

# Appendix "A"

## ROAD USE AGREEMENT

THIS AGREEMENT effective this 12<sup>th</sup> day of November, 2013 (the "Effective Date")

B E T W E E N :

**THE CORPORATION OF THE COUNTY OF MIDDLESEX**  
(hereinafter referred to as the "County")

OF THE FIRST PART

- and -

**JERICO WIND, INC.**  
a corporation established under the laws  
of the Province of New Brunswick  
(hereinafter referred to as "Jericho")

OF THE SECOND PART

### WHEREAS:

- A. the County is a municipal corporation with the meaning of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended, is governed by Warden and Council and operated by Administration, which is hereby authorized to administer this Agreement in its entirety, including but not limited to decisions with respect to the operation and termination of this Agreement in accordance with its provisions;
- B. the County exercises jurisdiction with respect to approval of certain activities with respect public rights of way, highways, streets, sidewalks, walkways, driveways, ditches and boulevards within the County of Middlesex;
- C. Jericho is a wind farm owner/operator, has a current registered corporate identity in New Brunswick; has an office and mailing address at 390 Bay Street, Suite 1720, Toronto, ON M5H 2Y2; and is operational out of 700 Universe Blvd., Juno Beach, Florida 33408;
- D. Jericho is the owner of the Wind Project, as defined herein;
- E. Jericho is the owner of the Power Purchase Agreement for the Wind Project, all assets of the Wind Project, as provided in the Jericho Asset Document, which is attached hereto as Schedule "A", forms a part of this Agreement but shall be treated as confidential between the parties to extent possible under Applicable Law;
- F. the County owns the roads identified in the Approved Road Use Plans, which is attached hereto as Schedule "B" and forms a part of this Agreement;

- G. Jericho wishes to make use of certain roads located in the County of Middlesex to allow for construction, operation and maintenance of the Wind Project and to deliver components and materials thereto;
- H. pursuant to section 50(3)(d.1) of the *Planning Act*, as amended, the Parties may enter into an agreement that has the effect of granting a use of or right in land directly or by entitlement to renewal for a period of more than twenty-one years;
- I. the County and Jericho enter into this Agreement with respect of the use, installation, construction, maintenance and operation of certain Transmission Infrastructure on, over, under and within the Road Allowances, as defined herein;
- J. subject to Provincial legislation and Ontario Energy Board Approval, and the terms and conditions set forth below with respect to the use of County Road Allowances, the County acknowledges Jericho's right to install, construct, maintain, operate and decommission such Transmission Infrastructure over, along, across or under Road Allowances;
- K. subject to obtaining an access/work permit from the County for non-electricity transmission related work, Jericho shall have the right to temporarily reconstruct or realign certain portions of the Road Allowances to permit delivery or movement of oversized Wind Project components, including wind turbine blades, tower sections and nacelles;
- L. subject to obtaining an access permit from the County, Jericho shall have the right to connect access roads from Wind Project turbines to the Road Allowances to permit ongoing access to the wind turbines during Wind Project operations; and
- M. Jericho warrants that all times throughout the Term of this Agreement, including its option periods, it shall retain assets which have a minimum value of \$5 million dollars.

**NOW THEREFORE THIS AGREEMENT WITNESSETH THAT**, in consideration of the payment of the sum of TWO DOLLARS (\$2.00) from each Party to the other and other good and valuable consideration, including the terms, covenants and provisions herein, the receipt and sufficiency of which is hereby acknowledged and agreed, the Parties covenant and agree as follows:

**A. INTERPRETATION**

- 1. The above recitals are true and the same are hereby incorporated into this Agreement by reference.
- 2. Each obligation of the Parties hereto contained in this Agreement, even if not specifically expressed as a covenant, shall be considered for all purposes to be a covenant. Each covenant in this Agreement is a separate and independent covenant and a breach of covenant by any Party will not relieve any other Party from its obligation to perform each of its covenants; except as otherwise provided herein.

## Definitions

3. In this Agreement, in addition to terms defined elsewhere in this Agreement, the following terms have the following meanings:
- (a) **“Agreement”** means this Agreement, including all Schedules, as it may be confirmed, amended, modified, supplemented or restated by written agreement between the Parties.
  - (b) **“Anti-Bribery Laws”** mean any anti-bribery law or international convention, as may apply now or in the future, including the Canadian Corruption of Foreign Public Officials Act, the U.S. Foreign Corrupt Practices Act, the U.K. Bribery Act and the OECD Convention on Combating Bribery of Foreign Public Officials.
  - (c) **“Applicable Law”** means all present or future applicable laws, statutes, regulations, treaties, judgments and decrees and all present or future applicable published directives, rules, policy statements and orders of any Public Authority and all applicable orders and decrees of courts and arbitrators of like application to the extent, in each case, that the same are legally binding on the Parties in the context of this Agreement.
  - (d) **“Appropriate Emergency Service Providers”** means those emergency service providers set out in **Schedule “C”**, which is attached hereto and forms a part of this Agreement;
  - (e) **“Approved Road Use Plans”** means the diagrams attached as **Schedule “B”** hereto depicting the location of and other aspects in relation to Transmission Infrastructure in Road Allowances, as approved by the County Engineer prior to the execution of this Agreement.
  - (f) **“As-Built Plan”** means a Plan following the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure confirming the exact location and specifications of any Transmission Infrastructure installed over, along, across, under or within the Road Allowances.
  - (g) **“Business Day”** means any day excluding a Saturday, Sunday or statutory holiday in the Province of Ontario, and also excluding any day on which the principal chartered banks located in the Municipality of Strathroy-Caradoc are not open for business during normal banking hours.
  - (h) **“Commercial Operation Date”** means the Commercial Operation Date as defined in the Power Purchase Agreement, as defined herein.
  - (i) **“County Engineer”** means the individual designated to serve in that position for the Corporation of the County of Middlesex duly passed via municipal by-law.

- (j) **“Deliveries”** means the transporting of materials, components and equipment including overweight or over-size cargoes across or along Road Allowances, to provide for the construction, maintenance, repair, replacement, relocation or removal of wind turbines and other infrastructure for the Wind Project.
- (k) **“Easement Rights”** means the right to place, install, construct, re-construct, inspect, maintain, operate, alter, enlarge, repair, replace, relocate and remove Transmission Infrastructure over, along, across, within or under the Road Allowances provided for this Agreement.
- (l) **“Entrance(s)”** means one or more points of access across and through the Road Allowances from the travelled portion of the Road Allowances connecting to private lands beyond and certain access roads in and upon adjacent lands used in connection with the Wind Project, which has been approved by the County Engineer
- (m) **“Entrance Work”** means the constructing and maintaining of Entrances to private wind turbine access roads.
- (n) **“Municipal Infrastructure”** means structures, services or facilities of any kind owned or operated by or for the benefit of the County, including drains, water mains and culverts.
- (o) **“Parties”** means the County and Jericho collectively, and **“Party”** means any one of them.
- (p) **“Permits”** means those permits required to be obtained by Jericho from the County for the purposes of performing the Work and for the purposes of use of the Road Allowances, along with all requirements for the issuance of such Permits and all fees associated with such Permits, as set out in the Permits and Fees Document, which is attached hereto as **Schedule “D”** and forms a part of this Agreement.
- (q) **“Plan”** means a detailed plan drawn to scale, which:
  - (i) identifies the location, size and elevation of the Transmission Infrastructure;
  - (ii) demonstrate that the installation of the Transmission Infrastructure will comply with applicable safety, technical and regulatory standards and the requirements of Applicable Law;
  - (iii) show the Road Allowances where the installation of Transmission Infrastructure is proposed and the location of the proposed Transmission Infrastructure or part thereof together with specifications relating to the proposed Transmission Infrastructure or part thereof; and
  - (iv) shows the “no winter maintenance” Road Allowances within the County.



- (r) **“Plans”** means more than one Plan, as defined herein, referred to collectively.
- (s) **“Power Purchase Agreement”**, (sometimes hereinafter **“PPA”**) means the Feed-In Tariff Contract made between Jericho and the Ontario Power Authority, including any amendments or renewals thereof.
- (t) **“Public Authority”** means any governmental, federal, provincial, regional, municipal or local body having authority over the County, Jericho, the Wind Project, the Transmission Infrastructure or the Road Allowances.
- (u) **“Repair Work”** means work involving the maintenance, repair and replacement of the Wind Project, including the maintenance, repair and replacement of installed Transmission Infrastructure and Entrances that does not cause the location, elevation, position, layout or route of the Transmission Infrastructure or Entrances to materially change.
- (v) **“Road Allowances”** means public rights of way, road allowances, streets, sidewalks, highways, walkways, driveways, ditches and boulevards and the allowances therefor, and includes all existing infrastructure located on or within the Road Allowances, all owned, or managed under the legal jurisdiction of the County as shown in the Approved Road Use Plans (**Schedule “B”**).
- (w) **“Secured Party”** or **“Secured Parties”** means Jericho’s lenders, from time to time.
- (x) **“Transmission”** means the conveyance of electricity at voltages in excess of 50 kilovolts.
- (y) **“Transmission Infrastructure”** means infrastructure conveying electricity at voltages in excess of 50 kilovolts and includes all structures, equipment or other things used for that purpose including, but not limited to, a line or lines of towers and/or poles, with such wires and/or cables for the transmission of electricity at voltages in excess of 50 kilovolts, and all necessary and proper foundations, safety barriers, footings, cross arms and other appliances, facilities and fixtures for use in connection therewith including without limitation, pads, vaults and junction boxes manholes, handholes, conduits, fiber optics, cables, wires, lines and other conductors of any nature, multiple above or below ground control, communications, data and radio relay systems, and telecommunications equipment, including without limitation, conduits, fiber optics, cables, wires and lines.
- (z) **“Transmission Infrastructure Work”** means the installing, constructing, operating, inspecting, maintaining, altering, enlarging, repairing, replacing, relocating and removing of Transmission Infrastructure over, along, across, within or under the Road Allowances in connection with the Wind Project.
- (aa) **“Tree Work”** means the cutting, trimming, removing or replacing of trees or bushes growing in or extending into, over or under the Road Allowances.

- (bb) **“Wind Project”** means the 150 megawatt renewable energy generating facility known as Jericho Wind Energy Centre and its appurtenant wind turbines, equipment, buildings and Transmission Infrastructure, a portion of which is to be constructed in the County of Middlesex for the purpose of supplying electricity in accordance with the PPA.
- (cc) **“Work”** means all work required to be performed by Jericho pursuant to the terms of this Agreement, including, but not limited to, all Deliveries, Transmission Infrastructure Work, Entrance Work, Tree Work, and Repair Work.

## **Schedules**

4. The following schedules to this Agreement are an integral part of this Agreement:

### **Schedule “A”**

#### **Jericho Asset Document**

Shows type and value of all current assets owned by Jericho

### **Schedule “B”**

#### **Approved Road Use Plans**

Geographically shows the location of the Wind Project; municipal description and location of County Road Allowances (including those Road Allowances which are not subject to winter maintenance); and particulars with respect of the route of Transmission Infrastructure, including but not limited to location of poles , engineering details of poles (type, material, size, foundation, construction methods, guying details.), electrical transmission line arrangement (height of cables, vertical clearances, expected cable sag/sway, etc.), and the location of any alteration of the County Road Allowances in relation to the installation of said transmission facilities (ditch grading and guardrails).

### **Schedule “C”**

#### **Appropriate Emergency Service Providers**

### **Schedule “D”**

#### **Permits and Fees**

Shows all Permits and fees required to be applied for and obtained by Jericho from the

County, including but not limited to  
Oversize/Overweight Permits, Entrance  
Permits, Drain Crossing Permits, Road  
Occupation/Excavation Permits

**Schedule “E”**

Rights and Remedies afforded to Secured  
Parties

**Statutory Rights**

5. The Parties agree that nothing contained in this Agreement shall abrogate or prejudice any statutory rights held by any Party under any applicable statute, including but not limited to the *Municipal Act, 2001*, as amended, the *Ontario Energy Board Act, 1998*, as amended, the *Green Energy and Green Economy Act, 2009*, as amended and the *Electricity Act, 1998*, as amended.

**B. GRANT OF PERMISSION**

**Term**

6. The rights provided for in this Agreement shall be for a term which is the greater of: (i) thirty (30) years from the Effective Date plus an option in favour of Jericho to extend the term of this Agreement for two (2) further ten (10) year periods, or (ii) from the Effective Date to the expiry of the term of the PPA and any extensions thereof, together with such additional time (not to exceed nine (9) months) as may be reasonably required to complete the decommissioning of the Wind Project, (hereinafter, the “**Term**”).

**Grant of Easement**

7. The County hereby grants and transfers to Jericho for the duration of the Term, the non-exclusive right, privilege, interest, benefit and easement to enter upon and use the Road Allowances as identified in the Approved Road Use Plans (**Schedule “B”**) with such persons, vehicles, equipment and machinery as may be necessary for the purpose of placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure and the right to perform Work over, along, across, within or under the Road Allowances in connection with the Wind Project, subject to the following conditions:

*Prior Approvals*

- (a) Jericho, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over,

along, across, within or under the Road Allowances, shall obtain the approval of any Public Authority required by or have the authority pursuant to Applicable Law in connection with such activity.

*Notice*

- (b) Jericho shall make its best effort, prior to the installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over, along, across, within or under the Road Allowances, to provide notice of all other existing Road Allowance users of the aforementioned installation, placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure over, along, across, within or under the Road Allowances.

*Transmission Infrastructure Placement*

- (c) All Transmission Infrastructure shall be installed above-grade within the Road Allowances in the location specified in the Approved Road Use Plans (**Schedule “B”**) within a reasonable error range and supported by stand facilities (poles) at an appropriate elevation to avoid incompatibilities and/or conflicts with other existing infrastructure;

*Distance from Travelled Portion and Property Line*

- (d) The Parties agree that Jericho shall make commercially reasonable efforts to install Transmission Infrastructure in the following locations within the Road Allowances:
  - (i) in locations between the outer limit of the travelled portion of the relevant Road Allowance and the property line of the Road Allowance;
  - (ii) at depths and/or elevations within the relevant Road Allowance to avoid incompatibilities and/or conflicts with existing infrastructure and, using commercially reasonable efforts, to avoid incompatibilities and/or conflicts with currently planned infrastructure; and
  - (iii) in consistent locations within the Road Allowances such that the number of road crossings is minimized.

