br>FILL | SS-1<br>2.0-3.5<br>16"R  | 16<br>17<br>14   |           | 15                             |                     |              |   |   |
| 695.7          | 3.8            |               | Black to brown organic silty clay,<br>trace sand, stiff, low plasticity, mo              |                      | SS-2<br>3.5-5.0<br>15"R  | 2 2 3            |           | 16                             | `\                  | `,           | Cave in after 3.5' qu=1.44**tsf qu=0.75*tsf |   |
|                |                |               | Black, medium stiff  |                      | SS-3<br>6.0-7.5<br>16"R  | 2<br>2<br>2<br>2 |           |                                |                     | (            | qu=0.66**tsf<br>qu=0.25*tsf<br>WC=64%       |   |
|                |                |               | Light gray   |                      | SS-4<br>8.5-10.0<br>18"R   | 1<br>1<br>1<br>1 |           |                                |                     | (            | qu=0.70**tsf<br>WC=98%                      |   |
| 688.0          | 11.5           |               | Light gray clay, trace organics, so plasticity, moist                                    | ft, high<br>CH       | SS-5<br>11.0-12.5<br>16"R  | W<br>O<br>H      |           | 22<br>C                        |                     |              | qu=0.25*tsf                                 |   |
|                |                |               |  |                      | SS-6<br>13.5-15.0<br>18"R  | 0 1 3            |           |                                |                     | (            | WC=76%                                      |   |
| 682.7          | 16.8           |               | Gray silty clay, little medium to co<br>stiff, low plasticity, moist                     | arse sand,           |  |                  |           |                                |                     | ,//          |   |   |
|                |                |               |  |                      | SS-7<br>18.5-20.0<br>12"R  | 1<br>2<br>3      |           | 16                             |                     |              | qu=1.32**tsf<br>qu=1.25*tsf                 |   |
| DRILL<br>DRILL | ING I<br>Ing e | METH<br>EQUIF | TRACTOR Groff Testing Co<br>IOD 3.25" I.D. HSA<br>PMENT CME-550<br>TED 9/6/16 ENDED 9/6/ | Bore<br>aug<br>with  | MARKS  ehole backfil  er cuttings a  cold patch of the cold in the | nd pa            | atched    | WATEF  ☑ Dry  ☑  ☑  ☑  ☑  ☑  ☑ | R LEVEL             | <u>(ft.)</u> |   |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

: \\patrickco-pw.bentley.com:patrickco-pw-07\Documents\Orland Park\22277.005\12 Design\12.3 CADD\\$HEFI

|           |            |        |  | BC            | RING  | NUMBER                     | ı             | B-2-16               | SHEET                  | 2 OF 2            |
|-----------|------------|--------|--|---------------|-------|----------------------------|---------------|----------------------|------------------------|-------------------|
|           | ΛTD        | ICK    | ENGINEERING INC.                         | CL            | JENT  |                            | _             | ge of Orland Pa      |                        |                   |
|           | ~117       |        | LINGINEERING INC.                        | PF            | ROJEC | T & NO.                    |               | <b>Humphrey Driv</b> |                        |                   |
|           |            |        |  | ノLC           | CATIO | NC                         | <b>N4</b> 1   | l°37'45.56"; W8      | 7°50'55.77"            |                   |
| LOGG      | ED B       | Y      | SAS                                      |               |       |                            |               |                      |                        |                   |
| GROU      | IND E      | LEVA   | ATION <b>699.5</b>                       |               |       |                            |               |                      |                        |                   |
| Z         | E          |        |  |               |       | SAMPLE                     |               | PLO                  | ontent LL              |                   |
| Ĕ         | 🖺          | ַ ַ    | SOIL/ROCK                                |               |       | TYPE & NO.                 | ု က           | 10 20                | 30 40 50               | NOTES             |
| ELEVATION | ОЕРТН (FT) | STRATA | DESCRIPTION                              |               |       | DEPTH (FT)                 | BLOW          | Unconfined Co        | ompressive<br>(TSF) ** | &<br> TEST RESULT |
|           |            | ST     |  |               |       | RECOVERY(IN)               | 필잉            | 1 2                  | 3 4 5                  |                   |
| 679.5     | 20.0       |        | Gray silty clay, little medium to coarse | e sand,       |       |                            |               |                      |                        |                   |
|           |            |        | stiff, low plasticity, moist             |               | CL    |                            |               | !                    |                        |                   |
|           |            |        |  |               | -     |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               | !                    |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       | SS-8                       | 2             | 16                   |                        | qu=2.07**tsf      |
|           |            |        | Trace fine sand                          |               |       | 23.5-25.0                  | 4             | 9                    |                        | qu=2.0*tsf        |
|           |            |        |  |               |       | 15"R                       | 6             |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       | SS-9                       | 3             | 15                   |                        | qu=2.89**tsf      |
|           |            |        | Very stiff                               |               |       | 28.5-30.0<br>18"R          | 9             |                      |                        | qu=2.75*tsf       |
| 669.5     | 30.0       |        | End of Boring at 30.0'                   |               |       |                            | $\cdot$       |                      |                        |                   |
|           |            |        | End of Borning at 30.0                   |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            |        |  |               |       |                            |               |                      |                        |                   |
|           |            | •      |  | $\overline{}$ |       |                            | •             |                      | <u> </u>               |                   |
|           |            |        | RACTOR Groff Testing Corp.               | .             |       | IARKS                      |               |                      | R LEVEL (ft.)          |                   |
| DRILL     |            |        |  |               |       | hole backfil               |               | 4-1                  |                        |                   |
|           |            |        | PMENT CME-550                            |               | with  | er cuttings a cold patch ( | na pa<br>Jpon | <del>-</del>         |                        |                   |
| DRILL     | ING S      | STAR   | TED 9/6/16 ENDED 9/6/16                  |               | com   | pletion.                   |               | Ţ                    |                        |                   |

| PA               | ATR               | ICI         | K ENGINEERING INC.  | CLIENT              | T & NO.  | Villaç<br>John   | B-3-16 S⊢<br>ge of Orland Park<br>Humphrey Drive 2167<br>1°37'47.48"; W87°50'56 |  |
|------------------|-------------------|-------------|---|---------------------|--|------------------|---|--|
| LOGGE<br>GROUI   |                   |             | SAS<br>'ATION 699.5   |                     |  |                  |   |  |
| ELEVATION        | <b>DEPTH (FT)</b> | STRATA      | SOIL/ROCK<br>DESCRIPTION  |                     | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW             | PL Water Content 10 20 30 44  Unconfined Compressiv Strength (TSF) 3 4          |  |
| 699.5<br>698.5   | 0.0<br>1.0        | $\bowtie$   | Gravel fill, some topsoil, fill  Gray sand and gravel, some slag, ve                  | ry dense,           | AU-1<br>0.0-1.0<br>SS-1                            | 13               | 16  |  |
| 696.5            | 3.0               |             | dry   | FILL                | 1.0-2.5<br>18"R                                    | 17<br>26         |   |  |
| 030.3            | 5.0               |             | Black and gray organic silty clay, soft plasticity, moist                             | t, medium           | SS-2<br>3.5-5.0<br>18"R                            | 2<br>2<br>2<br>2 | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\  | qu=0.87**tsf<br>qu=0.5*tsf                           |
|                  |                   |             |   |                     | SS-3<br>6.0-7.5                                    | 2 2              | 25  | Cave in after drilling 5.0' qu=0.25*tsf              |
|                  |                   |             | Very soft, wet  |                     | 13"R<br>SS-4<br>8.5-10.0                           | 2 2              | 16<br>\( \rangle \)   | qu<0.25*tsf  |
| 689.3            | 10.3              |             | Gray silty clay, trace fine gravel, med   | lium stiff,         | 9"R  | 3                |   |  |
|                  |                   |             | low plasticity, moist   | CL                  | SS-5<br>11.0-12.5<br>18"R                          | 1 2 2            | 15<br>□ <del> </del> <del> </del> <del> </del> <del> </del> <del> </del>        | qu=0.99**tsf<br>qu=0.5*tsf<br>LL=19<br>PL=10<br>PI=9 |
| 684.5            | 15.0              |             | Stiff   |                     | SS-6<br>13.5-15.0<br>18"R                          | 2 3 4            | 16<br>0   | qu=2.27**tsf<br>qu=1.5*tsf                           |
|                  |                   |             | End of Boring at 15.0'  |                     |  |                  |   |  |
|                  |                   |             |   |                     |  |                  |   |  |
|                  |                   |             |   |                     |  |                  |   |  |
| DRILLI<br>DRILLI | NG I              | METI<br>EQU | TRACTOR Groff Testing Corp HOD 3.25" I.D. HSA IPMENT CME-550 RTED 9/6/16 ENDED 9/6/16 | Bore<br>auge<br>com | IARKS<br>chole backfiler cuttings u<br>pletion.    |                  | water level  with   Dry  V  | _ (ft.)  |

| USER NAME  | = | dtroyer            | DESIGNED | - | KJP | REVISED | - |
|------------|---|--------------------|----------|---|-----|---------|---|
|            |   |                    | CHECKED  | - | AMK | REVISED | - |
| PLOT SCALE | = | 0:2.0000 ':" / in. | DRAWN    | - | RMH | REVISED | - |
| PLOT DATE  | = | 12/03/24           | CHECKED  | - | AMK | REVISED | - |
|            |   |                    |          |   |     |         |   |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