*Permits/Fees*

- (e) Jericho will obtain all Permits from the County and pay the appropriate fees associated with obtaining the same, which fees are shown in the Permits and Fees Document (**Schedule “D”**). The County shall issue all such Permits within the timelines set out in the County’s by-laws or in the relevant statutes or regulations or thirty (30) days following receipt from Jericho of its applications and fees,

whichever is less, and, without limiting the generality of the foregoing, in respect of grading, guardrails and culverts related to the Transmission Infrastructure, shall issue the applicable work permit on the basis of standards typically applied in accordance with the Road Safety Manual;

*Legal Compliance*

- (f) All actions of Jericho and the County shall be in compliance with Applicable Law;

*Insurance Coverage*

- (g) Jericho agrees that prior to the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances, Jericho shall arrange for and maintain commercial general liability insurance (hereinafter, the “CGL”), insuring Jericho and naming the County as an additional insured. The CGL shall provide, at a minimum limits of liability, not less than five million dollars (\$5,000,000.00) per incident and in the aggregate. In addition, the CGL shall contain a cross liability and severability of interest clause and provide for a minimum of ten (10) days’ notice of cancellation of the CGL. Jericho shall upon written request thereof, deliver to the County, from time to time and in any event prior to commencement of the Work, a copy of a certificate of insurance evidencing that the CGL is in full force and effect.

*Commencement of Work*

- (h) Prior to the commencement of any Work, Jericho shall document, by means of a video recording or other means satisfactory to the County, acting reasonably, the then-existing condition of all Road Allowances or structures that Jericho expects will or may be used for or subject to Work, and both Parties shall receive a complete copy of such video recording or document;
- (i) Jericho agrees to maintain the surface of the Road Allowances for a period of twelve (12) months following the Commercial Operations Date and restore the surface of the Road Allowance to at least the same condition as prior to the commencement of any Work, except in the cases where the alteration to the untraveled portion of the Road Allowance forms part of the Work;
- (j) Jericho agrees the Easement Rights shall be exercised and carried out in a good, safe and workmanlike manner;
- (k) Jericho shall be responsible for any damage caused to the Road Allowances at any time by itself, its agents, employees or contractors and for removing all debris from the work area following the undertaking of any of the Easement Rights contemplated herein;

- (l) Jericho shall make commercially reasonable efforts to protect the integrity and security of all existing equipment, installations, utilities, and other facilities within the Road Allowance or which might otherwise be located in, on, or under the Road Allowances or any adjacent lands;
- (m) Jericho shall make all payments and taking all such steps as may be reasonably necessary to ensure that no construction lien or other lien is registered against the Road Allowances as a result of the undertaking by Jericho of any of the Easement Rights or any other work contemplated in this Agreement and taking such steps as may be required to cause any such registered lien or claim for lien to be discharged or vacated immediately after notice thereof from the County is provided to Jericho.

### **Non-Exclusive Permission**

- 8. The Easement Rights provided for in this Agreement shall constitute a non-exclusive easement. Without limiting the foregoing, the Easement Rights are subject to the rights of the owners of the property adjoining the Road Allowances who are entitled access to and from the Road Allowances from their properties, and subject to the rights and privileges that the County may grant to other persons on the Road Allowances, all of which rights are expressly reserved, the rights shown on the Approved Road Use Plans and As-Built Plan and specifications only excepted. Jericho hereby acknowledges and agrees that there are other utilities and third parties that do and/or may have similar rights over the Road Allowances and Jericho hereby agree to make commercially reasonable efforts to accommodate the interests of other third parties when exercising the Easement Rights.
- 9. In respect of and without limiting the foregoing, Jericho agrees that when engaging in any Work, it shall use commercially reasonable efforts to ensure there is minimal interference with the traveled portion of any Road Allowances or any pedestrian, vehicular, or other traffic thereon, or any use or operation of any ditch or drain adjacent to such public right-of-way, highway, street, or walkway. Unless otherwise agreed by the County, the Road Allowances shall always be open to pedestrian, vehicular or other traffic and shall be open to the public. Without limiting the generality of the foregoing, Jericho shall be entitled to temporarily close any of the Road Allowances with the prior written consent of the County Engineer, which consent shall not be unreasonably withheld, delayed or conditioned. Jericho agrees that it shall reimburse the County for all reasonable costs associated with services rendered for traffic control purposes, and/or the erection of road closures/barriers required during the period in which Work is being performed, including but not limited to during decommissioning periods. If Jericho proposes the temporary closure of a Road Allowance, it shall also provide written notice to the Appropriate Emergency Service Providers.

### **Right of Entry**

- 10. The County reserves its right to enter upon and use the Road Allowances without notice to Jericho for its own purposes and to grant and transfer rights to third parties to enter

upon and use the Road Allowances to construct, operate, maintain, alter, repair or relate infrastructure, and to modify the Road Allowances, provided such entry, use, grant or transfer by the County does not adversely affect the Transmission Infrastructure, the Work, the Wind Project or the exercise of Jericho's rights under this Agreement.

## **Title**

11. The County represents that:

- (a) it has legal and beneficial title to the Road Allowances;
- (b) it has obtained the full and unconditional due authorization for execution and delivery of this Agreement by all required resolutions and other required municipal approvals;
- (c) it shall defend its title to the Road Allowances against any person or entity claiming any interest adverse to the County in the Road Allowances during the Term of this Agreement, save and except where such adverse interest arises as a result of the gross negligence or willful misconduct of Jericho or any person for which they are responsible at law;
- (d) the Permits are the only permits, approvals, consents or authority within the jurisdiction of the County required in connection with the Work and the fees as set forth in **Schedule "D"** attached hereto are the only fees payable by Jericho in connection with the Permits; and
- (e) the execution and delivery of this Agreement by the County will not result in a breach of any other agreement to which the County is a party and no rights, interests or privileges have been granted in respect of the Road Allowances by the County which will or could adversely affect the rights, interests or privileges granted to Jericho hereunder.

## **Transmission Infrastructure at Expense of Jericho**

12. Notwithstanding and without limiting any other term hereof, Jericho agrees and undertakes that all Transmission Infrastructure over, along, across, within or under the Road Allowances will be placed, installed, constructed, re-constructed, inspected, maintained, operated, altered, enlarged, repaired, replaced, relocated and removed at its own expense and in accordance with good engineering practices, and in compliance with Approved Road Use Plans, this Agreement and Applicable Law.

## **C. ADDITIONAL TERMS AND CONDITIONS RE EASEMENT RIGHTS**

### **Road Closure**

13. The County agrees, in the event of closing of any Road Allowances, to give Jericho reasonable notice of such closing and to provide Jericho with a further easement over that part of the closed Road Allowances, sufficient to allow Jericho to preserve any part of the

Transmission Infrastructure in its then existing location, and to enter upon the closed Road Allowances to maintain and repair such part of the Transmission Infrastructure.

### **Traffic Effects**

14. Notwithstanding and without limiting any other term hereof, the Parties acknowledge that the Work from time to time may require the temporary modification of traffic patterns or the imposition of temporary restrictions on public access to or use of the Road Allowances (“**Traffic Effects**”). In the event that Jericho determine that Traffic Effects are required, Jericho agrees to:
  - (a) give five (5) days’ notice of anticipated Traffic Effects to the County Engineer and affected residents and to coordinate with the County Engineer and the Appropriate Emergency Service Providers to minimize and mitigate any adverse impacts of the Traffic Effects and to ensure public safety; and
  - (b) use reasonable efforts to maintain adequate public access to and use of the Road Allowances while Traffic Effects are in progress and to remove the Traffic Effects as soon as reasonably possible when the Traffic Effects are no longer necessary.

### **Restoration**

15. Jericho further agrees that in the event that it becomes necessary to break, remove, or otherwise pierce the existing surface of any of the Road Allowances or any other municipal lands to undertake any placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure or to undertake any Work over, along, across, within or under the Road Allowances, Jericho in all cases will repair, reinstate and restore such surface at its own expense to the same or better condition which existed prior to the performing of the Work. Jericho also agrees that, except in those cases where breaking, removing or otherwise piercing the untraveled portion of the Road Allowance forms part of the Work, it shall thereafter, for a period of twelve (12) months following the Commercial Operation Date (the “**Interim Period**”), monitor that portion of such restored Road Allowances, at the sole expense of Jericho, and repair any settling thereof directly caused by the placing, installing, constructing, re-constructing, inspecting, maintaining, operating, altering, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure or any of the Work performed over, along, across, within or under the Road Allowances to the satisfaction of the County Engineer, acting reasonably.

### **Repairs**

16. Jericho shall be liable for any and all Repair Work required to be performed on the Transmission Infrastructure or on the Road Allowances due to the existence of the Transmission Infrastructure. Any Repair Work undertaken shall restore the road surface to at least the same condition it was in immediately prior to the use of the Road Allowances by Jericho. In the event that Repair Work is required, Jericho agrees to provide the County with at least five (5) days’ notice that the Repair Work will occur if such Repair Work:



- (a) will have or is likely to have Traffic Effects;
  - (b) will involve or is likely to involve Tree Work;
  - (c) could present a danger to public health and safety; or
  - (d) is located in Entrances.
17. Subject to the provisions of this Agreement and provided that Repair Work on Transmission Infrastructure complies with this Agreement, Jericho shall be entitled to conduct Repair Work on Transmission Infrastructure without prior approval of the County Engineer.

### **Emergency**

18. Notwithstanding any other provision of this Agreement, in the event of any emergency involving the Transmission Infrastructure, Jericho shall notify the Appropriate Emergency Service Providers immediately upon becoming aware of the situation and shall do all that is necessary and desirable to control the emergency, including such work in and to the Transmission Infrastructure or the Road Allowances as may be required for the purpose. If after reasonable and unsuccessful efforts to communicate with the County and in the event the emergency, at Jericho's sole determination, Jericho requires immediate access to Transmission Infrastructure, Jericho may enter upon the subject Road Allowances and/or municipal lands without prior notice to the County in order to gain access to such Transmission Infrastructure in order to address such emergency and, in so doing, shall undertake to rectify the Transmission Infrastructure to the standards and as are otherwise required by the terms of this Agreement and to thereafter provide written notification and details and specification of such Repair Work to the County on the next Business Day and to thereafter file amended Plans and drawings detailing such repairs as is otherwise required by this Agreement. Without limiting the foregoing, subject to resolving to the emergency, Jericho agrees that all work completed under this subsection shall maintain the same location of the Transmission Infrastructure as previously approved by the County.
19. Jericho shall be responsible for all costs associated with such emergencies. The Parties hereby agree to cooperate with each other and with the Appropriate Emergency Service Providers and Hydro One Networks Inc. to develop and adopt protocols applicable in the event of an emergency involving the Transmission Infrastructure.

### **Upgrades Required**

20. In the event that the standard, condition or maintenance of any of the Road Allowances is not sufficient to permit Jericho to carry out its desired operations, Jericho shall be solely responsible for carrying out any work or maintenance required to upgrade the Road Allowances, at its own expense.

### **Locating Infrastructure:**

21. Jericho agrees at its sole expense to:
- (a) mark the location of Transmission Infrastructure installed by Jericho within the Road Allowances with appropriate markings;
  - (b) participate in the “Ontario One Call” system to facilitate ongoing notice to the public of the location of the Transmission Infrastructure; and
  - (c) upon written request of the County, Jericho shall properly and accurately identify the location of any Transmission Infrastructure within the County, and provide such reports to identify the depth of the relevant portion of the Transmission Infrastructure, such request to be made in writing to Jericho with advance notice of twenty (20) days prior to the County or a third party commencing work that may conflict with the Transmission Infrastructure.

### **Relocation of Installed Infrastructure**

#### *Upon Election of Jericho*

22. In the event that Jericho wishes to relocate Transmission Infrastructure which has been previously installed in accordance with this Agreement at 100% its own expense, Jericho shall notify the County of such request, in writing, and such request will thereafter be considered and administered by the County acting reasonably and with diligence giving due consideration to the scope of the works already undertaken by Jericho on the Road Allowances, provided that, in considering and administering such request the County shall be entitled to take into consideration any specific municipal or engineering interests affected by such relocation including any additional facilities located within the Road Allowances. Notwithstanding the foregoing, the County shall not be permitted to unreasonably withhold, delay or condition its approval for such request.

#### *Required by the County*

23. In the event that the County, in conjunction with an approved municipal plan, and acting reasonably, deems it necessary for the location of the Transmission Infrastructure or Entrances (hereafter, “a **General Relocation**”) to be taken up, removed, or modified within the Road Allowances, the General Relocation and any related installation work shall be conducted at the 100% of the expense of Jericho within a reasonable period of time and subject to Force Majeure.
24. Without limiting and in addition to Section 23, in the event that Jericho determines that leave to construct or amendment thereto or any other approval is required from a Public Authority, or any successor thereof, with respect to the proposed General Relocation or related installation work, then the County shall provide such reasonable period of time as is necessary for Jericho to obtain such leave to construct, amendment or other approval before closing or disposing of the Road Allowance, if applicable; provided, however, in the event that any Public Authority’s approval is not provided to Jericho, both Jericho

and the County shall be bound to comply with the determination of the Public Authority and shall modify or discontinue the relocation of the Transmission Infrastructure or Entrances as necessary.

*Required by Legislation or Lawful Order*

25. In the event that a General Relocation is required as a result of the County's compliance with a legislative requirement, Ministerial order or such other law or order of a body which has the ability to force the County to act then the costs of the General Relocation and/or related installation work associated with the installed Transmission Infrastructure shall be performed by Jericho at 100% its cost.

*By Third Party*

26. Where the General Relocation under Section 24 is required due to the County accommodating a third party (hereinafter "**Third Party Work**"), the required General Relocation or related installation work shall be conducted by Jericho in accordance with the terms of this Agreement respecting installation, and the full cost of the amendment or General Relocation shall be borne solely by the third party and paid in advance. The County agrees to provide Jericho with ninety (90) days' notice of the need for any such Third Party Work and to require that the relevant third party or parties bear the full cost of such Third Party Work and indemnify Jericho against all claims and liabilities arising from the amendment or General Relocation as a condition precedent to any such amendment or General Relocation.

*Temporary Reconstruction or Realignment of Road Allowances*

27. Jericho shall, upon reasonable prior notice to the County, have the right to:
- (a) temporarily reconstruct or realign certain portions of the Road Allowances in order to permit the delivery or movement of oversized Wind Project components, including wind turbine blades, tower sections and nacelles; and
  - (b) connect access roads located on private land and running from the Wind Project turbines to the Road Allowances to permit ongoing access to such wind turbines during the period of commercial operation of the Wind Project.

**D. MAINTENANCE, SNOW CLEARANCE AND TREE WORK/REPLACEMENT**

**No County Winter Maintenance**

28. Jericho acknowledges that certain of the Road Allowances, which are clearly identified in the Approved Road-Use Plans (**Schedule "B"**) are not maintained by the County for winter use due to soft surfaces and otherwise. In the event that Jericho requires the Road Allowances to be maintained for winter access, they shall undertake the necessary snow plowing on its own accord and at its expense and shall be responsible for all costs associated with the repair of any Road Allowance damaged as a result of such use by Jericho.