BORING NUMBER SHEET 1 OF 1 RB-1-22 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630457N GROUND ELEVATION 705.8 -87.846311W Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive Strength (TSF) \*\* DEPTH (FT) DESCRIPTION TEST RESULTS RECOVERY(IN) 걸 경 705.8 705.1 0.0 0.7 crushed, CONCRETE SS-1 0.0-2.0 R=18" 8 13 16 CONCRETE/ black,TOPSOIL, grass roots, medium stiff, moist 703.8 2.0 SS-2 2.0-4.0 R=18" 10 qu\*=1.75tsf TOPSOIL qu\*\*=2.06tsf brown, mottled, silty CLAY, stiff, 701.8 qu\*=4.5tsf brown, mottled, CLAY, trace gravel, 4.0-6.0 qu\*\*=2.89tsf hard, moist R=18" Bulk Ut Wt=137.4 Dry Ut Wt=116.9 699.8 LL=28, PL=15 SS-4 6.0-8.0 R=18" PI=13 brown, mottled, CLAY, trace gravel, very stiff, moist qu\*=3.0tsf CL qu\*\*=2.27tsf 8.0-10.0 696.8 R=18" Silt started at 9 brown, SILT, some sand, medium 10 dense, wet 695.8 10.0 End of boring at 10' DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) DRILLING METHOD SSA Borehole backfilled with soil ☑ NE cuttings DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/5/22 ENDED 4/5/22

| P <i>i</i><br>Logg |              |        | ENGINEERING INC.  | PROJEC<br>LOCATI   | CT & NO<br>ON '                                    | John<br>143rd | ge of Orland Park<br>Humphrey Drive Phas<br>I street, Orland Park, II<br>10759N |  |
|--------------------|--------------|--------|---|--------------------|--|---------------|---|--|
| GROU               |              |        |   |                    |  |               | 49092W  |  |
| ELEV.              | DEPTH (FT)   | STRATA | SOIL/ROCK<br>DESCRIPTION                                    |                    | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | BLOW          | Water Content  PL   | & <u>-</u>   |
| 700:3              |              |        | crushed, CONCRETE   |                    |  |               |   |  |
|                    |              |        | black, organic CLAY, soft, m                                | oist<br>OH         | SS-1<br>1.0-2.5<br>R=8"                            | 1 3 2         | 22<br>9   | qu*=0.5tsf   |
| 005.0              |              |        |   |                    | SS-2<br>3.5-5.0<br>R=10"                           | 3 4 5         | 29  | qu*=0.5tsf   |
| 695.2              | 5.5          |        | brown, mottled, CLAY, stiff, r                              | moist<br>CL        | SS-3<br>6.0-7.5<br>R=10"                           | 1<br>4<br>4   | 19  | qu*=0.5tsf<br>qu**=1.65tsf   |
| 692.7              | 8.0          |        | brown, CLAY, trace sand, so<br>moist                        | oft,               | SS-4<br>8.5-10.0<br>R=12"                          | WOH<br>2<br>3 | 119   | qu*=0.5 tsf<br>qu**=1.65 tsf<br>Bulk Ut Wt=130.<br>Dry Ut Wt=109.5 |
| 690.2              | 10.5         |        | dark brown, CLAY, hard, mo                                  | ist CL             | SS-5<br>11.0-12.5<br>R=18"                         | 4 5 6         | <br> <br> <br> <br> <br> <br> <br> <br>   | LL=28, PL=15<br>PI=13<br>qu*=3.5tsf<br>qu**=5.36tsf                |
| 687.7              | 13.0         |        | dark brown, CLAY, very stiff,                               | moist<br>CL        | SS-6<br>13.5-15.0<br>R=12"                         | 4 3 3         | 25<br>()  | qu*=2.25tsf<br>qu**=3.30tsf<br>Bulk Ut Wt=131.<br>Dry Ut Wt=105.5  |
| 685.2<br>684.7     | 15.5<br>16.0 | 77777  | darkgray, CLAY, trace grave                                 | l, very            |  |               | $ \hspace{.05cm} \hspace{.05cm} '\hspace{.05cm} \hspace{.05cm} $                | LL=28, PL=15<br>PI=13  |
|                    |              |        | - stiff, saturated  | CL                 | SS-7<br>16.0-17.5<br>R=14"                         | 5<br>6<br>6   | 18  | qu*=2.0tsf<br>qu**=3.71tsf   |
| 682.7<br>680.7     | 18.0         |        | darkgray, CLAY, trace grave saturated                       | I, stiff,<br>CL    | SS-8<br>18.5-20.0<br>R=18"                         | 4<br>4<br>6   | 16  | qu*=0.5tsf<br>qu**=1.24tsf   |
| DRILL<br>DRILL     | ING N        | /IETH  | RACTOR STRATA OD HSA PMENT CME-75 FED 3/29/22 ENDED 3/29/22 | Bor<br>bag<br>soil | MARKS ehole backfil s of bentonit cuttings         |               |   |  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BORING NUMBER RB-4-22 SHEET 2 OF 2 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630759N GROUND ELEVATION 700.7 -87.849092W PL Water Content LL 10 20 30 40 50 SAMPLE NOTES SOIL/ROCK TYPE & NO. DEPTH (FT) MOTH Unconfined Compressive Strength (TSF) \*\* DESCRIPTION TEST RESULTS darkgray, CLAY, trace gravel, stiff, saturated 680.7 20.0 SS-9 21.0-22.5 R=18" qu\*=0.5tsf qu\*\*=1.20tsf ST-1 23.5-25.0 R=18" qu=1.23tsf LL=25, PL=14 PI=11 675.7 25.0 End of boring at 25' DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) Borehole backfilled with 3 bags of bentonite chips and soil cuttings DRILLING METHOD HSA DRILLING EQUIPMENT CME-75 DRILLING STARTED 3/29/22 ENDED 3/29/22

| _OGG       |            |                                       | BG   | LOCATI                   | ON .   | 143rd<br>41.63 | Humphrey Drive Phase<br>I street, Orland Park, IL<br>0463N |  |
|------------|------------|---------------------------------------|--|--------------------------|--|----------------|--|--|
| ELEV.      | DEPTH (FT) | STRATA A                              | SOIL/ROCK DESCRIPTION                              |                          | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) |                | 10 20 30 40  | LL<br>50<br>NOTES<br>&<br>TEST RESULTS                     |
| 성<br>701.1 |            | . <u>74.7</u> €. '7 <sub>4</sub><br>Ω |  |                          | RECOVERY(IN)                                       | BI             | 1 2 3 4  | 5  |
| 701.1      |            | 1/ 1/1/                               | black, TOPSOIL, moist                              |                          |  |                |  |  |
| 700.1      | 1.0        |                                       | black, sandy CLAY, trace gr<br>medium stiff, moist | OPSOIL /-<br>avel,<br>CL | SS-1<br>1.0-2.5<br>R=8"                            | 2<br>3<br>5    | 37   |  |
| 698.1      | 3.0        |                                       | gray, CLAY, trace gravel, mostiff, moist           | edium<br>CL              | SS-2<br>3.5-5.0<br>R=18"                           | 2<br>4<br>4    | 20   | qu*=1.00tsf<br>qu**=2.18tsf                                |
| 695.6      | 5.5        |                                       | black, organic CLAY, very somedium stiff, moist    | oft to<br>OH             | SS-3<br>6.0-7.5<br>R=18"                           | WOH<br>2<br>2  | 36   | qu*=0.5tsf<br>qu**=0.82tsf                                 |
| 690.6      | 10.5       |                                       |  |                          | SS-4<br>8.5-10.0<br>R=18"                          | W<br>O<br>H    |  | Bulk Ut Wt=95.5<br>Dry Ut Wt=50.6<br>LL=88, PL=53<br>PI=35 |
| 690.6      | 10.5       | 77 7<br>77 7<br>77 7                  | gray, PEAT, very soft, moist                       | PT                       | SS-5<br>11.0-12.5<br>R=18"                         | W<br>O<br>H    | 21   | Switched to rotar  |
| 688.1      | 13.0       | <u> </u>                              | brown, CLAY, very stiff, moi                       | st CL                    | ST-1<br>13.5-15.0<br>R=18"                         | -              |  | drilling with<br>bentonite mud at<br>12 feet<br>qu=2.59tsf |
| 685.6      | 15.5       |                                       | brown, CLAY, trace gravel, s<br>moist              | stiff,                   | SS-6   | 3              |  | LL=28, PL=14<br>Pl=14<br>qu*=1.25tsf                       |
| 683.1      | 18.0       |                                       | gray, CLAY, trace gravel, ve                       |                          | 16.0-17.5<br>R=18"                                 | 5 7            | 18<br>0<br>1   | qu**=2.27tsf   |
| 681.1      | 20.0       |                                       | moist  | CL                       | SS-7<br>18.5-20.0<br>R=18"                         | 5<br>5<br>6    | 18   | qu*=2.5tsf<br>qu**=3.71tsf                                 |
|            | ING I      | ИЕТН                                  |  | Bore<br>bag              | MARKS  ehole backfil  s of bentonit  cuttings      | led w          | water Level  WATER Level  NE ps and                        | (ft.)  |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

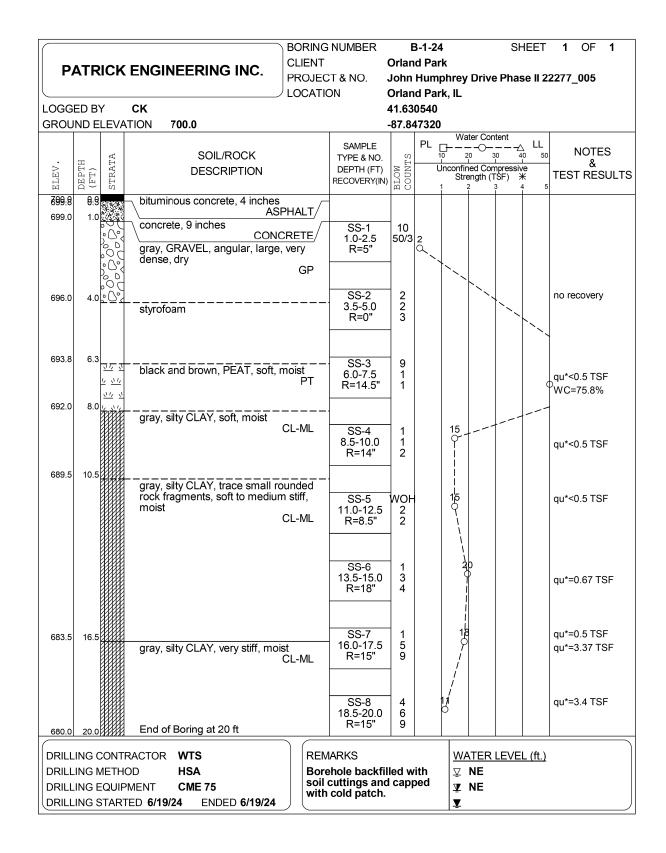
ickco-pw.bentley.com.patrickco-pw-07\Documents\Orland Park\22277.005\12 Design\12.3 CADD\SHEETS\