### **Tree Work**

29. Notwithstanding applicable statutory rights, in the event that Jericho deems it necessary to perform any Tree Work, Jericho shall be entitled to conduct the Tree Work. In the event that trees are removed from within the Road Allowances, Jericho agrees at its sole expense, to remove the tree stump to a level below grade and to restore and remediate the surface of the Road Allowance.

### **E. IMPLEMENTATION OF PLANS**

30. Intentionally Deleted

### **Revisions Required**

31. In the event that physical features of the Road Allowances or other obstacles or circumstances frustrate the ability of Jericho to complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlargement, repair, replacement, relocation and removal of Transmission Infrastructure in compliance in all material respects with the Approved Road Use Plans, Jericho agrees to revise the relevant Plans and submit such revised Plans for review by the County Engineer. If a material revision is required, subject to Section 64 of this Agreement, the County agrees to expedite in the instance of a revision of Plans submitted and agrees not to unreasonably condition, delay or withhold approval of revised Plans.

### **Adherence to Approved Road Use Plans**

32. Jericho further agrees to commence, perform and complete the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure in compliance with the Approved Road Use Plans within a reasonable margin of error.

### **Filing of As-Built Plan Following Installation etc.**

33. Following the completed placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure and within one hundred eight (180) days after the Commercial Operation Date, Jericho agree to conduct the necessary investigation necessary to produce and file with the County Engineer an As-Built Plan together with a final electronic copy (CD ROM or DVD) prepared in an AUTOCAD, CAD or GIS environment of the As-Built Plan, showing the exact location and specifications of any Transmission Infrastructure installed over, along, across, under or within the Road Allowances and any Entrances. The Parties agree that the County shall not release of any deposits or securities held until the As-Built Plan is filed.

### **Post-Installation Report and Required Repairs**

34. Following the County Engineer's receipt of notice from Jericho confirming that installation of the placement, installation, construction, re-construction, inspection,

maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances is complete (the “**Completion Notice**”), the County Engineer shall conduct a further inspection and provide a post-installation report (the “**Post-Installation Report**”), which includes the following:

- (a) identification of the Road Allowances which in the opinion of the County Engineer, have been damaged or destroyed by Jericho and its employees, agents or contractors during the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repairing, replacing, relocating and removing Transmission Infrastructure over, along, across, within or under the Road Allowances, hauling, or establishing of Entrances; and
- (b) identification of the repairs, replacements or remedial work necessary to repair the damaged Road Allowances.

The County Engineer’s inspection, for the purposes of producing the Post-Installation Report shall be completed no later than ten (10) business days following receipt by the County of the Completion Notice. Jericho agree to repair any and all damage to the Road Allowances directly caused by the Work in accordance with the Post-Installation Report (hereinafter referred to as the “**Required Repairs**”). In the event Jericho fails to complete the Required Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of Jericho.

#### **Final Condition Report and Final Repairs**

35. Following the expiry of the Interim Period, the County’s Engineer shall forthwith conduct an inspection of the Road Allowances to either (i) confirm its satisfaction that all restoration work has been completed and that the Road Allowances are in the same or better condition which existed prior to the performing of the Work; or (ii) identify those Road Allowances which are not in the same or better condition which existed prior to the performing of the Work and identify the repair, replacement or remedial work required to repair the Road Allowances to the same condition which existed prior to the performing of the Work (the “**Final Condition Report**”). The County Engineer’s inspection, for the purposes of producing the Final Condition Report shall be completed no later than ten (10) Business Days following the expiry of the Interim Period and the Final Condition Report shall be delivered to Jericho not later than ten (10) Business Days following the date of inspection aforesaid. Jericho agrees to repair any damage to the Road Allowances identified in the Final Condition Report (the “**Final Repairs**”) within a reasonable period of time. In the event Jericho fails to complete the Final Repairs in a manner and within a timeframe acceptable to the County Engineer acting reasonably, the County may do so at the sole expense of Jericho.

## **F. COMPENSATION**

### **For Use of Road Allowances**

36. To offset the administrative expenses incurred by the County as a result of the use of its Road Allowances and to further secure covenants of Jericho as set out in this Agreement, Jericho agrees to pay to the County,
- (a) An initial payment of ten thousand dollars (\$10,000.00) within 30 days of the Effective Date of this Agreement, which shall *inter alia*, fully compensate the County for all reasonable out of pocket costs incurred in connection with the preparation and implementation of this Agreement including reasonable legal, engineering and inspection costs; and
- An annual fee in the amount of four thousand dollars (\$4,000.00) per kilometer of transmission lines located on County Road Allowances per year, payable by March 31 of every year during the Term of this Agreement.
- (b) The appropriate permit fees, which fees are shown in the Permits and Fees Document (**Schedule "D"**) with respect to those permits Jericho requires in order to engage in desired actions while using the rights identified in this Agreement.
37. All overdue payments payable by Jericho to the County under the terms of this Agreement shall bear interest at the rate of ten (10%) per cent per annum.

### **First Security Deposit**

38. Prior to the commencement of the Work, Jericho shall deposit with the County an irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the "**First LC**") in the amount of \$250,000, which shall secure the obligations of Jericho pursuant to this Agreement during the initial placement, installation and construction of the Transmission Infrastructure over, along, across, within or under the Road Allowances. Jericho acknowledges and agrees that the County shall be entitled to draw on and use the proceeds from the First LC to complete the Required Repairs if Jericho fails to do so in accordance with Section 34 of this Agreement.

### **Second Security Deposit**

39. Following the completion of any Required Repairs to the satisfaction of the County acting reasonably, the County shall forthwith return the First LC to Jericho and Jericho shall, within five (5) business days of the receipt of the First LC, provide a second irrevocable letter of credit in a form satisfactory to the County and from a financial institution satisfactory to the County, acting reasonably (the "**Second LC**") in the amount of \$125,000, which shall secure the obligations of Jericho with respect to Section 35. Jericho acknowledges and agrees that the County shall be entitled to draw on and use the proceeds of the Second LC to complete the Final Repairs in the event Jericho fails to do so within a reasonable period of time, in accordance with Section 35 of this Agreement.

The County shall return the Second LC to Jericho within five (5) business days following the earlier of, (i) the date on which Jericho notifies the County that the Final Repairs required to be performed by Jericho pursuant to Section 35 have been satisfactorily completed in the opinion of the County, acting reasonably; and (ii) the date which is ninety (90) days following the date of the Final Condition Report.

## **G: LIABILITY**

### **Risk with Jericho**

40. Jericho hereby acknowledges that the placement, installation, construction, re-construction, inspection, maintenance, operation, alteration, enlarging, repair, replacement, relocation and/or removal of any Transmission Infrastructure by Jericho in accordance with the Easement Rights granted hereunder is performed entirely at the risk of Jericho and that the County shall in no way or under any circumstances will be responsible or liable to Jericho or its contractors, agents, or customers for any damage or losses in consequence thereof, unless due to the negligent or intentional acts of the County or those for whom it is at law responsible.

### **Indemnification**

41. Jericho will indemnify and hold harmless the County, its Warden, Councilors, officers, employees, legal counsel, agents and contractors from and against any and all claims, suits, demands, liabilities, losses, costs, damages, and other expenses of every kind that the County may incur or suffer as a direct consequence of the Easement Rights granted hereunder, except where such claims, suits, demands, liabilities, losses, costs, damages, and other expenses result from the negligence or intentional acts of the County, its Warden, Councilors, officers, employees, legal counsel, agents or contractors.

### **No Joint Venture, Partnership or Co-ownership**

42. The Parties hereby acknowledge and agree that this Agreement is solely a road use agreement and that no relationship is formed between the Parties in the nature of a joint venture, partnership co-ownership arrangement or other similar relationship.

## **G. ABANDONMENT AND DECOMMISSIONING OF TRANSMISSION INFRASTRUCTURE**

### **Notice of Abandonment**

43. During the Term of this Agreement, Jericho may elect to permanently discontinue the use of (hereinafter, “**Abandon**”) any part of the Transmission Infrastructure in which event Jericho shall provide written notice specifying the part of the Transmission Infrastructure to be abandoned and the date when the abandonment will occur.

## **Removal**

44. If Jericho Abandons any part or all of the Transmission Infrastructure, it shall decommission and remove in accordance with the Wind Project's decommissioning plan and the Ministry of Environment ("MOE") requirements in Jericho's Renewable Energy Approval ("REA"). Should Jericho fail to decommission and remove the infrastructure as set out above, the County may, to the extent permitted by Applicable Law, retain necessary personnel to remove the infrastructure and Jericho shall compensate the County for 100% of its cost to decommission and remove the infrastructure. This provision shall survive the termination of this Agreement.

## **H. DEFAULT**

### **Breach**

45. Subject to the rights granted to any Secured Parties hereunder or by the County, in the event that a Party commits a material breach of or omits to comply with any of the provisions of this Agreement (the "**Defaulting Party**") which continues for at least sixty (60) days after written notification of such default is provided to the Defaulting Party, the other Party (the "**Complainant**") shall have the right to terminate this Agreement. However, if the Defaulting Party shall have remedied the breach or shall have commenced to remedy the breach and has diligently pursued the remedying thereof within the sixty (60) days after the initial written notification of default, the Defaulting Party shall be allowed not less than one hundred and fifty (150) days after the expiry of the original notice period to remedy the breach, or such longer period of time as is reasonable in the circumstances. In the event of default by Jericho and without such default being rectified within the time period referred to in this section, the County shall have the right to terminate this Agreement

### **Expiration of PPA**

46. Notwithstanding any other term or provision of this Agreement, if the PPA expires or is terminated and not otherwise extended or renewed during the Term of this Agreement, and Jericho does not secure an adequate replacement market for the electricity generated by the Wind Project within ninety (90) days of the expiry or termination of the PPA, this Agreement shall, at the option of Jericho be terminated.

### **Force Majeure**

47. Whenever, and to the extent that a Party will be unable to fulfill or will be delayed or restricted in the fulfillment of any obligations under any provision of this Agreement by reason of:
- (a) strikes;
  - (b) lock-outs;



- (c) war acts of military authority;
- (d) rebellion or civil unrest;
- (e) material or labour shortage not within the control of the affected Party;
- (f) fire or explosion;
- (g) inclement weather, flood, wind, water, earthquake, or other casualty;
- (h) changes in Applicable Law not wholly or mainly within the control of the affected Party, including the revocation by any Public Authority of any permit, privilege, right, approval, license or similar permission granted to Jericho or the Wind Project;
- (i) any event or matter not wholly or mainly within the control of the affected Party (other than lack of funds or any financial condition of the parties hereto); or,
- (j) acts of God,

(in each case a “**Force Majeure**”) not caused by the default or act of or omission by that Party and not avoidable by the exercise or reasonable effort or foresight by it, then, so long as any such impediment exists, that Party will be relieved from the fulfillment of such obligation and the other Party will not be entitled to compensation for any damage, inconvenience, nuisance or discomfort thereby occasioned. The Party relying on Force Majeure will be required and is entitled to perform such obligation within a period of time immediately following the discontinuance of such impediment that is equal to the period of time that such impediment existed. A Party shall promptly notify the other Party of the occurrence of any Force Majeure, which might prevent or delay, that doing or performance of acts or things required to be done or performed.

## **I. MISCELLANEOUS**

### **Assignment**

- 48. Subject to the provisions in other paragraphs of this Agreement, Jericho shall not assign this Agreement without the written consent of the County, which shall not be unreasonably withheld, delayed or conditioned, except that no consent shall be required for Jericho to assign this Agreement to an affiliated or successor entity, or for purposes of securing indebtedness or other obligations respecting the Transmission Infrastructure or the Wind Project. The County acknowledges that a change in control of Jericho shall not be considered an assignment by Jericho of this Agreement or of any of Jericho's rights and obligations under this Agreement.
- 49. Jericho shall be entitled to assign this Agreement and all of its rights thereunder without the consent of the County to the Secured Parties as security for Jericho's obligations to such Secured Parties which shall be further entitled to assign this Agreement and Jericho's rights thereunder in connection with an enforcement of their security. The

County hereby grants to any Secured Party the rights and remedies set forth in this Agreement, including those rights and remedies set forth in **Schedule “E”**. In addition, the County will, from time to time, at the request of the Secured Party, promptly execute and deliver in favour of any Secured Party such consents and acknowledgements granting and confirming the rights and remedies in this Agreement, including those rights and remedies set forth in **Schedule “E”**. The County shall enter into any other reasonable agreements with the Secured Party, as may reasonably be required by Jericho in order to obtain financing from the Secured Party.

50. Jericho shall be entitled, with the written consent of the County, which may not be unreasonably conditioned, delayed, or withheld, to assign this Agreement to a transferee of the Wind Project other than an affiliated or successor company, and Jericho shall thereupon be released from any and all obligations under this Agreement from and after the date of such assignment, provided that such assignee has agreed in writing with the County, in a form acceptable to the assignee and the County, both acting reasonably, to be bound by the provisions of this Agreement from and after the date of the assignment.
51. In the event Jericho applies to the County for consent to a transfer, the County shall have a period of thirty (30) days following receipt of sufficient information to make a determination as to whether the County shall provide or refuse to provide its consent to the proposed transfer. The County’s failure to respond within that thirty (30) day period shall be construed as consent by the County.
52. Any documents relating to a transfer or the County’s consent will be prepared by the County or its solicitors or their retained agents and all of the legal costs borne as a result by the County together with a reasonable administrative charge of One Thousand Dollars (\$1,000) shall be reimbursed to the County by Jericho on demand.

### **Dispute Resolution**

53. In the event that either Party provides the other Party with written notice of dispute regarding the interpretation or implementation of this Agreement (a “**Dispute**”) then both Parties shall use their best efforts to settle the Dispute by consulting and negotiating with each other in good faith to reach a solution satisfactory to both Parties. However, if the Parties do not resolve the Dispute within thirty (30) days following receipt of such notice, then either Party may provide written notice to the other Party (the “**Arbitration Notice**”) requiring resolution by arbitration or thereafter the Dispute shall be referred to arbitration in accordance with the provisions of the *Arbitration Act, 1991*.
54. The Parties agree to the following with respect to any arbitration between the Parties:
  - (a) the arbitration tribunal shall consist of one arbitrator appointed by mutual agreement of the Parties or, if the Parties fail to agree on an arbitrator within ten (10) days after receipt of the Arbitration Notice then either Party may apply to a judge of the Ontario Superior Court of Justice to appoint an arbitrator;
  - (b) The arbitrator shall be qualified by education and training to be able to decide upon the matter to be decided;

- (c) The arbitration shall be conducted in English;
  - (d) The arbitration shall take place in the geographic boundary of the County of Middlesex or another place mutually agreed upon by the Parties;
  - (e) The arbitration award shall be given in writing and shall address the question of costs of the arbitration and all related matters;
  - (f) The arbitration award shall be final and binding on the Parties as to all questions of fact and shall be subject to appeal only with respect to matters of law or jurisdiction.
55. The Parties agree that except to the extent that a matter is specifically the subject of a Dispute, both Parties shall continue to observe and perform the terms and conditions of this Agreement pending the resolution of a Dispute.

#### **Termination by Jericho**

56. Jericho may upon six (6) months' notice in writing, terminate this Agreement. Once the notice has been provided, Jericho shall be liable to the County for the provisions of this Agreement to the date of termination. Following the termination date, Jericho will only be liable for the provisions which survive this Agreement.

#### **Further Assurances**

57. Each of the Parties covenant and agrees with the other that it will at all times hereafter execute and deliver, at the request of the other, all such further documents, agreements, deeds and instruments, and will do and perform all such acts as may be necessary to give full effect to the intent and meaning of this Agreement.

#### **Notices**

58. The parties hereto agree as follows:

Any written notice provided for and contemplated by this Agreement will be delivered to the parties by hand or registered mail at the following addresses:

To the County:                      The Corporation of the County of Middlesex  
   Attention: County Clerk  
   399 Ridout Street North  
   London, ON   N6A 2G7

To Jericho:                              Jericho Wind, Inc.  
   Attention: Business Management  
   390 Bay Street, Suite 1720  
   Toronto, ON, M5H 2Y2, Canada

Phone: (416) 364-9714

With a copy to: Jericho Wind, Inc.  
Attention: General Counsel  
700 Universe Blvd. LAW/JB  
Juno Beach, Florida 33408  
Phone: (561) 691-2359

Every such notice shall be deemed to have been received if personally delivered at the time of such delivery and if sent by prepaid registered mail, at the end of five (5) business days after the mailing thereof.

### **Governing Law**

59. This Agreement shall be governed by, and be construed and interpreted in accordance with, the laws of Ontario and the laws of Canada applicable in Ontario.

### **Counterparts**

60. This Agreement may be executed by facsimile or PDF transmission and in one or more counterparts, all of which shall be considered one and the same Agreement.

### **Binding Covenant**

61. This Agreement and the rights granted hereunder are and shall be of the same force and effect, to all intents and purposes, as a covenant running with the Road Allowances. The provisions of this Agreement, including all of the covenants and conditions herein shall extend, be binding upon and enure to the benefit of the County, Jericho and their respective successors and permitted assigns as the case may be.

### **Severability**

62. The invalidity or unenforceability of any provision of covenant contained in this Agreement shall affect the validity or enforceability of such provision or covenant only and any such invalid provision or covenant shall be deemed to be severable from the balance of this Agreement, which shall be enforced to the greatest extent permitted by law.

### **Amendments to the Agreement**

63. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

### **Amendments to the Approved Road Use Plans**

64. Any material amendment to the Approved Road Use Plans will be submitted to the County Engineer for his approval, who will not unreasonably withhold such approval. The Parties agree that once approved, the amended Approved Road Use Plans shall substitute for, and replace the attached **Schedule "B"** as part of this Agreement.

## **Waiver**

65. No supplement, modification, amendment, or waiver of this Agreement shall be binding unless executed in writing by the Parties.

## **Foreign Corrupt Practices Act and Anti-Bribery Indemnity**

66. Notwithstanding anything to the contrary herein, the County, in its administration of this Agreement, shall refrain from offering, giving or promising, directly or indirectly, money or anything of value to a Canadian or foreign governmental official to influence the official in his or her official capacity, induce the official to do or omit to do an act in violation of his or her lawful duty, or to secure any improper advantage in order to assist in obtaining or retaining business for or with, or directing business to, any person. For the purposes of this Section, **“anything of value”** includes, but is not limited to, cash or a cash equivalent, discounts, gifts, use of materials, facilities or equipment, entertainment, drinks, meals, transportation, lodging, insurance benefits, or promise of future employment. **“governmental official”** shall mean any person holding any level of legislative, administrative, or judicial office of the Canadian or a foreign government or any of its departments or agencies or divisions; any person acting on behalf of the Canadian or a foreign government, including a local or provincial agency, enterprise, or organization; any official or agent of a Canadian or a foreign public administration or publicly funded organization; any official of a Canadian or a foreign political party; any officer or agent of a public international organization (e.g., World Bank, International Monetary Fund, World Health Organization, United Nations, World Trade Organization); or any relatives or close family/household members of any of those listed above. The County shall indemnify and hold harmless Jericho from all claims brought against Jericho as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. The County shall indemnify and hold harmless Jericho from all claims brought against Jericho as a result of the County or its representatives’ failure to comply with Anti-Bribery Law. The County shall immediately report any breach of Anti-Bribery Law by the County or its representatives. Jericho shall have the right to audit the County’s books and records with respect to payments made on behalf of Jericho in the event that Jericho believes that the County has violated this Section 66. Jericho shall have the right to immediately terminate all payments to the County under this Agreement if the County fails to comply with this Section 66.

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals, attested to by the hand of their authorized officers, as the case may be, at London, Ontario, this 12<sup>th</sup> day of November, 2013 to be effective as of the date first written above.

*XB BT*  
SIGNED, SEALED AND DELIVERED  
in the presence of

**THE CORPORATION OF THE  
COUNTY OF MIDDLESEX**

*Brant M. ...*  
\_\_\_\_\_  
Warden

*... ..*  
\_\_\_\_\_  
Clerk

*We have the authority to bind the Corporation*

SIGNED, SEALED AND DELIVERED  
in the presence of

**JERICHO WIND INC.**

\_\_\_\_\_  
Per:

Title:

*I have the authority to bind the Corporation*

IN WITNESS WHEREOF the parties hereto affix their hands and seal or corporate seals, attested to by the hand of their authorized officers, as the case may be, at \_\_\_\_\_, Ontario, this \_\_\_\_ day of \_\_\_\_\_, 2013 to be effective as of the date first written above.

SIGNED, SEALED AND DELIVERED  
in the presence of

**THE CORPORATION OF THE  
COUNTY OF MIDDLESEX**

\_\_\_\_\_  
Warden

\_\_\_\_\_  
Clerk

*We have the authority to bind the Corporation*

SIGNED, SEALED AND DELIVERED  
in the presence of

**JERICO WIND INC.**



\_\_\_\_\_  
Per: F. Allen Wiley

Title: Vice President

*I have the authority to bind the Corporation*

**SCHEDULE "A"**

Jericho Asset Document

[REDACTED]

[REDACTED]

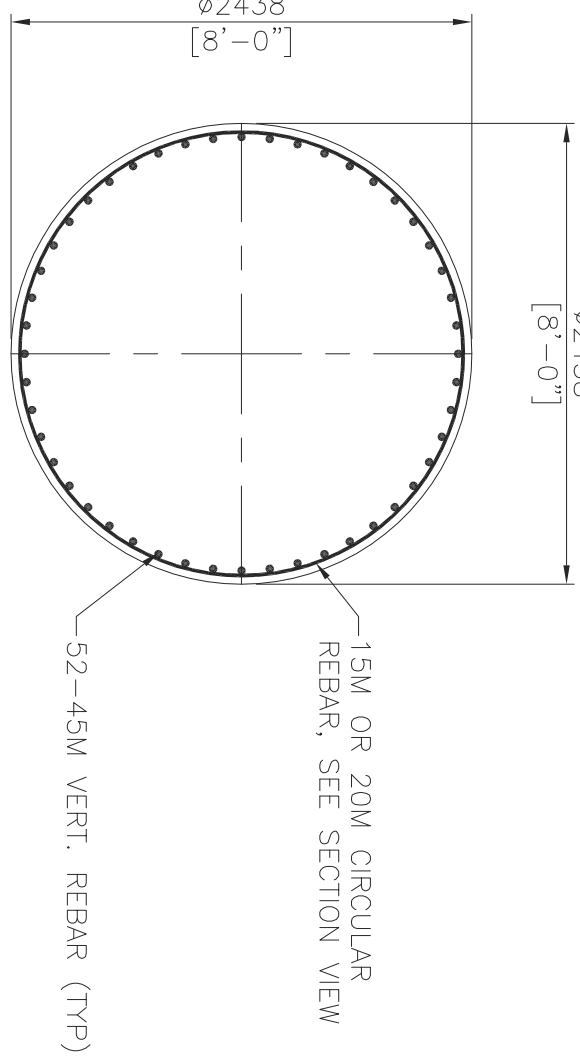
[REDACTED]

***CONFIDENTIAL***

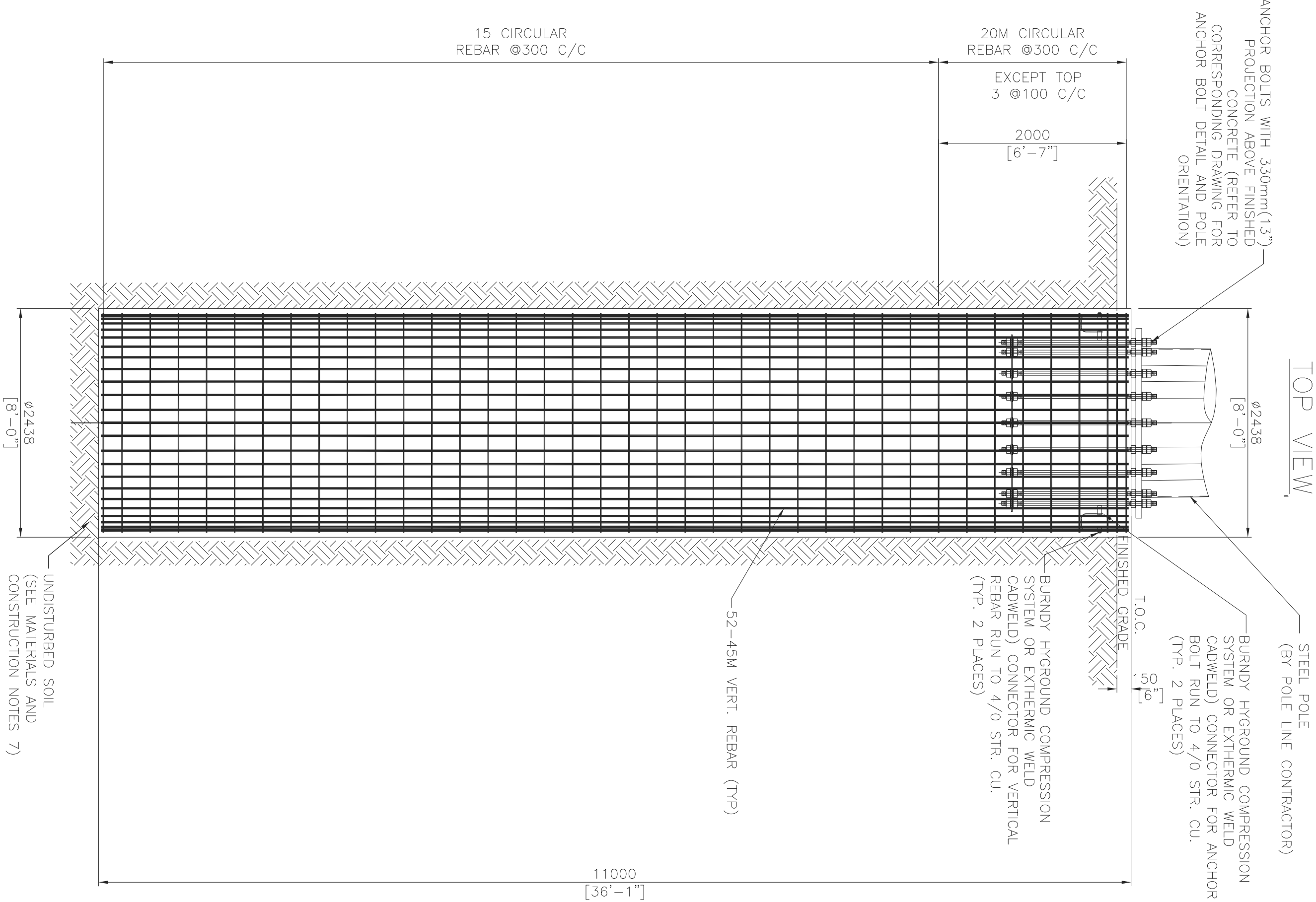


**SCHEDULE “B”**

Approved Road Use Plans



TOP VIEW



SECTION VIEW

TYPICAL DETAILS FOR  
POLE FOUNDATION TYPE B

GENERAL NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG#1235-3-P012), ANCHOR BOLT DRAWINGS AND STAKING INFORMATION.
- FOR POLE FRAMING DETAILS, SEE DWG#1235-3-T00X SERIES.
- FOR POLE FOUNDATION DETAILS, SEE DWG#1235-3-F001 AND 1235-3-F002.
- ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

DESIGN ASSUMPTION

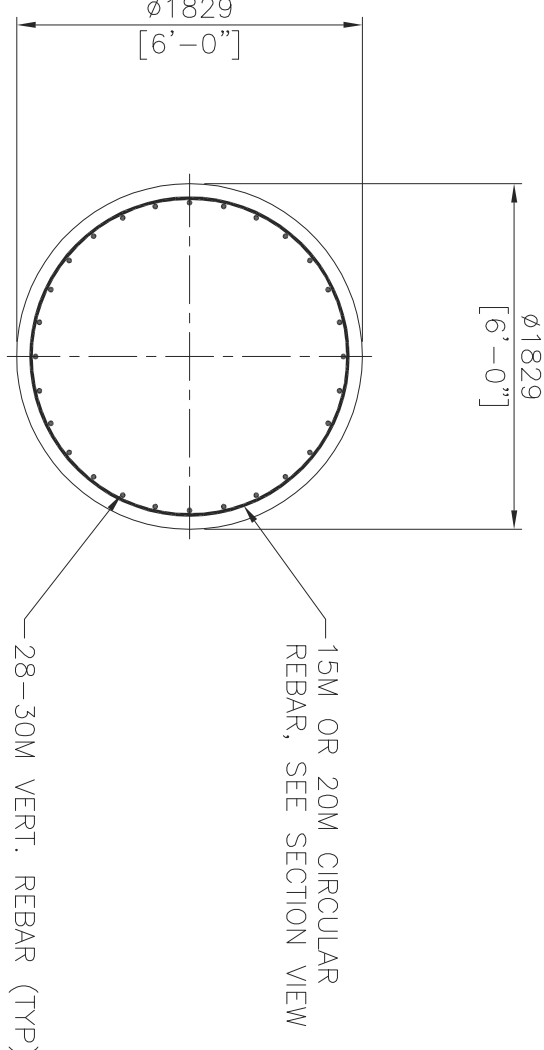
- GROUND WATER LEVEL IS DESIGNED AT GRADE.
- FROST DEPTH IS 1.2m (4') BELOW GRADE.
- BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
  - FROM 0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
  - FROM 1.2m TO 1.6m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) TO B-N082
  - FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 10 (COHESIVE) TO B-N082
  - FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 15 (COHESIVE)