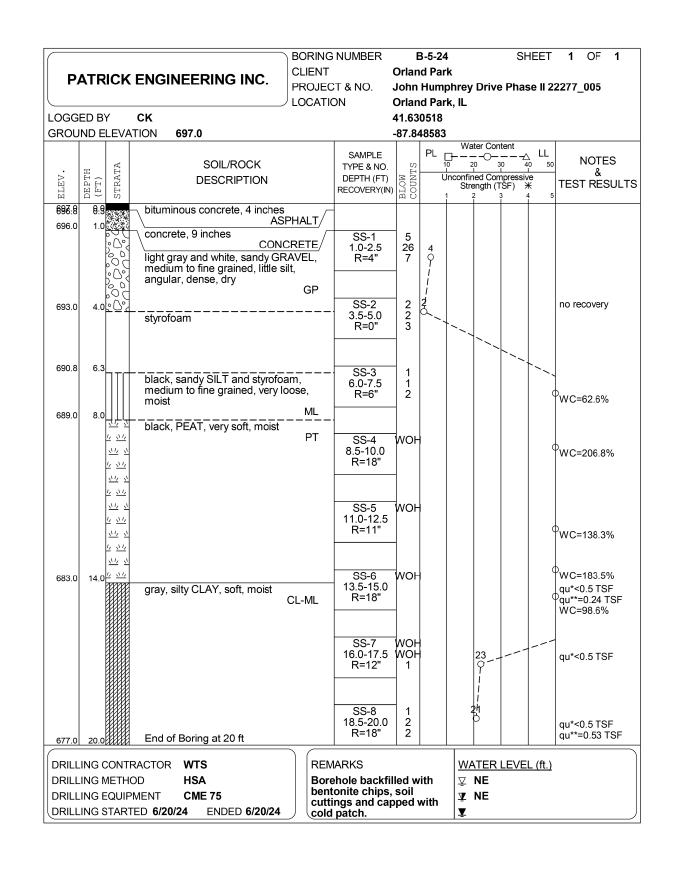
BORING NUMBER RB-5-22 SHEET 2 OF 2 CLIENT Village of Orland Park PATRICK ENGINEERING INC. PROJECT & NO. John Humphrey Drive Phase II 22277.005 LOCATION 143rd street, Orland Park, IL LOGGED BY BG 41.630463N GROUND ELEVATION 701.1 -87.849274W Water Content PL Water Content SAMPLE NOTES SOIL/ROCK TYPE & NO. Unconfined Compressive
Strength (TSF) \*\*

2 3 4 DEPTH (FT) MOTE NOO DESCRIPTION TEST RESULTS gray, CLAY, trace gravel, stiff, moist CL 681.1 20.0 SS-8 21.0-22.5 R=18" 23 qu\*=0.5tsf ST-2 23.5-25.0 R=18" qu=1.2tsf LL=22, PL=11 PI=11 676.1 25.0 End of boring at 25' DRILLING CONTRACTOR STRATA REMARKS WATER LEVEL (ft.) Borehole backfilled with 3 bags of bentonite chips and soil cuttings DRILLING METHOD SSA DRILLING EQUIPMENT CME-75 DRILLING STARTED 4/5/22 ENDED 4/5/22

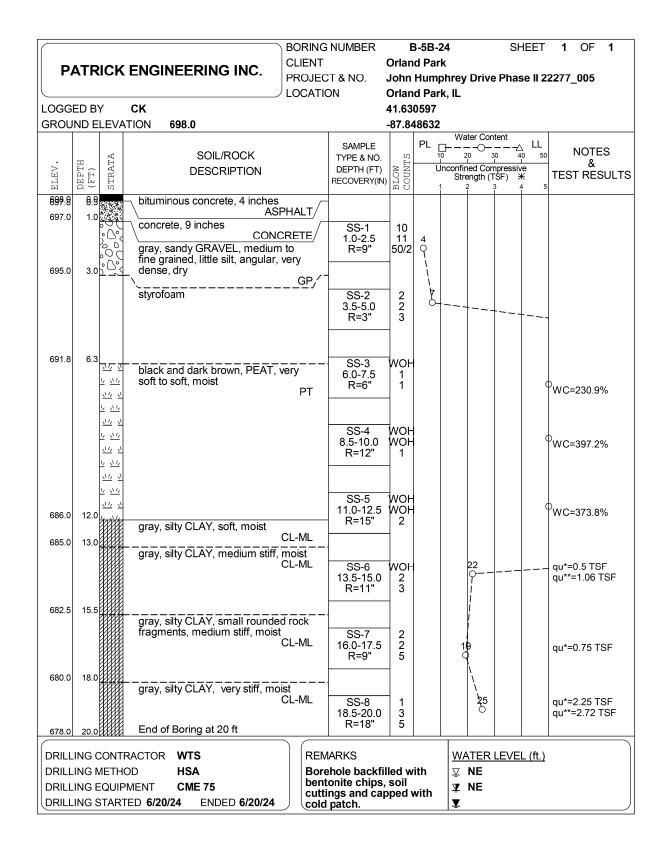
| P              | ΔTF            | RICK                | CENGINEERING INC.  | CLIENT                | CT & NO.  | Villaç<br>John | RB-7-22 SHEET 1 OF 1<br>ge of Orland Park<br>n Humphrey Drive Phase II 22277.005<br>d street, Orland Park, IL |
|----------------|----------------|---------------------|--|-----------------------|---|----------------|---|
| LOGG<br>GROU   |                |                     | BG<br>Ation 699.2  |                       |   |                | 31267N<br>48814W  |
| ELEV.          | DEPTH (FT)     | STRATA              | SOIL/ROCK<br>DESCRIPTION                                     |                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN     | 105            | PL Water Content 10 20 30 40 50 Unconfined Compressive Strength (TSF) * 1 2 3 4 5                             |
| 699.2          | 0.0            | 1/ 7/1/<br>7/1/ 7/1 | black,TOPSOIL, grass roots,                                  | moist                 | SS-1<br>0.0-2.0                                       | WOF            | 1   |
|                |                | 11. 7               | тс   | PSOIL                 | R=18"   | 2 3            | qu*=2.00tsf   |
| 697.2          | 2.0            | $\bowtie$           | gray, CLAY, some gravel, mo                                  | oist<br>FILL          | SS-2<br>2.0-4.0                                       | 5<br>10        | 22  |
| 696.2<br>695.2 | 3.0<br>4.0     |                     | reddish brown, crushed GRA moist                             |                       | R=18"   | 13<br>17       |   |
| 694.2          | 5.0            |                     | gray, clayey SAND, very loos<br>⊻                            | FILL<br>se, wet<br>SC | SS-3<br>4.0-6.0<br>R=12"                              | W<br>O<br>H    | %sand=48.7<br>%gravel=4.6<br>%fines=46.7  |
| 693.2          | 6.0            |                     | black, organic CLAY, very so<br>saturated                    |                       | SS-4<br>6.0-8.0<br>R=18"<br>SS-5<br>8.0-10.0<br>R=18" | W O H 1 1 1 2  | Bulk Ut Wt=97.2<br>Dry Ut Wt=49.0<br>OLL=73, PL=41<br>PI=32   |
| 689.2          | 10.0           |                     | End of boring at 10'   |                       |   |                |   |
| DRILL<br>DRILL | ING I<br>ING I | METH<br>EQUII       | TRACTOR STRATA HOD SSA PMENT CME-75 ETED 4/5/22 ENDED 4/5/22 | Bore                  | IARKS<br>Phole backfi<br>cuttings                     | illed v        | with   WATER LEVEL (ft.)  |

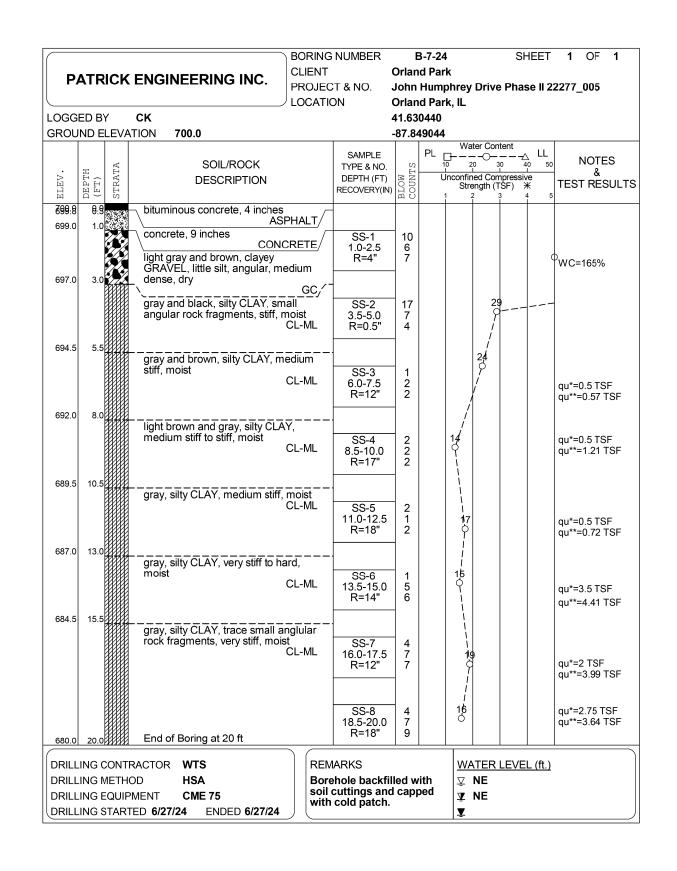
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