FOUNDATION MATERIAL AND CONSTRUCTION NOTES

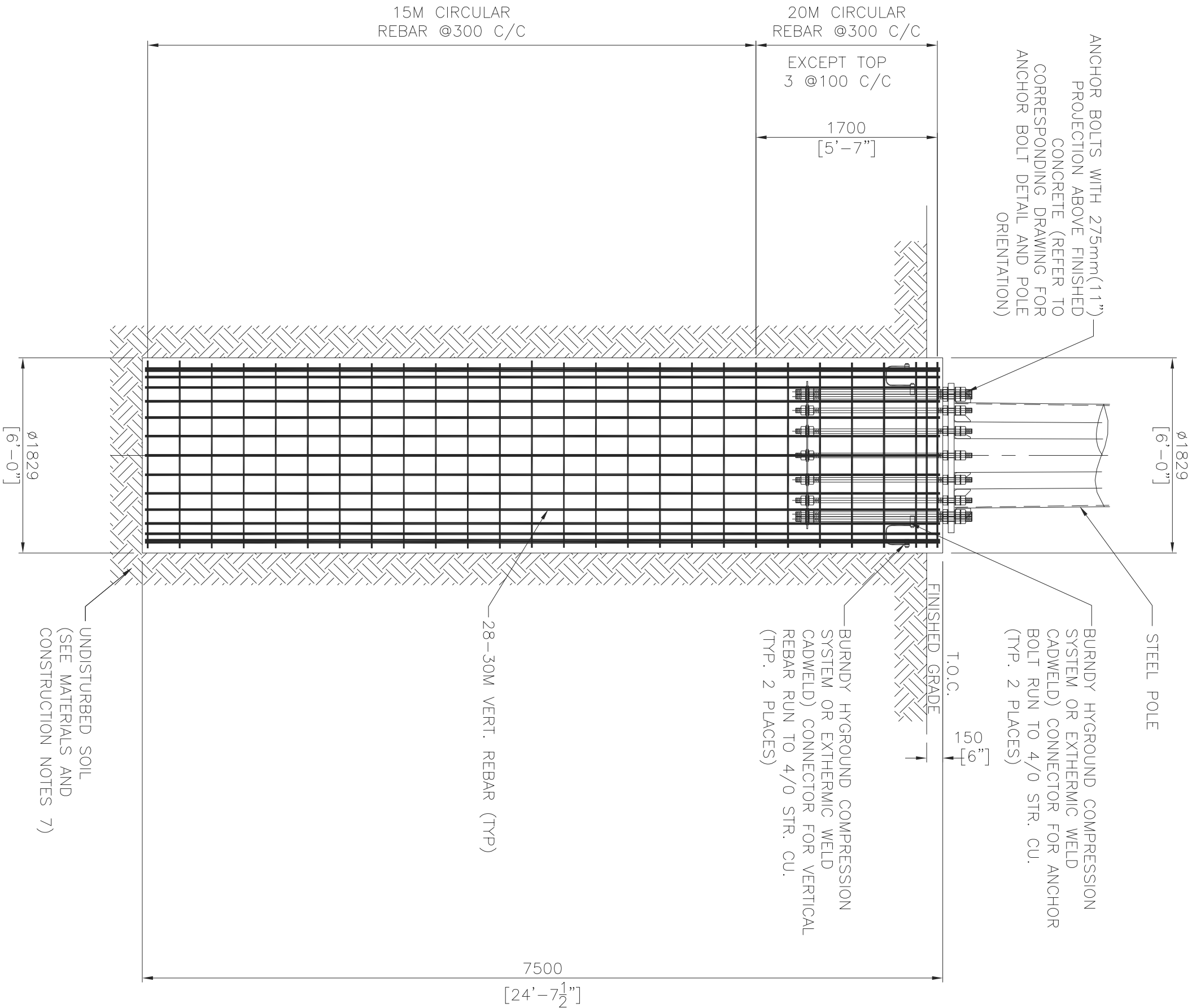
- CONCRETE MATERIAL, DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CANADIAN STANDARD CAN 2-A23 SERIES.
- CONCRETE SHALL BE SUPPLIED AND DELIVERED TO THE SITE IN ACCORDANCE WITH THE FOLLOWING:
  - MINIMUM COMPRESSIVE STRENGTH: 35 MPa AT 28 DAYS
  - SPECIFICATIONS ON PORTLAND CEMENT: TYPE GU NORMAL PORTLAND CEMENT, EXPOSURE CLASS C-1
  - 45%-75% AIR CONTENT
  - MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED FOR EACH LOT OF CONCRETE. MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE 50mm UNLESS OTHERWISE SPECIFIED.
- CONCRETE CAST AGAINST SOIL = 75mm
- FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
- CONCRETE SURFACE EXPOSED TO WEATHER = 50mm
- REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFIRMING TO CSA G30.12 OR 400 EXCEPT TIES AND STIRRUPS WHICH SHALL BE GRADE 300
- MINIMUM SPLICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-A23.1
- ALL OTHER STEEL REINFORCEMENT SHALL BE CSA G40.21-M500W UNCLD. AND SHALL BE HOT DIP GALVANIZED STEEL FINISH IN ACCORDANCE WITH CSA G40.21-M500W UNCLD.
- ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DEMATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
- AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONCRETE CASTING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER PROTECTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND SITE PRIOR TO THE EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE EXCAVATION BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS.
- BEFORE PLACING CONCRETE, CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
- PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
- CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
- ALL BACKFILL UNDER FOUNDATIONS SHALL BE A 25mm CHAMFER ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL-GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPMD WITH MAX LIFT OF 300mm.
- ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm.
- SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

NOT FOR CONSTRUCTION  
DESIGN IN PROGRESS

APPROVED FOR CONSTRUCTION										10CCT 115KV TRANSMISSION LINE POLE FOUNDATION TYPE B									
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.										AREA JERHOHO WIND PROJECT									
PROJECT PHASE										PROJECT NO.									
PROJECT NO.										ACTIVITY NO.									
PROJECT NO.										PACKAGE CODE									
PROJECT NO.										SUBJECT									
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TOP VIEW



SECTION VIEW

TYPICAL DETAILS FOR  
POLE FOUNDATION TYPE A

GENERAL NOTES

- THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG#1235-3-P012), ANCHOR BOLT DRAWINGS AND STAKING INFORMATION.
- FOR POLE DRAWING DETAILS, SEE DWG#1235-2-T00X SERIES.
- FOR POLE FOUNDATION DETAILS, SEE DWG#1235-2-T00X SERIES.
- ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.

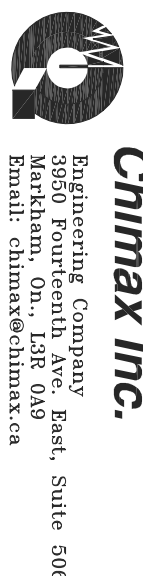
DESIGN ASSUMPTION

- GROUND WATER LEVEL IS DESIGNED AT GRADE.
- FROST DEPTH IS 1.2m (4') BELOW GRADE.
- BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
  - FROM 0.0m TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
  - FROM 1.2m TO 1.6m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 8 (COHESIVE) TO B-N082
  - FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 10 (COHESIVE) TO B-N082
  - FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX 'N' = 15 (COHESIVE)

FOUNDATION MATERIAL AND CONSTRUCTION NOTES

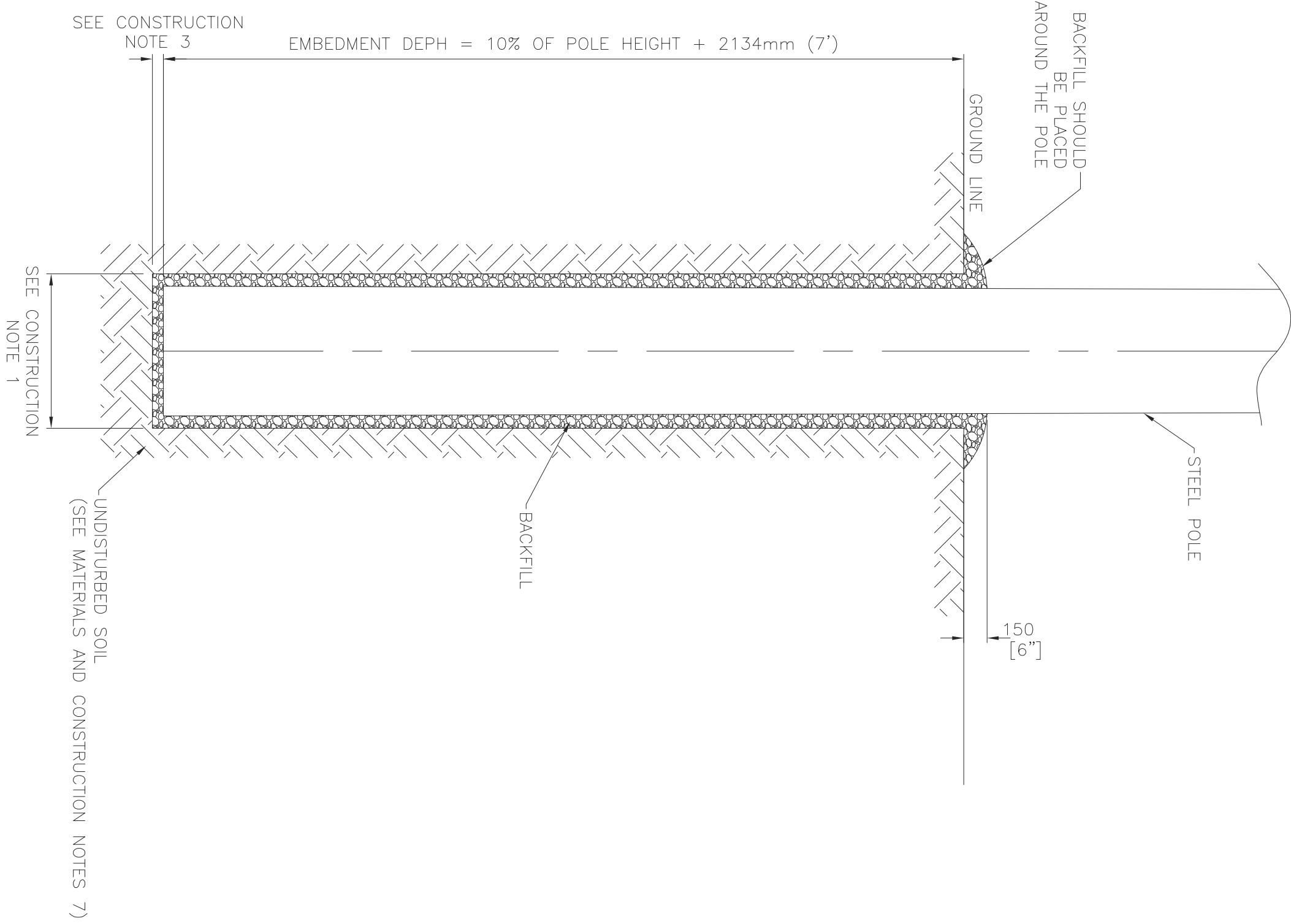
- CONCRETE MATERIAL, DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CANADIAN STANDARD CON 2-A23 SERIES.
- CONCRETE SHALL BE SUPPLIED AND DELIVERED TO THE SITE IN ACCORDANCE WITH THE FOLLOWING:
  - MINIMUM COMPRESSIVE STRENGTH: 35 MPa AT 28 DAYS
  - SPECIFICATIONS ON PORTLAND CEMENT: TYPE GU NORMAL PORTLAND CEMENT, EXPOSURE CLASS C-1
  - 4%~7% AIR CONTENT
  - MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED UNLESS OTHERWISE SPECIFIED. MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE 50mm
  - CONCRETE CAST AGAINST SOIL = 75mm
  - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
  - REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFORMING TO CSA G30.12 OR 400 EXCEPT TIES AND STIRRUPS SHALL BE GRADE 300
  - MINIMUM SPACES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-A23.1
  - ALL OTHER STEEL REINFORCEMENT SHALL BE CSA G40.21-M500W U.N.O. AND SHALL BE HOT DIPPED GALVANIZED FINISH IN ACCORDANCE WITH CSA G40.21-M500W U.N.O. AND SHALL BE HOT DIPPED GALVANIZED FINISH IN ACCORDANCE WITH CSA G40.21-M500W U.N.O. AND SHALL BE HOT DRAINAGE DURING THE COURSE OF WORK, FLOODED EXCAVATIONS SHALL BE DEMATERED AND ALL WICK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
  - AFTER EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONCRETE CASTING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER PROTECTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION, FROST DEPTH, PROXIMITY OF THE FOUNDATION TO EXISTING STRUCTURES, AND THE SOIL PROPERTIES BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS.
  - BEFORE PLACING CONCRETE, CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF ALL MECHANICAL, UTILITY SERVICES FOR EMBEDDED ITEMS, HOLES, ETC.
  - PROPER VIBRATION METHODS SHALL BE USED DURING CONCRETING.
  - CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
  - ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.
  - ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRANULAR B MATERIAL AND SHALL BE COMPACTED TO 100% SPMD WITH MAX LIFT OF 200mm. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.

NOT FOR CONSTRUCTION  
DESIGN IN PROGRESS



										APPROVED FOR CONSTRUCTION																																							
										CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.										AREA																													
										PROJECT PHASE										JERICHO WIND PROJECT																													
										PROJECT NO.										ACTIVITY NO.										PACKAGE CODE										SUBJECT									
																														10CT 115KV TRANSMISSION LINE																			
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																														CLIENT DWG. NO.																			
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STAMP/SEAL										TITLE									
PROPRIETARY INFORMATION THIS DRAWING IS THE PROPERTY OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.										REFERENCES									



SECTION VIEW

TYPICAL DIRECT EMBEDMENT DETAILS FOR  
POLE FOUNDATION

GENERAL NOTES

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG#235-3-P012). ANCHOR BOLT DRAWINGS AND STAKING INFORMATION.
2. FOR POLE FRAMING DETAILS, SEE DWG#235-2-P3XX SERIES UNO.
3. ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS UNO.