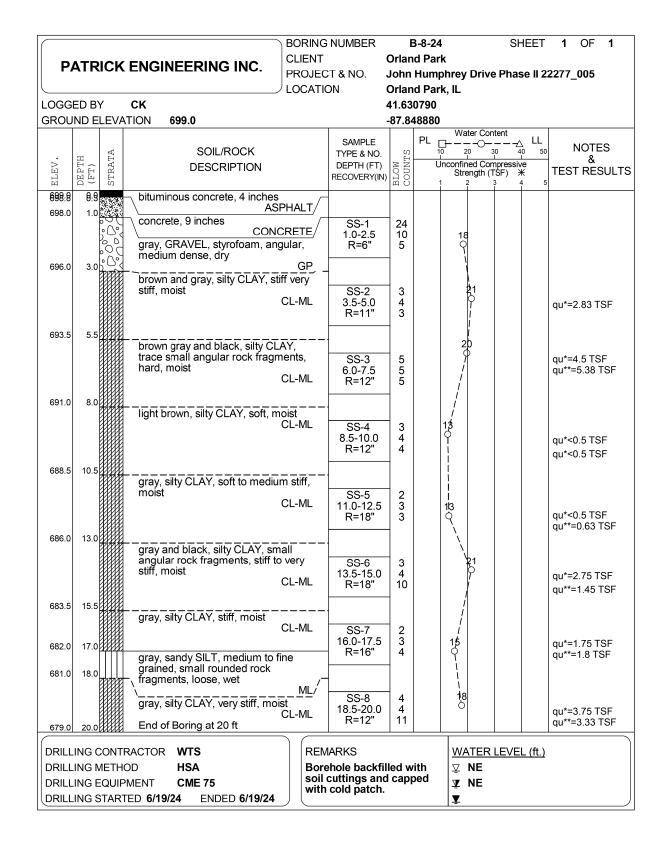


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION





STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

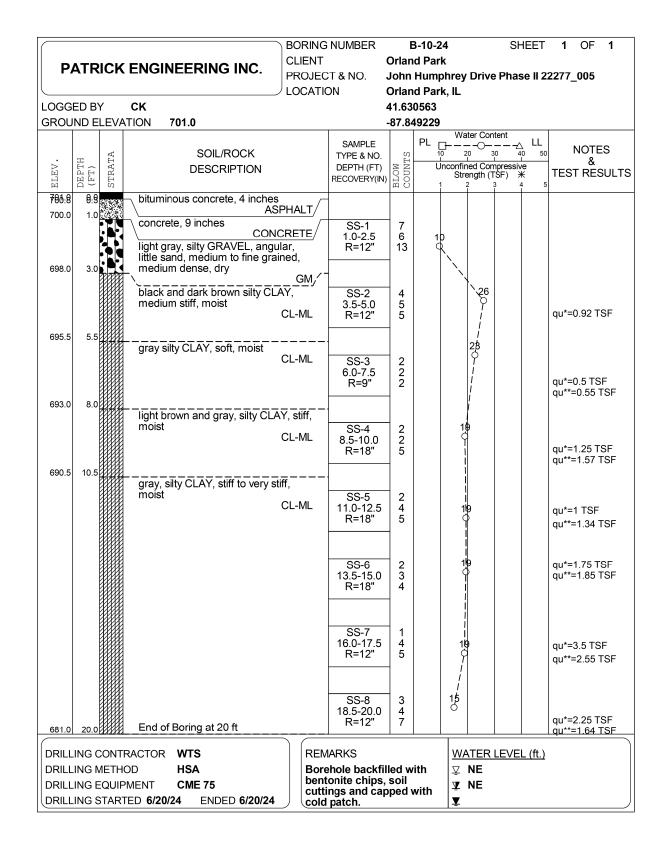


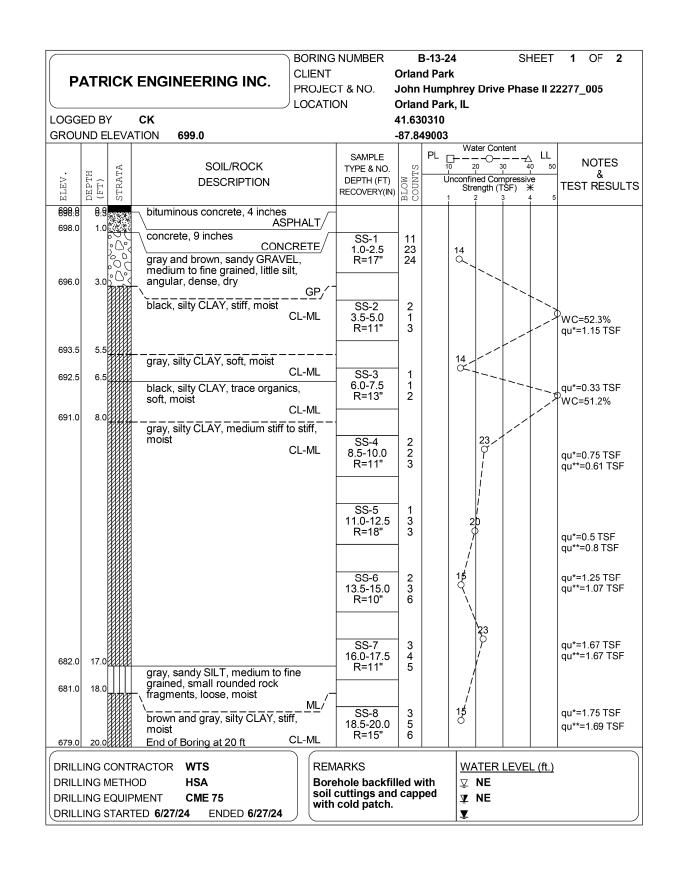
|                |                                 | K ENGINEERING INC.   | CLIENT                 | CT & NO.<br>ON                                       | B-9-24 SHEET 1 OF 1 Orland Park John Humphrey Drive Phase II 22277_005 Orland Park, IL |  |                              |  |  |  |
|----------------|---------------------------------|--|------------------------|--|--|--|------------------------------|--|--|--|
|                | ED BY<br>IND ELEV               | CK<br>/ation 701.0   |                        |  | 41.630<br>-87.84   |  |                              |  |  |  |
| ELEV.          | DEPTH<br>(FT)<br>STRATA         | SOIL/ROCK<br>DESCRIPTION   |                        | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN)   | BLOW   | PL Water Content 10 20 30 Unconfined Compre Strength (TSF) 1 2 3 | NOTES  Ssive  NOTES          |  |  |  |
| 700:8          | 9:9                             | bituminous concrete, 4 inches  | 5                      |  |  |  |                              |  |  |  |
| 700.0          | 1.0                             | AS \ concrete, 9 inches  | SPHALT/                | SS-1   | 19   |  |                              |  |  |  |
| 699.0          | 2.0                             | CON  | CRETE/<br>ium          | 1.0-2.5<br>R=10"                                     | 13   | 12   | qu*=2.5 TSF                  |  |  |  |
| 698.0          | 3.0                             | dark brown, sandy CLAY, me fine grained, very stiff, moist dark brown, sandy CLAY, me fine grained, medium stiff, mo | CL/<br>dium to<br>oist | SS-2<br>3.5-5.0<br>R=7"                              | 12<br>4<br>3   | 14   | qu*=0.5 TSF                  |  |  |  |
|                |                                 |  | CL                     | SS-3<br>6.0-7.5<br>R=10"                             | 2 2 3  | 23   | qu*=0.5 TSF                  |  |  |  |
| 690.5          | 10.5                            |  |                        | SS-4<br>8.5-10.0<br>R=11"                            | 2 2 3  | 1 <del>9</del><br>O  | qu*=0.5 TSF                  |  |  |  |
|                |                                 | dark brown, sandy CLAY, me<br>fine grained, very stiff, moist  | dium to                | SS-5<br>11.0-12.5<br>R=18"                           | 2 3 6  | 119  | qu*=3 TSF<br>qu**=2.68 TSF   |  |  |  |
| 688.0          | 13.0                            | gray, silty CLAY,trace sand, n<br>to fine grained, very stiff to ha<br>moist   | nedium<br>rd,<br>CL-ML | SS-6<br>13.5-15.0<br>R=14"                           | 2<br>6<br>6  | 13   | qu*=2.5 TSF<br>qu**=5.54 TSF |  |  |  |
| 693.0          | 18.0                            |  |                        | SS-7<br>16.0-17.5<br>R=14"                           | 2<br>3<br>7  | 115  | qu*=2.5 TSF<br>qu**=2.66 TSF |  |  |  |
| 683.0<br>681.0 | 18.0                            | gray, clayey SAND, small rou<br>rock fragments, dense, wet<br>End of Boring at 20 ft                                 | nded<br>SC             | SS-8<br>18.5-20.0<br>R=11.5"                         | 4<br>14<br>18  | 18<br>0  |                              |  |  |  |
| DRILL          | ING CON<br>ING METI<br>ING EQUI |  | Bore                   | IARKS<br>hole backfil<br>cuttings and<br>cold patch. | d capp   |  | /EL (ft.)                    |  |  |  |

| USER NAME  | = | dtroyer            | DESIGNED | - | KJP | REVISED | - |
|------------|---|--------------------|----------|---|-----|---------|---|
|            |   |                    | CHECKED  | - | AMK | REVISED | - |
| PLOT SCALE | = | 0:2.0000 ':" / in. | DRAWN    | - | RMH | REVISED | - |
| PLOT DATE  | = | 12/03/24           | CHECKED  | - | AMK | REVISED | - |
|            |   |                    |          |   |     |         |   |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

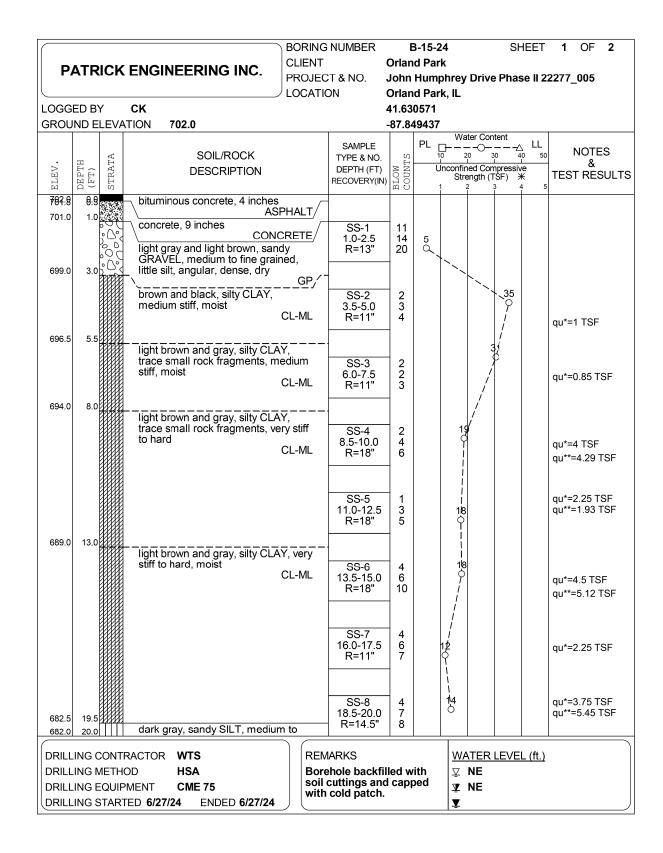
kro-nw hentley com:natrickro-nw-07\Documents\Orland Park/22277 005\12 Desirn\17 3 C4DD\SHEFTS\016D010-143\HD-PSE





STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

| BORING LOGS (9 - 11) | F.A.J. | SECTION | COUNTY | SHEET | SHEET | OF | SHEETS | SHEET | OF | SHEETS | SHEETS



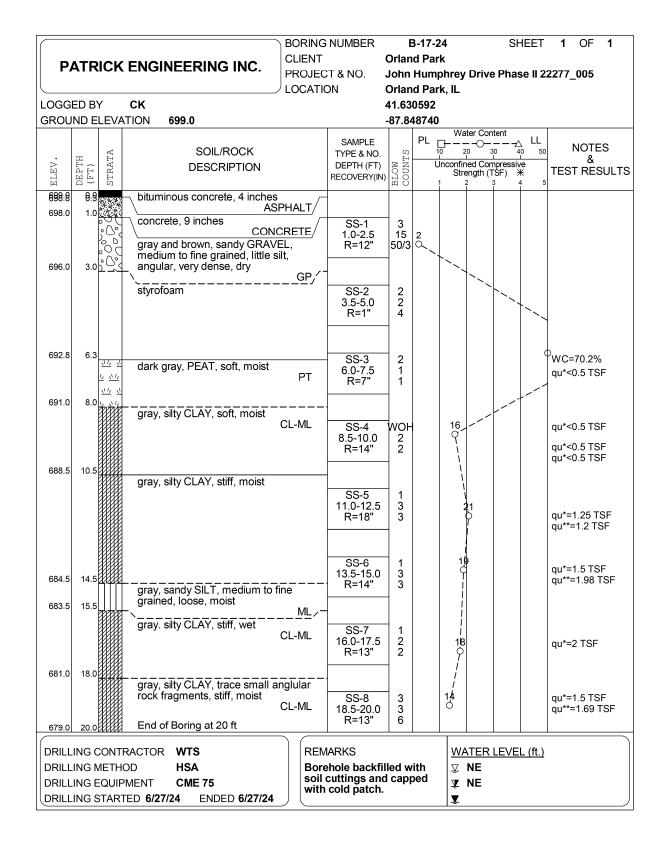
|                |            |              | ENGINEERING INC.  | BORING<br>CLIENT<br>PROJEC<br>LOCATIO | T & NO.<br>ON                                      | Orlan<br>John<br>Orlan | nd Park        | t<br>hrey Dr |      |              | 2 OF 2<br>2277_005 |
|----------------|------------|--------------|---|---------------------------------------|--|------------------------|----------------|--------------|------|--------------|--------------------|
| LOGG<br>GROU   |            |              | CK<br>ation 702.0   |                                       |  | 41.63                  | 30571<br>49437 |              |      |              |                    |
| ELEV.          | DEPTH (FT) | STRATA       | SOIL/ROCK<br>DESCRIPTION  |                                       | SAMPLE<br>TYPE & NO.<br>DEPTH (FT)<br>RECOVERY(IN) | JW<br>JNTS             | PL _           | nconfined (  | 30 4 | 10 50<br>Ve  | &<br>TEST RESULT   |
| 682.0          | 20.0       |              | fine grained, trace small roun rock fragments, medium densemble.  End of Boring 20 ft | ded<br>se, wet<br>ML                  |  |                        |                |              |      |              |                    |
| DRILL<br>DRILL | ING N      | METH<br>QUIF | RACTOR WTS<br>OD HSA<br>PMENT CME 75<br>TED 6/27/24 ENDED 6/27/24                     | Bore<br>soil<br>with                  | IARKS chole backfil cuttings and cold patch.       | led w<br>I cap         | vith<br>ped    | WATE V NE    |      | <br> L (ft.) |                    |

USER NAME = dtroyer DESIGNED - KJP REVISED -REVISED -CHECKED - AMK PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -PLOT DATE = 12/03/24 CHECKED - AMK REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION COUNTY **BORING LOGS (10 – 11)** 1600 16-00078-00-CH COOK 228 **EXPANDED POLYSTYRENE FILL** CONTRACT NO. 61K89

12/3/2024 3:08:11 PM



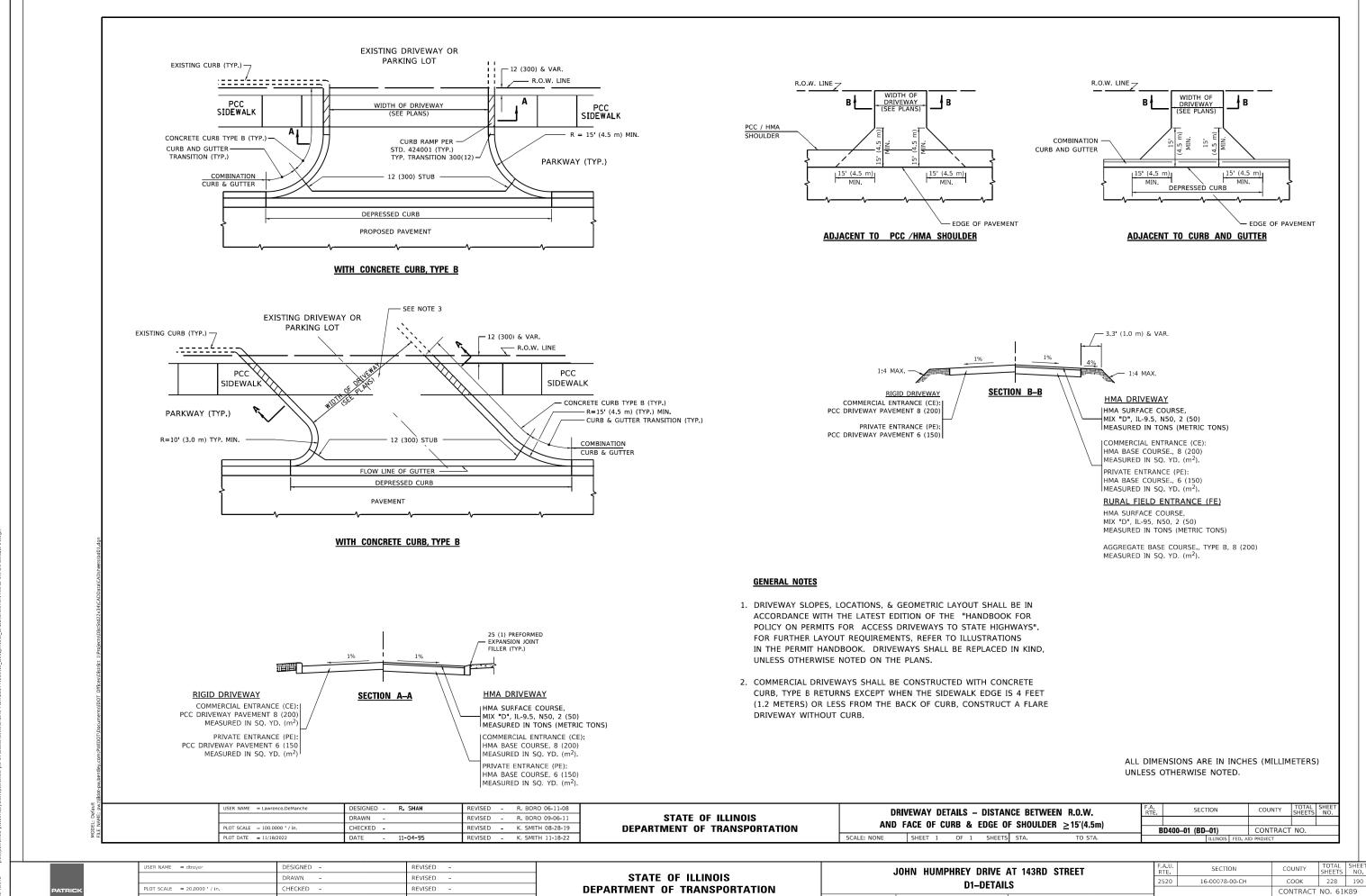
USER NAME = dtroyer DESIGNED - KJP REVISED -CHECKED - AMK REVISED -PLOT SCALE = 0:2.0000 ':" / in. DRAWN - RMH REVISED -PLOT DATE = 12/03/24 CHECKED - AMK REVISED \_

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

BORING LOGS (11 - 11) **EXPANDED POLYSTYRENE FILL** 

SECTION COUNTY 1600 16-00078-00-CH COOK 228 CONTRACT NO. 61K89

12/3/2024 3:08:46 PM



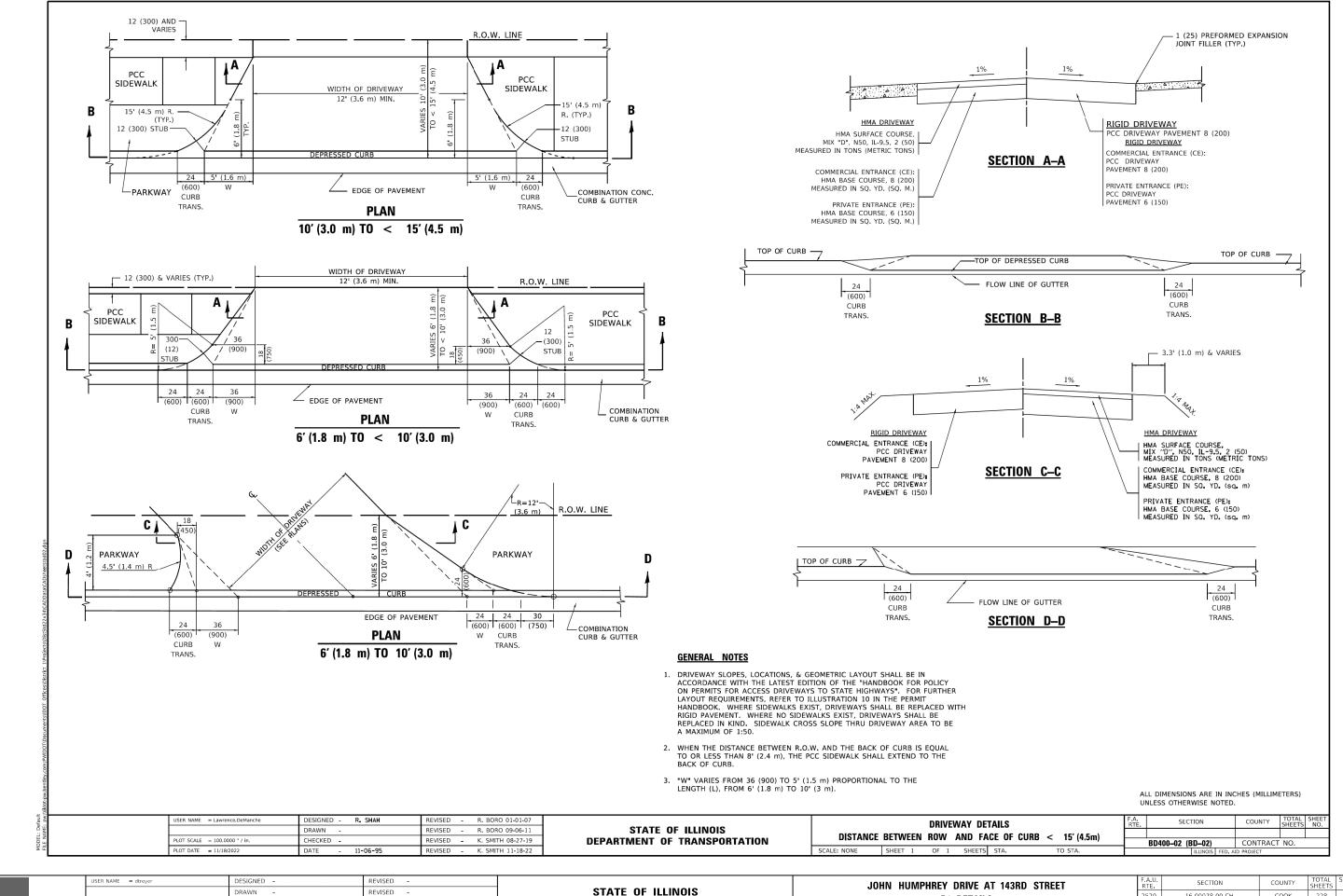
SCALE: 1" = 20' SHEET

PLOT DRIVER = \$PLTDRVL\$
PEN TABLE = \$PENTBLL\$
FILE MAME = now/toatrickro.now heartflow ro