DESIGN ASSUMPTION

1. GROUND WATER LEVEL IS DESIGNED AT GRADE.
2. FROST DEPTH IS 1.2m (4') BELOW GRADE.
3. BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETER AND ASSUMPTIONS ARE ADOPTED FOR THE FOUNDATION DESIGN:
  - A. FROM 1.2m TO 1.6m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE, AVERAGE FROM 1.2m TO 1.6m BELOW GRADE, AVERAGE PENETRATION INDEX  $N' = 8$  (COHESIVE) FOR STRUCTURE B-N001 TO B-N027, AND  $N' = 5$  (COHESIVE) FOR STRUCTURE B-N028 TO B-N082
  - C. FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX  $N' = 10$  (COHESIVE)
  - D. FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX  $N' = 15$  (COHESIVE)

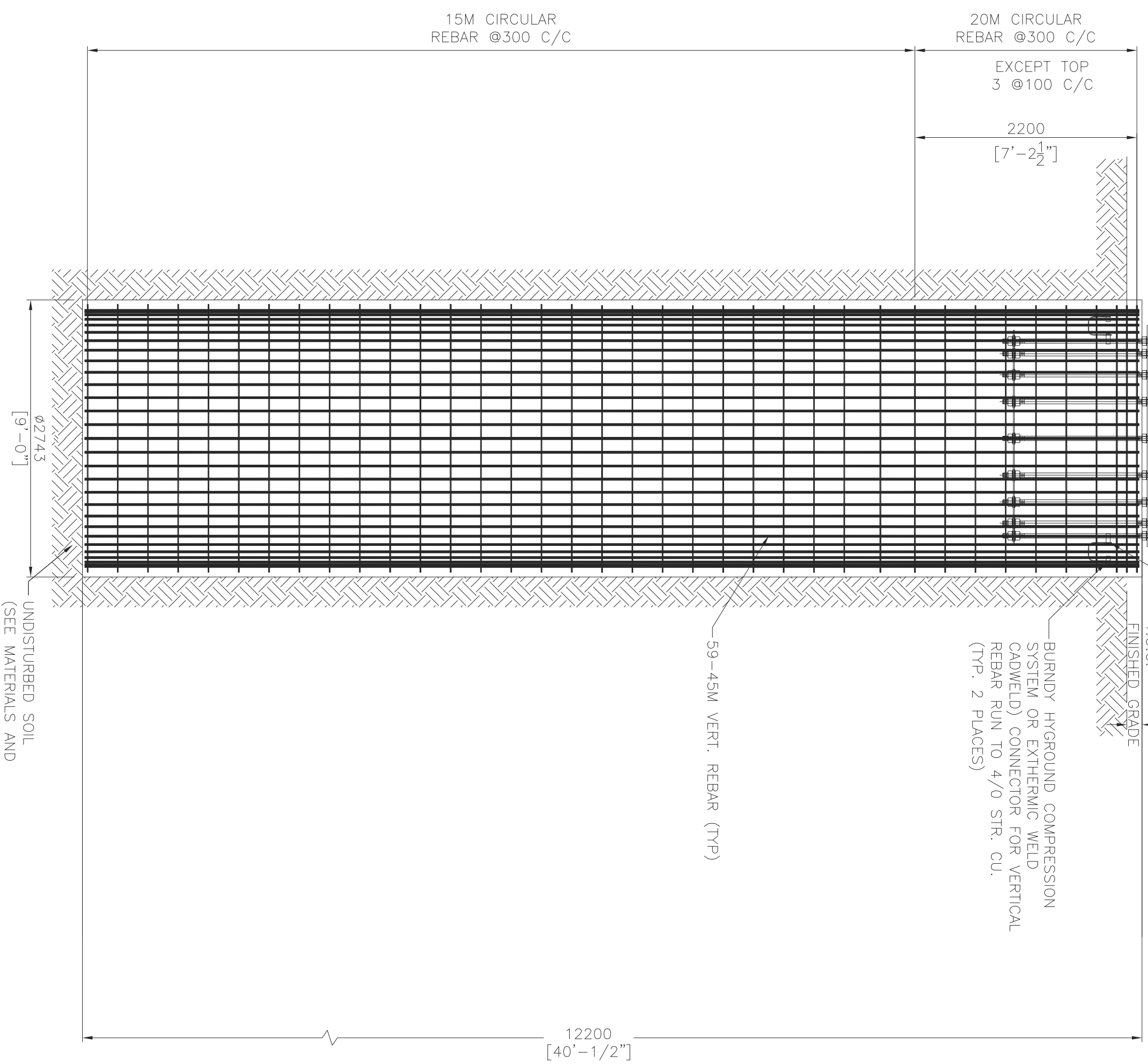
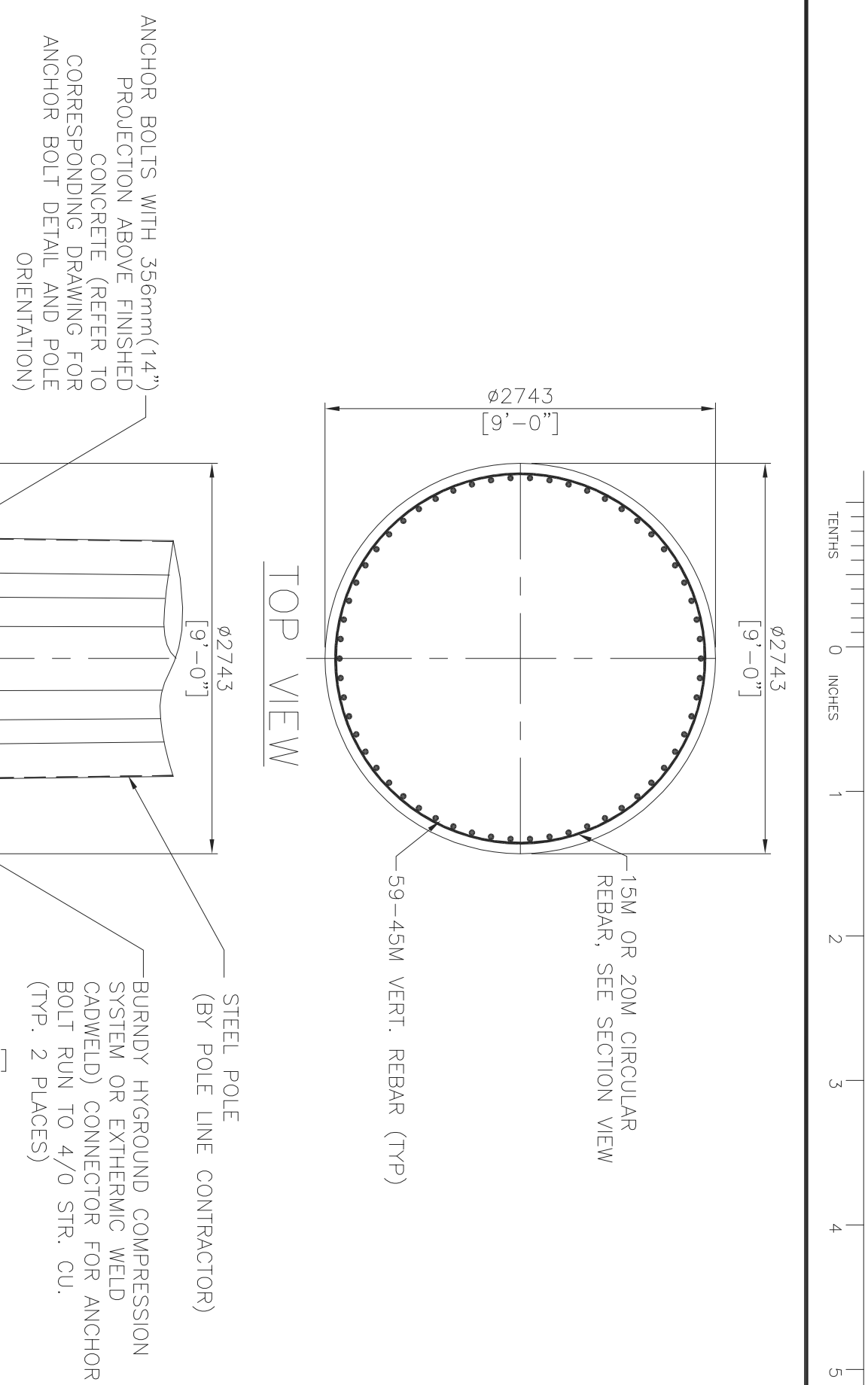
FOUNDATION MATERIAL AND CONSTRUCTION NOTES

1. MINIMUM DIAMETER OF HOLE EXCAVATION SHALL BE POLE BUTT DIAMETER + 300mm (12")
2. DEPTH OF HOLE IN SLOPING GROUND SHALL BE MEASURED FROM THE LOWER SIDE OF HOLE.
3. A MINIMUM OF 450mm (18") OF CRUSH STONE OR ROCKS SHALL BE USED AND TO BACKFILL THE BOTTOM OF THE POLE HOLE. PROPER COMPACTION OF BACKFILL MATERIAL SHALL BE ENSURED. THE CONTRACTOR SHALL ENSURE THE BACKFILL POLE EMBEDMENT DEPTH IS ACHIEVED WITH THE BACKFILL.
4. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DEWATERED AND ALL MUCK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
5. ALL EXCAVATIONS SHALL BE PROTECTED PRIOR TO POLE PLACEMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ADOPT PROPER CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE.
6. ALL EXCAVATION, BACKFILL AND INSTALLATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL PERSONNEL.
7. PRIOR TO THE PLACEMENT OF POLE, EXCAVATION SHALL BE INSPECTED BY A QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATION REPORT AND DESIGN PARAMETERS.
8. ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE SELF-COMPACTED SCREENING OR WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRANULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SMD WITH MAX LIFT OF 300mm.
9. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.
10. IN ADDITION TO THE CONSTRUCTION NOTES STATED ABOVE, ALL CONSTRUCTION WORKS SHALL BE PERFORMED IN ACCORDANCE WITH PROJECT SPECIFICATIONS AS LISTED AS FOLLOWS WHEN THEY ARE APPLICABLE:
  - A. FOUNDATION EXCAVATION AND FILL
  - B. FOUNDATION EXCAVATION AND FILL
  - C. REINFORCED CONCRETE

NOT FOR CONSTRUCTION  
DESIGN IN PROGRESS



										APPROVED FOR CONSTRUCTION																			
										CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.										AREA JERICHO WIND PROJECT									
										PROJECT PHASE																			
										PROJECT NO. ACTIVITY NO. PACKAGE CODE										SUBJECT									
										SCALE DSN. K.WONG MTS (D-SIZE) D/M/Y 13/05/13										1CCT 115KV TRANSMISSION LINE DIRECT EMBEDMENT POLE FOUNDATION									
										STAMP/SEAL										DRAWING NO. 1235-3-C001									
										PROPRIETARY INFORMATION OF CHIMAX INC. THIS DRAWING IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.										REV. B									



### TYPICAL DETAILS FOR POLE FOUNDATION TYPE C

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
B	12/09/13	ISSUED FOR PERMIT	J.C.	M.H.					B	12/09/13		ISSUED FOR PERMIT					
A	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					A	14/05/13		ISSUED FOR TENDER					

APPROVED FOR CONSTRUCTION					
CLIENT PROJECT MGR.		DEPARTMENT MGR.	PROJECT MGR.		
PROJECT PHASE			AREA		
			JERICHO WIND PROJECT		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE		SUBJECT	
SCALE		1CCT 115kV TRANSMISSION LINE			
DIN. K.WONG		D/M/Y			
MIS (0-SIZE)		13/05/13			
DIN. LOHEN		13/05/13			
		POLE FOUNDATION TYPE C			
DRAWING NO.		CLIENT DWG. NO.		REV.	
1235-3-C004				B	

NOT FOR CONSTRUCTION  
DESIGN IN PROGRESS

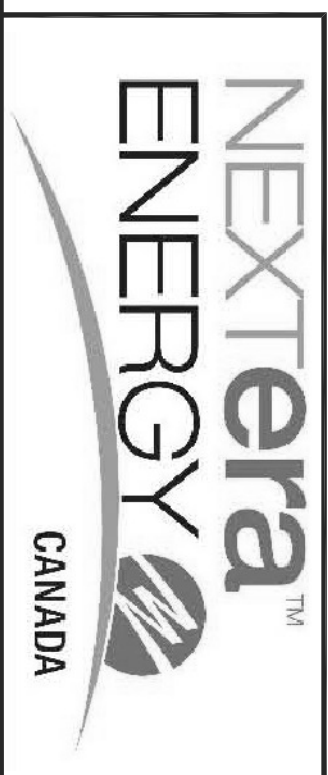
- GENERAL NOTES**
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE PLAN AND PROFILE DRAWINGS (DWG#1235-3-P102). ANCHOR BOLT DRAWINGS AND STAGING INFORMATION.
  2. FOR POLE FRAMING DETAILS, SEE DWG#1235-3-P2XX SERIES.
  3. FOR ANCHOR BOLT DETAILS, SEE DWG#1235-3-T101 AND 102.
  4. ALL DIMENSIONS AS SHOWN ARE METRIC IN MILLIMETERS (M.M.).