LOT DATE = 12/3/2024

DATE

REVISED



PEN TABLE = \$PENTBLL\$
FILE NAME = pw:\\patrickco-pw.bentley.com

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOHN HUMPHREY DRIVE AT 143RD STREET

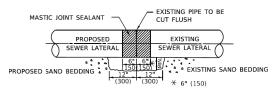
D1-DETAILS

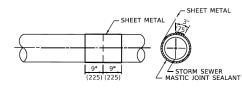
SCALE: 1" = 20' SHEET OF SHEETS

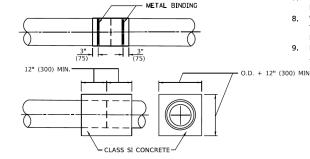
# **DETAIL** "A"

CONCRETE COLLAR

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

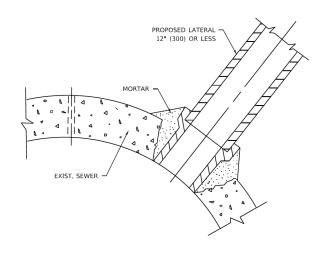






#### CONSTRUCTION SEQUENCE

- 1. CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- 2. APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12' x 6' (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERANCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT. STARTING AT THE TOP OF THE PIPE.
- 6. LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- 9. PLACE CLASS SI CONCRETE AROUND THE



### DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

# CLASS SI CONCRETE COLLAR

**DETAIL** "B"

#### **NOTES:**

#### **MATERIAL**

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

#### **CONSTRUCTION METHODS**

- I. THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- II. CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS: A) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE
  - B) PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

#### **GENERAL**

- 1. CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.
- 2. CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

#### **BASIS OF PAYMENT**

- 1. TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS, THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.
- 2. REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.
- 3. TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.
- 4. CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

\* ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

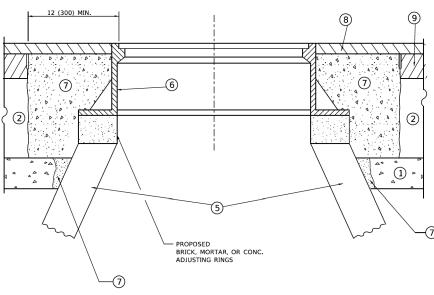
| USER NAME = Lawrence.DeManche | DESIGNED - M. DE YONG | REVISED - R. SHAH 09-09-94  |                              |             | DETAIL OF STORM SEWER            | F.A.<br>RTF | SECTION           | COUNTY S   | FOTAL SHEET  |
|-------------------------------|-----------------------|-----------------------------|------------------------------|-------------|----------------------------------|-------------|-------------------|------------|--------------|
|                               | DRAWN -               | REVISED - R. SHAH 10-25-94  | STATE OF ILLINOIS            |             |                                  | 1112        |                   | -          | TILLETS INO. |
| PLOT SCALE = 100.0000 ' / in. | CHECKED -             | REVISED - R. SHAH 06-12-96  | DEPARTMENT OF TRANSPORTATION |             | CONNECTION TO EXISTING SEWER     |             | D500-01 (BD-07)   | CONTRACT N | NO.          |
| PLOT DATE = 11/18/2022        | DATE - 07-25-90       | REVISED - K. SMITH 11-18-22 |                              | SCALE: NONE | SHEET 1 OF 1 SHEETS STA. TO STA. |             | ILLINOIS FED. AII | D PROJECT  |              |

DESIGNED -REVISED DRAWN REVISED HECKED REVISED LOT DATE = 12/3/2024 REVISED DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

JOHN HUMPHREY DRIVE AT 143RD STREET D1-DETAILS SCALE: 1" = 20' SHEET SHEETS

SECTION 16-00078-00-CH COOK 228 192 CONTRACT NO. 61K89



# DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

#### NOTES

- 1. EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER. REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.
- IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.
- CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.
- 4. THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
- 5. THE CONTRACTOR SHALL REMOVE ALL TRAFFIC CONTROL DEVICES BY THE END OF EACH WORK SHIFT.

#### CONSTRUCTION PROCEDURES

#### STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12 (300) OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE.
- C) COVER THE STRUCTURE OPENING WITH A 36 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND HMA SURFACE MIX APPROVED BY THE ENGINEER. (MIN. 3 (80) HMA TO REMAIN AFTER MILLING).

#### STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION.
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-2\* CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- \*UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER."

#### LEGEND

- ① SUB-BASE GRANULAR MATERIAL
- 6 FRAME AND LID (SEE NOTES)
- 2 EXISTING PAVEMENT
- 7 CLASS PP-2\* CONCRETE
- 3 36 (900) DIAMETER METAL PLATE
- PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- 8 PROPOSED HMA SURFACE COURSE
- HMA SURFACE MIX

  (5) EXISTING STRUCTURE
- 9 PROPOSED HMA BINDER COURSE

#### **LOCATION OF STRUCTURES**

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

#### **BASIS OF PAYMENT**

- REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."
- THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.
- 3. NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.
- 4. WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

PATRICK

| USER NAME = dtroyer          | DESIGNED - | REVISED - |
|------------------------------|------------|-----------|
|                              | DRAWN -    | REVISED - |
| PLOT SCALE = 20.0000 ' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 12/3/2024        | DATE -     | REVISED - |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

|                 | JOHN HU | IMPHREY | DRIVE A  | AT 143RD STREET |  |
|-----------------|---------|---------|----------|-----------------|--|
|                 |         | D       | 1-DETAIL | S               |  |
| SCALE: 1" = 20" | SHEET   | OF      | SHEETS   |                 |  |

| F.A.U.<br>RTE | SECT     | COUNTY             | TOTAL<br>SHEETS | SHE        |    |    |   |
|---------------|----------|--------------------|-----------------|------------|----|----|---|
| 2520          | 16-00078 | 3-00-CH            | соок            | 228        | 19 | 13 |   |
|               |          | CONTRACT NO. 61K89 |                 |            |    |    |   |
|               |          | THUMOTO            | CED AL          | D. DDOJECT |    |    | _ |

nous = pw:\patrickco-pw.bentley.com:patrickco-pw-07\Documents\Orland Park

REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."

## **BASIS OF PAYMENT**

- 1. REFER TO SECTION 442 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL."
- 2. SAW CUT/SCORING OF EXISTING HMA OVERLAY IS INCLUDED IN THE COST OF PAVEMENT PATCHING.
- 3. SAW CUT/SCORING OF EXISTING PAVEMENT IS INCLUDED IN THE COST OF PAVEMENT PATCHING.

★ SEE TYPICAL SECTIONS FOR

THICKNESS AND MATERIALS

HMA REMOVAL OVER PATCHES \* AND HMA REPLACEMENT OVER PATCHES FOR PATCHING FIRST CONSTRUCTION 6 (150) MIN. -FOR PATCHING FIRST CONSTRUCTION SAW CUT/SCORING EXIST, HMA OVERLAY, TYPICAL. TOP OF EXIST. HMA -OR MILLED SURFACE CLASS C OR CLASS D PATCH OF THE THICKNESS SPECIFIED 12 (300) SAW CUT/SCORING, TYPICAL **EXISTING PAVEMENT** PROPOSED UNSUITABLE SUBGRADE REMOVAL AND REPLACEMENT UTILITY OR STORM SEWER TRENCH (IF PATCH IS DUE TO UTILITY OR SEWER WORK, THE WIDTH OF THE FULL DEPTH PATCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH).

## SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

## **SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

- 1. MILL HMA FIRST IF THERE IS AT LEAST 4½ INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

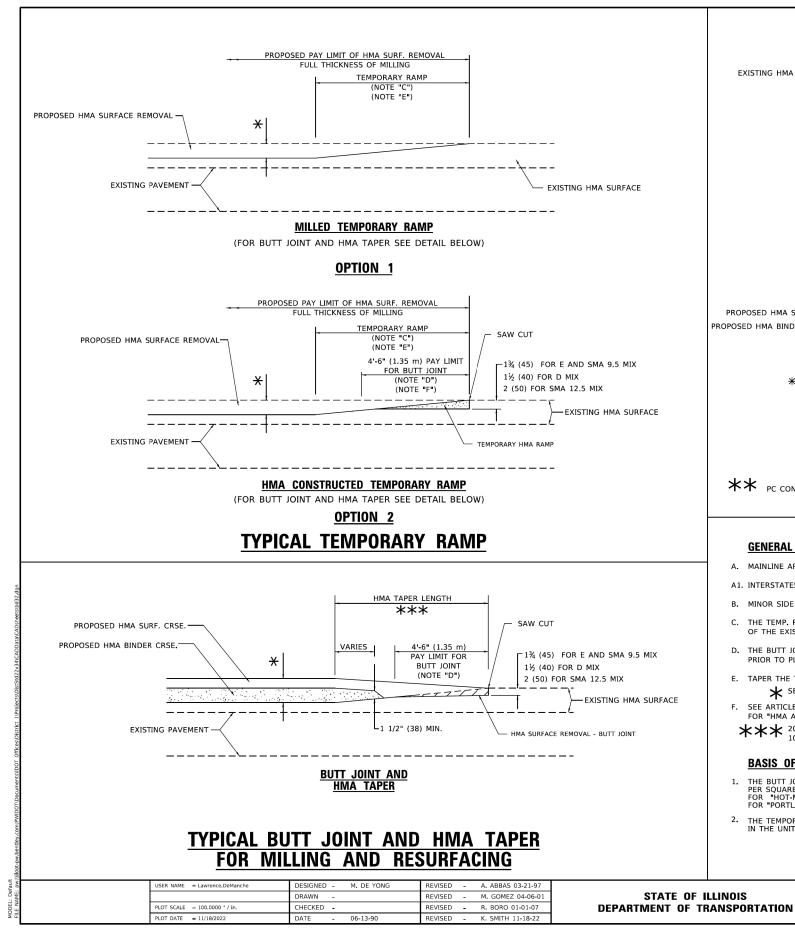
| USER NAME = Lawrence.DeManche | DESIGNED - R. SHAH | REVISED - R. BORO 01-01-07  |                              |             | PAVEMENT PATCHING FOR    | R       | F.A.     | SECTION          | COUNTY      | TOTAL SHE   | ET       |
|-------------------------------|--------------------|-----------------------------|------------------------------|-------------|--------------------------|---------|----------|------------------|-------------|-------------|----------|
|                               | DRAWN -            | REVISED - R. BORO 09-04-07  | STATE OF ILLINOIS            |             |                          |         | IXIL.    |                  | +           | SITEE IS IN | <u></u>  |
| PLOT SCALE = 100.0000 ' / in. | CHECKED -          | REVISED - K. ENG 10-27-08   | DEPARTMENT OF TRANSPORTATION |             | HMA SURFACED PAVEMEN     | 11      | <b> </b> | BD400-04 (BD-22) | CONTRACT    | NO.         | $\dashv$ |
| PLOT DATE = 11/18/2022        | DATE - 10-25-94    | REVISED - K. SMITH 11-18-22 |                              | SCALE: NONE | SHEET 1 OF 1 SHEETS STA. | TO STA. |          | ILLINOIS FED.    | AID PROJECT |             |          |
|                               |                    |                             |                              |             |                          |         |          |                  |             |             | _        |