### DESIGN ASSUMPTION

1. GROUND WATER LEVEL IS DESIGNED AT GRADE.
2. FROST DEPTH IS 1.2m (4') BELOW GRADE.
3. BASED ON THE INFORMATION ON BOREHOLE RECORD, THE FOLLOWING DESIGN PARAMETERS ARE ASSUMED:
  - A. FROM 0cm TO 1.2m BELOW GRADE, ASSUMED LOOSE CONDITION WITH FRICTION ANGLE = 20 DEG
  - B. FROM 1.2m TO 16m BELOW GRADE, AVERAGE PENETRATION INDEX  $N_u = 8$  (COHESIVE) FOR STRUCTURE B-N001 TO B-N027, AND  $N_u = 5$  (COHESIVE) FOR STRUCTURE B-N028 TO B-N032
  - C. FROM 1.6m TO 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX  $N_u = 10$  (COHESIVE)
  - D. FROM 2.4m BELOW GRADE, AVERAGE PENETRATION INDEX  $N_u = 15$  (COHESIVE)

FOUNDATION MATERIAL AND CONSTRUCTION NOTES



1. CONCRETE MATERIAL, DESIGN, TESTING AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH CSA STANDARD CAN 2-42.3 SERIES.
2. CONCRETE SPECIFICATION
3. SUPPLY AND DELIVERY OF CONCRETE SHALL BE AS FOLLOWS:
  - A. MINIMUM STRENGTH OF 40 MPa (5800 PSI)
  - B. SPECIFICATIONS ON PORTLAND CEMENT: TYPE 60 NORMAL PORTLAND CEMENT, EXPOSURE CLASS -C-1
  - C. 45-7% AIR CONTENT
  - D. MIN. 3 CYLINDERS TESTING WITH ONE AT 7 DAYS AND TWO AT 28 DAYS ARE REQUIRED UNLESS OTHERWISE SPECIFIED, MINIMUM CONCRETE COVER TO REINFORCEMENT SHALL BE AS FOLLOWS:
    - AS FOLLOWS: 25mm
    - FORMED CONCRETE WITH DIRECT CONTACT TO SOIL = 50mm
  - E. REINFORCING STEEL SHALL BE DEFORMED STEEL BAR WITH MINIMUM YIELD STRENGTH OF 400 MPa (60PSI) AND CONFORMING TO CSA G30.12 GR 400 EXCEPT TIES AND STIRRUPS WHICH SHALL BE GADE 300.
4. MINIMUM SPICES, LAPS AND HOOKS SHALL BE IN ACCORDANCE WITH CAN 3-42.3.1
5. ALL CONCRETE SHALL BE IN ACCORDANCE WITH CSA G60.12 GR 60 AND SHALL BE HOT PLACED AND CURED IN ACCORDANCE WITH CSA G60.12 GR 60
6. ALL EXCAVATIONS SHALL BE PERFORMED IN A MANNER THAT SHALL ENSURE PROPER DRAINAGE DURING THE COURSE OF WORK. FLOODED EXCAVATIONS SHALL BE DETERMINED AND ALL WICK SHALL BE REMOVED BEFORE PROCEEDING WITH WORK. ALL EXCAVATIONS SHALL BE SUFFICIENTLY SUPPORTED TO PREVENT COLLAPSE.
7. BEFORE EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE PRIOR TO THE PLACEMENT OF CONCRETE. BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATIONAL REPORT AND DESIGN PARAMETERS BEFORE PLACING CONCRETE. CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF REBAR PLACING, UTILITIES, SERVICES AND EMBEDDED ITEMS, HOLES, ETC.
8. BEFORE EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE PRIOR TO THE PLACEMENT OF CONCRETE. BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATIONAL REPORT AND DESIGN PARAMETERS BEFORE PLACING CONCRETE. CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF REBAR PLACING, UTILITIES, SERVICES AND EMBEDDED ITEMS, HOLES, ETC.
9. BEFORE EXCAVATION, EXPOSED SOIL SURFACES SHALL BE PROTECTED PRIOR TO CONSTRUCTION AND EXCAVATION METHOD BASED ON THE SOIL CONDITION FOUND ON SITE PRIOR TO THE PLACEMENT OF CONCRETE. BOTTOM OF FOUNDATIONS SHALL BE INSPECTED BY QUALIFIED GEOTECHNICAL PERSONNEL TO CONFIRM THAT THE SOIL PROPERTIES ARE CONSISTENT WITH THE GEOTECHNICAL INVESTIGATIONAL REPORT AND DESIGN PARAMETERS BEFORE PLACING CONCRETE. CONTRACTOR SHALL VERIFY ANCHOR BOLTS AND LOCATIONS OF REBAR PLACING, UTILITIES, SERVICES AND EMBEDDED ITEMS, HOLES, ETC.
10. CONCRETE SHALL BE ADEQUATELY CURED BY ADDITIONAL MOISTURE AND/OR COVERED BY WATER RETAINING MATERIAL AFTER POURING.
11. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 25mm CHAMFER.
12. ALL BACKFILL SURROUNDING FOUNDATIONS SHALL BE WELL GRADED PIT RUN GRAVEL THAT CONFORMS TO RECOMMENDED SPECIFICATIONS FOR GRAVULAR MATERIALS IN THE GEOTECHNICAL REPORT AND SHALL BE COMPACTED TO 95% SPDM WITH MAX LIFT OF 300mm.
13. ALL BACKFILL UNDER FOUNDATIONS SHALL BE LEAN CONCRETE MIX OR GRAVULAR B MATERIAL, AND SHALL BE COMPACTED TO 100% SPDM WITH MAX LIFT OF 200mm.
14. SAFETY MEASURES SHALL BE PROVIDED AFTER EXCAVATION TO ENSURE WORKPLACE SAFETY.



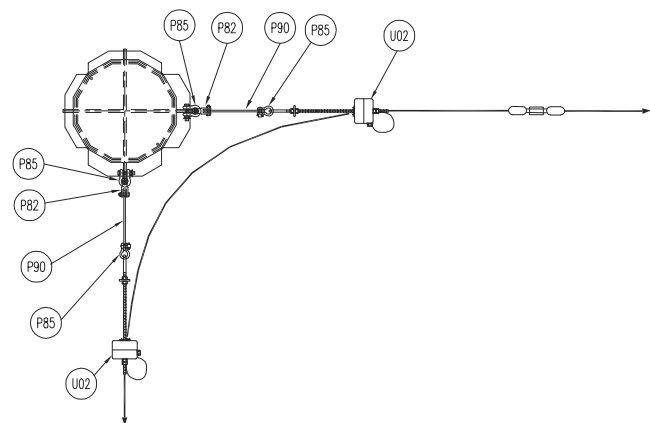


NOTES:

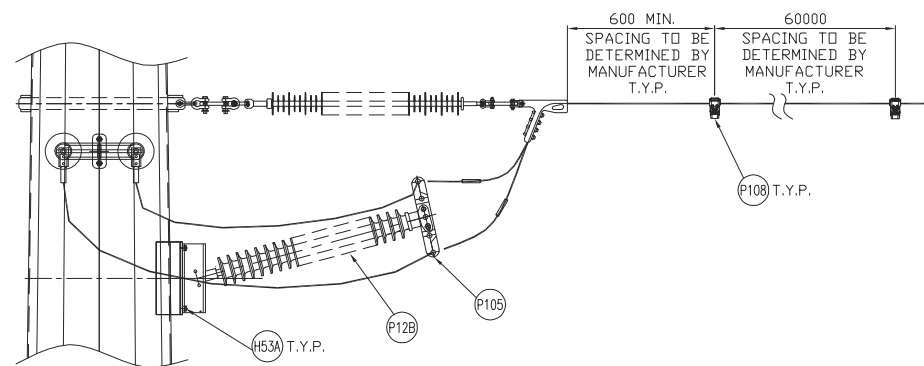
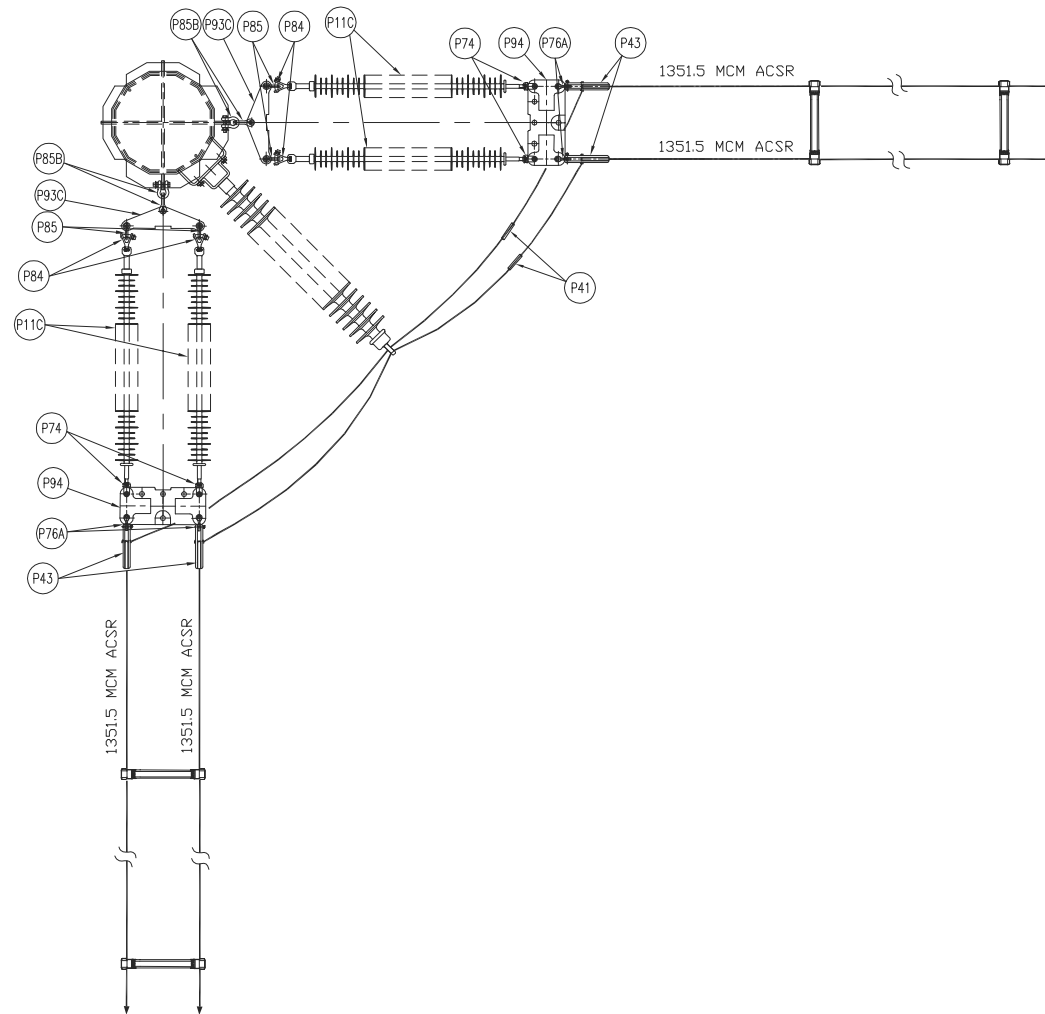
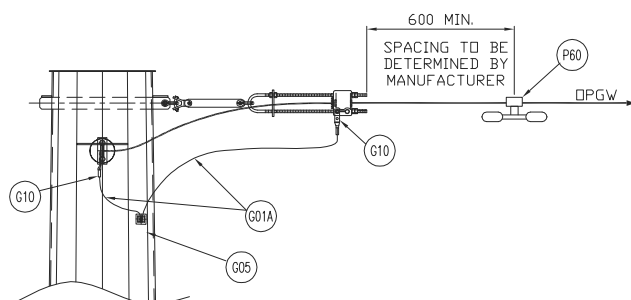
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.

	
	<b>Chimax Inc.</b> Engineering Company 3950 Fourteenth Ave. East, Suite 508 Markham, On. L3R 0A9 Email: chimax@chimax.ca
CLIENT DWG. NO.	
DRAWING NO. 1235-3-P319-S01	REV. A
CAD FILE ADDRESS 1235-2-P319-S01&02-A	

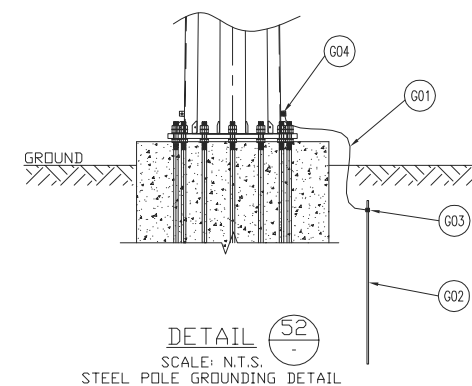




DETAIL 6A  
SCALE: N.T.S.  
STEEL POLE OPGW SUSPENSION ASSEMBLY



DETAIL 11A  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL



CLIENT DWG. NO.

DRAWING NO.  
1235-3-P319-S02

CADD FILE ADDRESS  
1235-2-P319-S01&S02-A

REV. A

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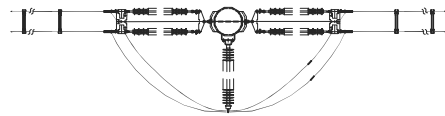
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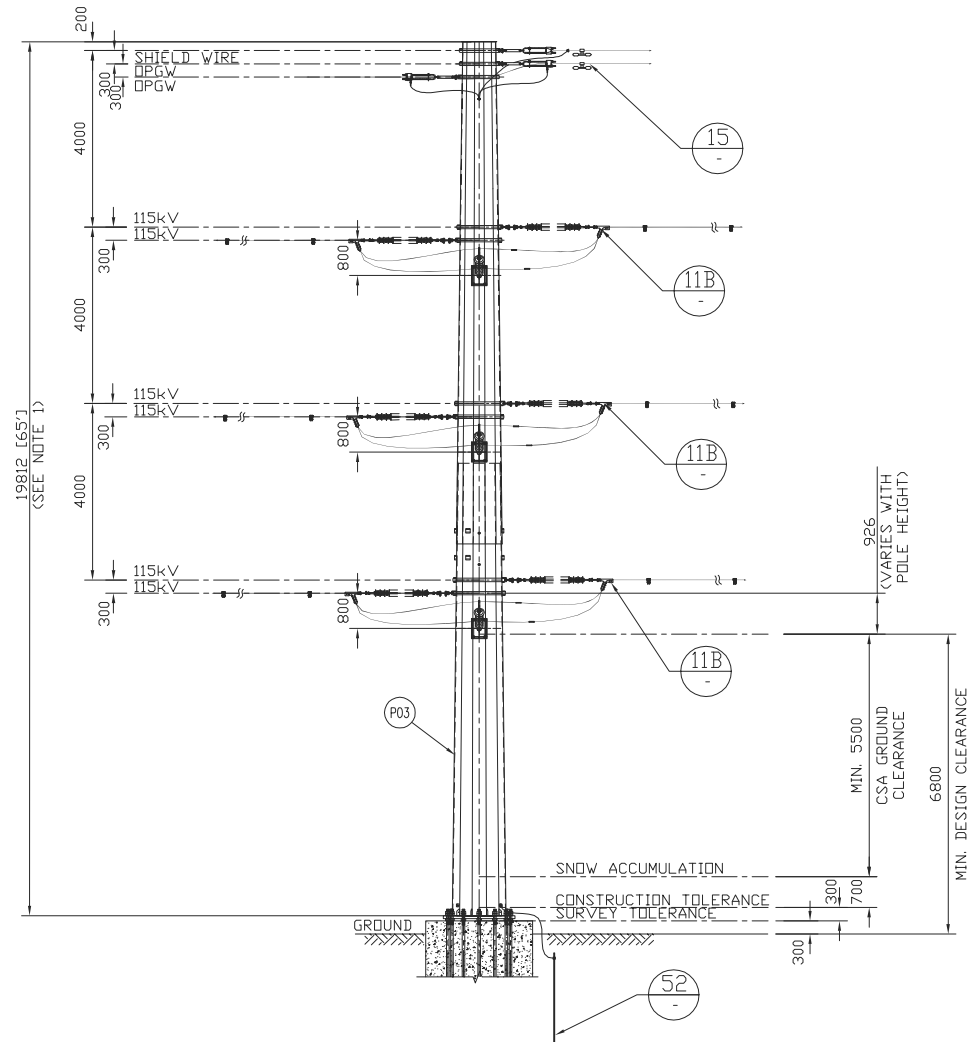
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PLAN VIEW



1CCT 115kV TRANSMISSION LINE  
DOUBLE DEADEND FRAMING  
(FOR BORNISH STATION TAP)

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)

ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")x64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

ADDITIONAL PARTS FOR SHIELD WIRE TAP TO STATION

ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P60B	1	VIBRATION DAMPER FOR 7#5 ALUMOWELD SHIELD WIRE	HUBBELL 607051011	
P82	1	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P85	2	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	1	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
G01B	LOT	4/0 STR. Cu. GROUND WIRE		
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	

NOTES:

- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
- VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.