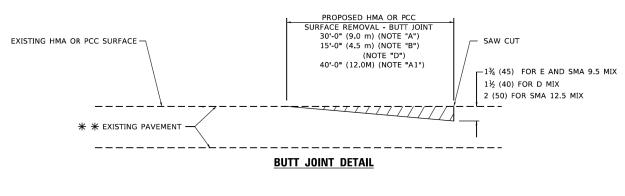
DESIGNED -REVISED -DRAWN -REVISED -HECKED -REVISED LOT DATE = 12/3/2024 DATE REVISED -

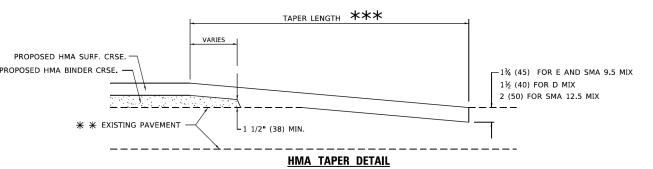
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

JOHN HUMPHREY DRIVE AT 143RD STREET D1-DETAILS SCALE: 1" = 20' SHEET SHEETS

SECTION 16-00078-00-CH COOK 228 194 CONTRACT NO. 61K89







# TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\*\* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT

#### **GENERAL NOTES**

- A. MAINLINE ARTERIAL ROADWAYS AND MAJOR SIDE ROADS.
- A1. INTERSTATES
- B. MINOR SIDE ROADS.
- C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- TAPER THE TEMP. RAMP AT A RATE OF 3' 4" (1.02m) PER 1 INCH (25 mm) OF MILLING THICKNESS. \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

\*\*\* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### **BASIS OF PAYMENT**

- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT"
- 2. THE TEMPORARY RAMP AND SAW CUT SHALL BE INCLUDED IN THE UNIT COST FOR HMA OR PCC SURFACE REMOVAL-BUTT JOINT.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

SECTION COUNTY **BUTT JOINT AND HMA TAPER DETAILS** CONTRACT NO BD400-05 BD-32 OF 1 SHEETS STA.

SER NAME = dtroyer DESIGNED -REVISED -DRAWN -REVISED -HECKED -REVISED LOT DATE = 12/3/2024 DATE

STATE OF ILLINOIS

JOHN HUMPHREY DRIVE AT 143RD STREET D1-DETAILS SCALE: 1" = 20' SHEET

SECTION COUNTY 16-00078-00-CH COOK 228 195 CONTRACT NO. 61K89

**DEPARTMENT OF TRANSPORTATION** 

#### SECTION A-A

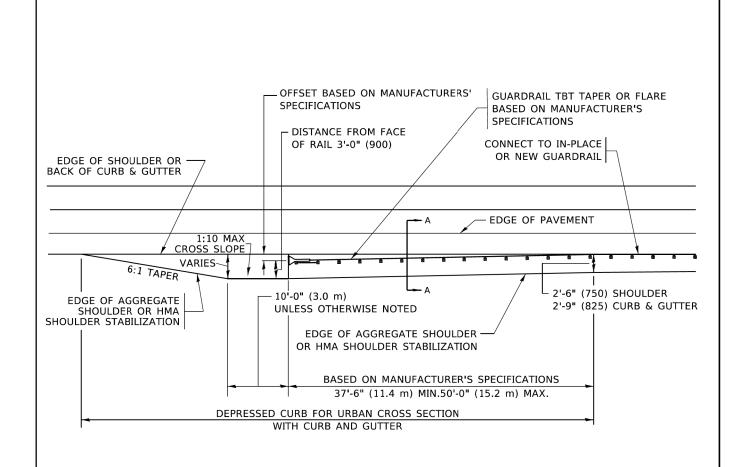
#### NOTES:

- 1. THE AGGREGATE SHOULDER, 10 (250) OR HMA SHOULDER, 6 (150) (IF REQUIRED) SHALL EXTEND UNDER THE TRAFFIC BARRIER TERMINAL.
- 2. "EXISTING" GUARDRAIL REFERS TO CONNECTING TERMINAL SECTION TO GUARD RAILING PRIOR TO THE MIDWEST GUARDRAIL SYSTEM.
- 3. THE CONTRACTOR SHALL VERIFY THE TYPE/HEIGHT OF GUARDRAIL IN-PLACE BEFORE ORDERING THE NEW TERMINAL SECTION. COST INCLUDED WITH THE COST OF THE TERMINAL. THE EXISTING GUARDRAIL HEIGHT SHALL TRANSISTION TO MATCH THE NEW TERMINAL END SECTION AND SHALL BE PAID FOR AS VERTICAL ADJUSTMENT OF EXISTING GUADRAIL.

DETAILS FOR STEEL PLATE BEAM

GUARD RAIL ADJACENT TO CURB AND GUTTER

[FOR ROADWAY SPEED 35 MPH (60 kmh) TO 45 MPH (70 kmh)]



# DEPRESSED CURB AND GUTTER AND SHOULDER TREATMENT AT TBT TY. 1 SPL.

AGGREGATE SHOULDER, 10 (250) WILL BE PAID ACCORDING TO SECTION 481.

HMA SHOULDERS 6 (150) (IF REQUIRED) WILL BE PAID ACCORDING TO SECTION 482.

COMB. CONC. C&G, STEEL PLATE BEAM GUARD RAIL AND TRAFFIC BARRIER TERMINAL, OF THE TYPE SPECIFIED WILL BE PAID FOR SEPARATELY.

TBT = TRAFFIC BARRIER TERMINAL

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| USER NAME = Lawrence.DeManche | DESIGNED - M. DE YONG | REVISED | - | R. BORO 09-14-200 |
|-------------------------------|-----------------------|---------|---|-------------------|
|                               | DRAWN -               | REVISED | - | R. BORO 08-06-201 |
| PLOT SCALE = 100.0000 ' / in. | CHECKED -             | REVISED | - | R. BORO 05-08-201 |
| PLOT DATE = 11/18/2022        | DATE - 09-22-90       | REVISED | - | K. SMITH 11-18-22 |

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

| SHOULDER TREATMENT AT TBT TY.1 SPL.  SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA. | DE          |       |      |     |    |         |       |    | GUTTER AND |
|---|-------------|-------|------|-----|----|---------|-------|----|------------|
| SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.                                      |             | эпооі | LDEN | INC | ΑI | IVICIVI | AI II | DI | IT, I SPL  |
|   | SCALE: NONE | SHEET | 1    | OF  | 1  | SHEET   | S STA | ۸. | TO STA.    |

| F.A.<br>RTE. | SECT        | ПОИ      | COUNTY       | TOTAL<br>SHEETS | SHEET<br>NO. |  |  |  |  |  |  |
|--------------|-------------|----------|--------------|-----------------|--------------|--|--|--|--|--|--|
| l            |             |          |              |                 |              |  |  |  |  |  |  |
|              | BD600-10 (B | D-34)    | CONTRACT NO. |                 |              |  |  |  |  |  |  |
|              |             | ILLINOIS | ID PROJECT   |                 |              |  |  |  |  |  |  |

EN TABLE = \$PENTB

 USER NAME
 = dtroyer
 DESIGNED
 REVISED

 DRAWN
 REVISED

 PLOT SCALE
 = 20,0000 ' / in.
 CHECKED
 REVISED

 PLOT DATE
 = 12/3/2024
 DATE
 REVISED

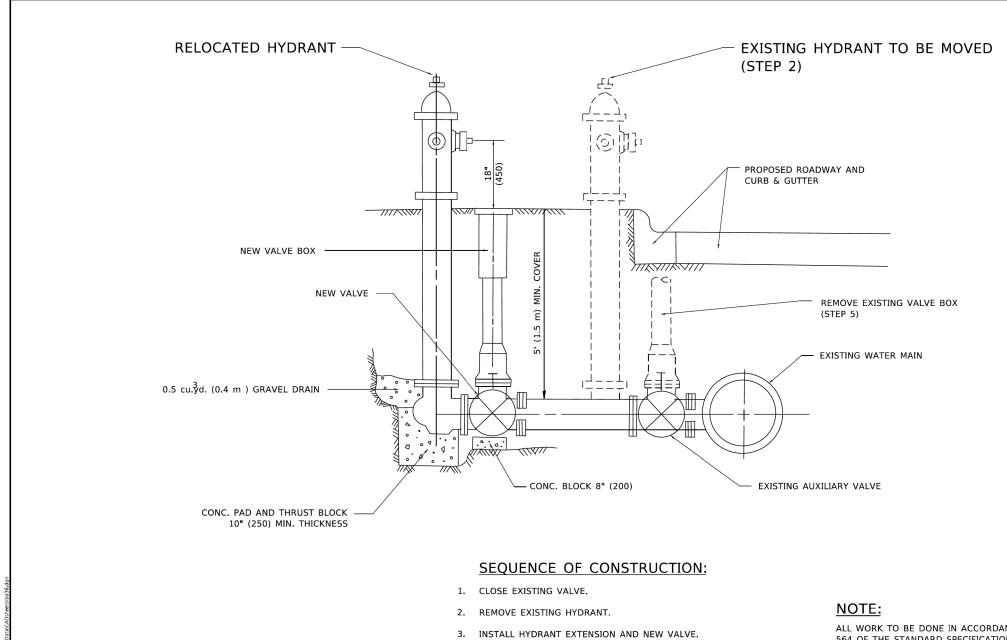
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JOHN HUMPHREY DRIVE AT 143RD STREET

D1-DETAILS

SCALE: 1" = 20' SHEET OF SHEETS

F.A.U. SECTION COUNTY TOTAL SHEET NO. 2520 16-00078-00-CH COOK 228 196 CONTRACT NO. 61K89



- 4. RELOCATE EXISTING HYDRANT.
- 5. OPEN EXISTING VALVE, REMOVE BOX.
- . BACKFILL.
- FLUSH AND TEST FOR CHLORIDE RESIDUAL AND PROVIDE TEST.

ALL WORK TO BE DONE IN ACCORDANCE WITH SECTION 564 OF THE STANDARD SPECIFICATIONS. NEW VALVE AND BOX SHALL BE SAME MAKE AND MODEL AS EXISTING.

# FIRE HYDRANT TO BE MOVED

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

| USER NAME = Lawrence.DeManche | DESIGNED - | REVISED - R. SHAH 09-09-94  |                              |             |                          |         | F.A.<br>RTE. | SECTION         | COUNTY      | TOTAL SHEET  <br>SHEETS NO. |
|-------------------------------|------------|-----------------------------|------------------------------|-------------|--------------------------|---------|--------------|-----------------|-------------|-----------------------------|
|                               | DRAWN -    | REVISED - R. SHAH 10-25-94  | STATE OF ILLINOIS            |             | FIRE HYDRANT TO BE MOVED |         |              |                 |             |                             |
| PLOT SCALE = 100.0000 ' / in. | CHECKED -  | REVISED - K. SMITH 11-18-22 | DEPARTMENT OF TRANSPORTATION |             | <del>,</del>             |         | BI           | D-36            | CONTRACT    | NO.                         |
| PLOT DATE = 11/18/2022        | DATE -     | REVISED -                   |                              | SCALE: NONE | SHEET 1 OF 1 SHEETS STA. | TO STA. |              | ILLINOIS FED. A | AID PROJECT |                             |
|                               |            |                             |                              |             |                          |         |              |                 |             |                             |

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

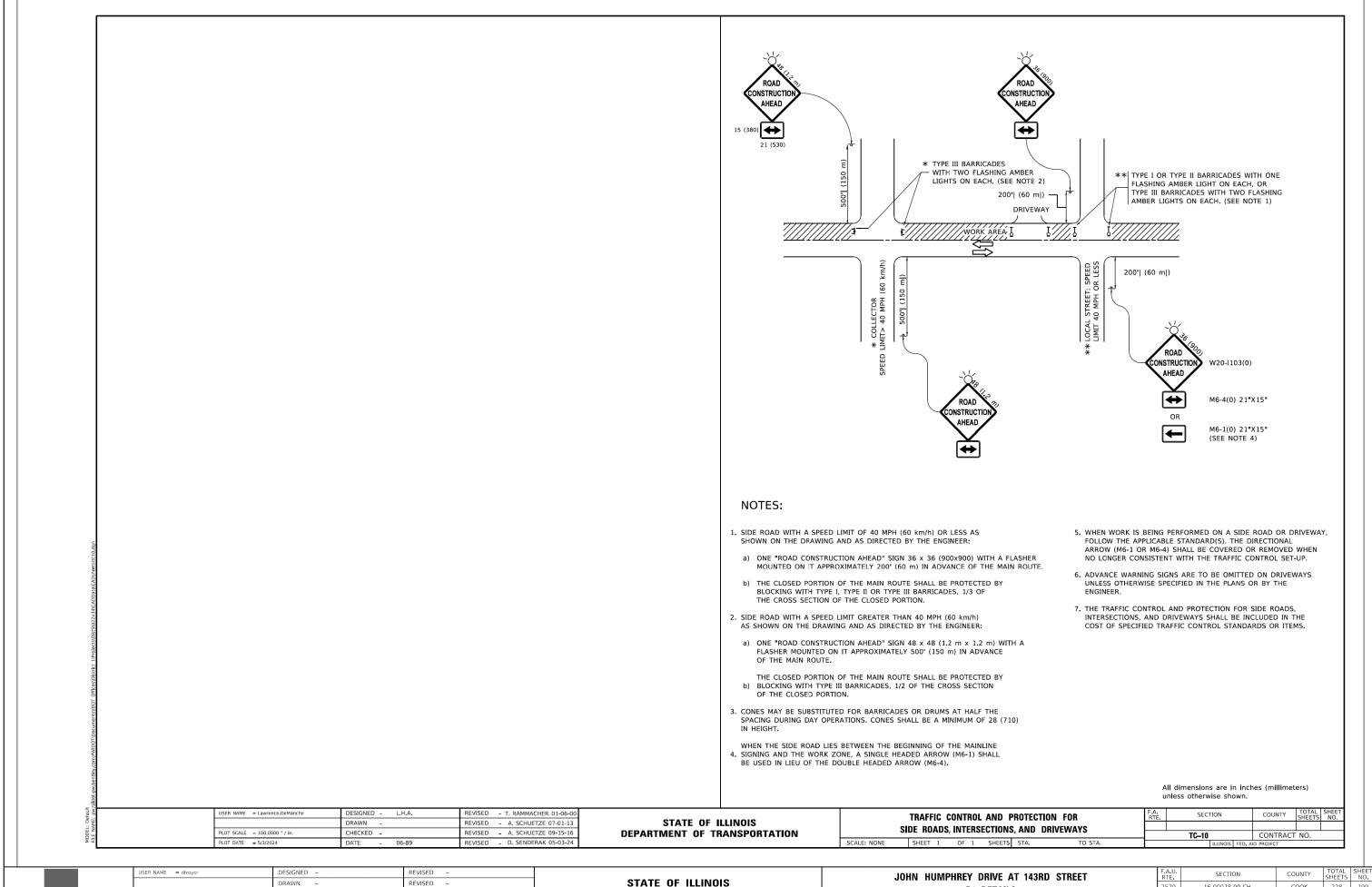
PEN TABLE = \$PENTBLL\$
FILE NAME = pw:\\patrickco-pw.bentley.com:patrickco-pw-07\\Doc

LOT SCALE = 20.0000 ' / in. CHECKED -REVISED PLOT DATE = 12/3/2024 DATE REVISED -

**DEPARTMENT OF TRANSPORTATION** 

SCALE: 1" = 20' SHEET

CONTRACT NO. 61K89

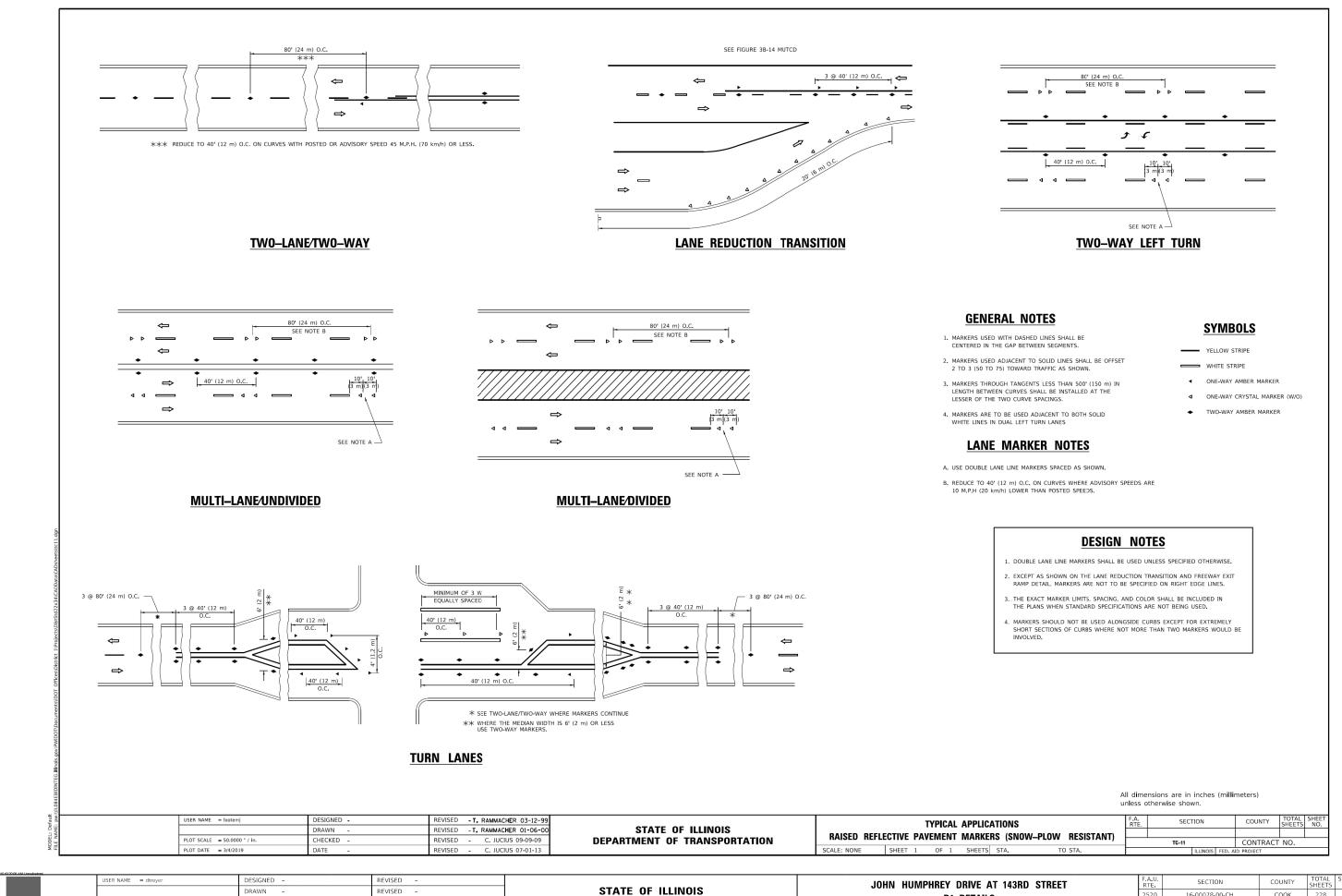


LOT SCALE = 20.0000 ' / in. HECKED REVISED LOT DATE = 12/3/2024 DATE REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

D1-DETAILS SCALE: 1" = 20' SHEET

16-00078-00-CH COOK 228 199 CONTRACT NO. 61K89



CHECKED REVISED LOT DATE = 12/3/2024 DATE REVISED -

**DEPARTMENT OF TRANSPORTATION** 

D1-DETAILS SCALE: 1" = 20' SHEET

16-00078-00-CH COOK 228 200 CONTRACT NO. 61K89