CLIENT DWG. NO.  
DRAWING NO.  
1235-3-P320-S01  
REV. A  
CADD FILE ADDRESS  
1235-3-P320-S01&S02-A

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

AREA

NEXTERA 5-PACK TRANSMISSION LINE

PROJECT NO.

ACTIVITY NO.

PACKAGE CODE

SUBJECT

1CCT 115kV TRANSMISSION LINE

DOUBLE CONDUCTOR CONFIGURATION

DOUBLE DEADEND FRAMING

(FOR BORNISH STATION TAP)

SCALE

N.T.S. (11"x17")

BY

D/SN. E.KWONG

D/DRN. J.CHEN

D/W/Y

14/05/13

14/05/13

STAMP/SEAL

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ISS 14/05/13  
REV D/M/Y

ISSUED FOR TENDER

REVISION

DR

CHK

APP

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ISS 14/05/13

ISSUED FOR TENDER

ISSUED FOR

REF

NUMBER

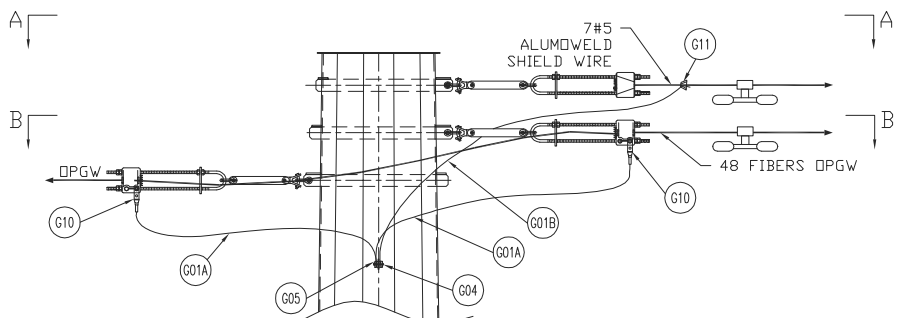
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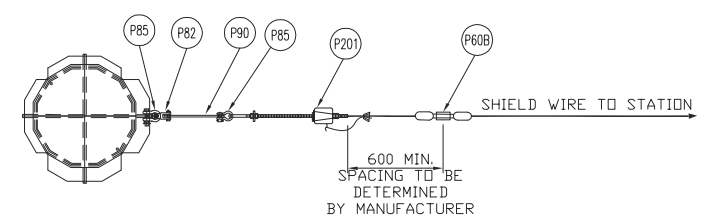
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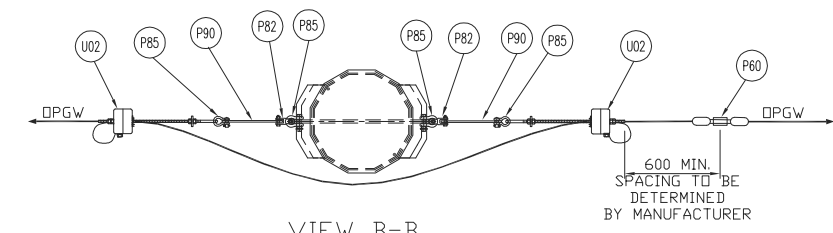




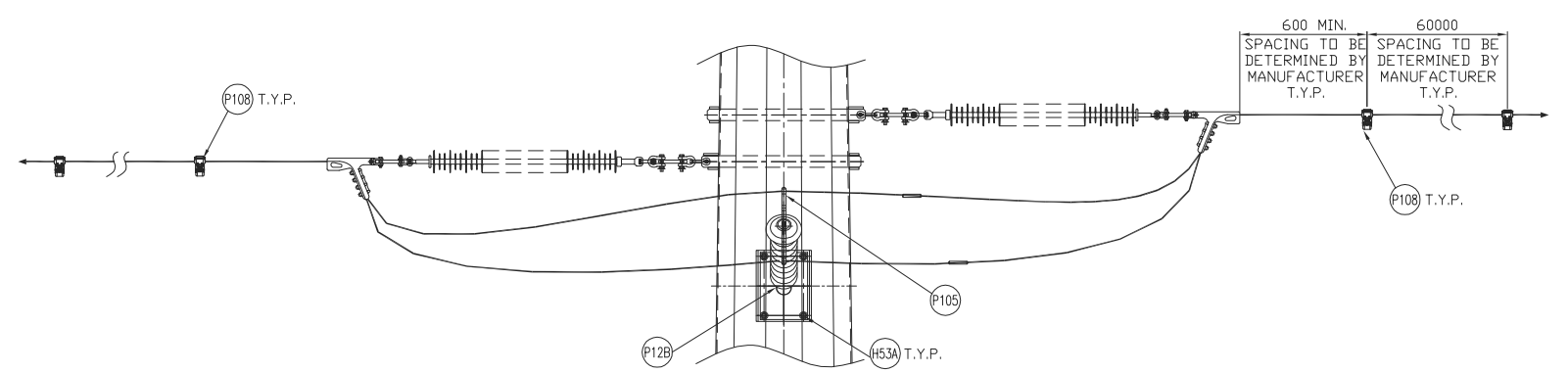
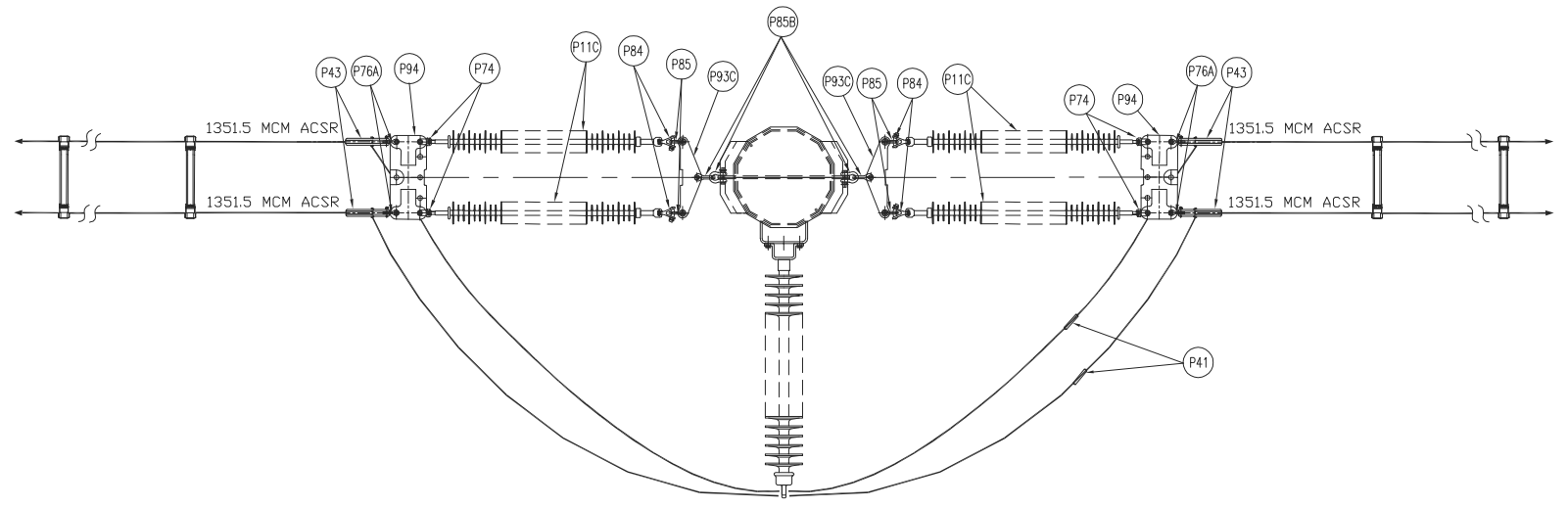
DETAIL 15  
SCALE: N.T.S.  
STEEL POLE SHIELD WIRE & OPGW SUSPENSION ASSEMBLY



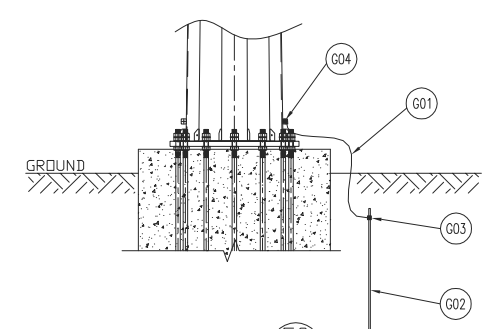
VIEW A-A  
SHIELD WIRE SUSPENSION ASSEMBLY



VIEW B-B  
OPGW SUSPENSION ASSEMBLY



DETAIL 11B  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL

**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.	
DRAWING NO. 1235-3-P320-S02	REV. A
CADD FILE ADDRESS 1235-3-P320-S01&S02-A	

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	ISSUED FOR	REF	NUMBER	TITLE
A	14/05/13	ISSUED FOR TENDER	J.C.	M.H.					A	14/05/13	ISSUED FOR TENDER			
9									7					
8									6					
7									5					
6									4					
5									3					
4									2					
3									1					

APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.		DEPARTMENT MGR.	
PROJECT MGR.		PROJECT PHASE	
PROJECT NO.		ACTIVITY NO.	
PACKAGE CODE		SUBJECT	
SCALE		BY	
N.T.S. (11"x17")		DSM. E.KWONG DRN. J.CHEN	
D/M/Y		D/M/Y	
14/05/13		14/05/13	
14/05/13		14/05/13	
SUBJECT 1CCT 115KV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION DOUBLE DEADEND FRAMING (FOR STATION TAP TO BORNISH STATION)			





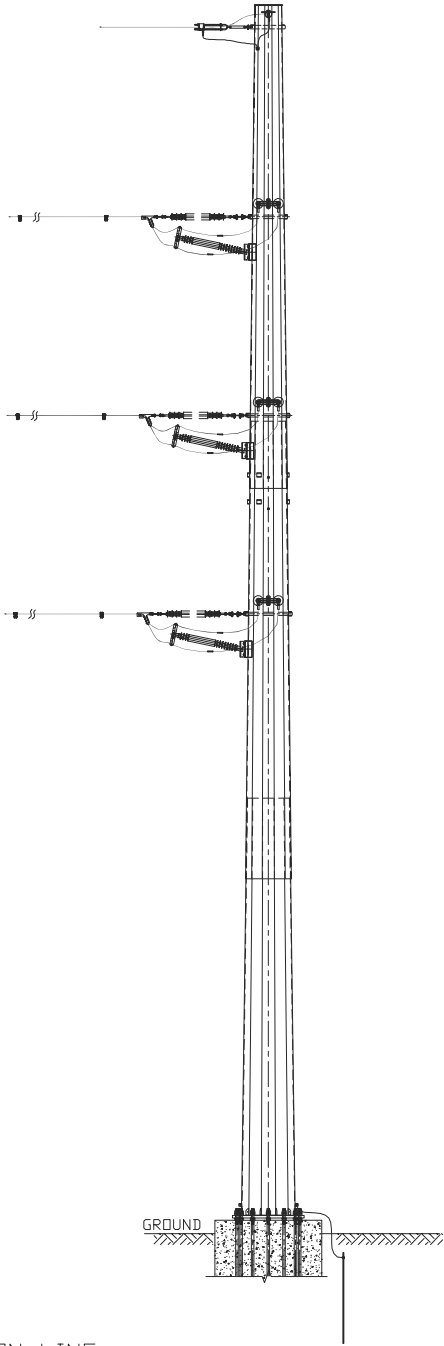
ADDITIONAL PARTS FOR SHIELD WIRE TAP TO STATION				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P60B	1	VIBRATION DAMPER FOR 7#5 ALUMOWELD SHIELD WIRE	HUBBELL 607051011	
P82	1	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P85	2	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	1	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
G01B	LOT	4/0 STR. Cu. GROUND WIRE		
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	

1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.

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	CLIENT DWG. NO.	
DRAWING NO. 1235-3-P321-S01	REV. A	
CADD FILE ADDRESS 1235-3-P321-S01&S02-A		



	
 <p><b>Chimax Inc.</b>          Engineering Company          9560 Fourteenth Ave. East, Suite 506          Markham, On. L3R 0A9          Email: chimax@chimax.ca</p>	
CLIENT DWG. NO.	
DRAWING NO. 1235-3-P321-S02	REV. A
CAD FILE ADDRESS 1235-3-P321-S01&S02-A <div style="float: right; font-size: 2em;">1</div>	



ADDITIONAL PARTS FOR SINGLE DOWN GUY				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	
P85A	4	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
H25	LOT	GUY WIRE 3/4" EHS GALVANIZED STEEL		
H28	4	PERFORMED GUY DEADEND FOR 3/4" EHS GALVANIZED STEEL	PLP BG-2112	
H39	4	GUY GUARD (HALF-ROUND MARKER 2" DIA. x 8" LENGTH)	HUBBELL 96PBG-2Y	AS REQ'D
H133	4	DUCTILE DEADEND GUY THIMBLE CLEVIS (UTS 60,000LBS)	HUBBELL DDT12	
H111	4	LEAD SECTION OF HIGH-STRENGTH SS ANCHORS (GALV.), C/W 8", 10", 12" & 14" DIA. HELIX AND 1 1/2" DIA. ROD x 2 1/2" LENGTH. (UTS 70,000LBS)	HUBBELL T1100521	
H112	LOT	HIGH-STRENGTH ANCHOR ROD EXTENSION, 1 1/2" DIA. ROD x 7' LENGTH, GALV., (UTS 70,000LBS)	HUBBELL C1100389	AS REQ'D
H115	4	GALV. TRIPLEPLYE CHAIN SHACKLE, FOR 1 1/2" DIA. ROD (UTS 70,000LBS)	HUBBELL C1100574	
H128	4	ADJUST-A-GRIP DEADEND GRIPS FOR 3/4" EHS GALV. STEEL WIRE, C/W SERVING SLEEVE (UTS 58,000LBS)	HUBBELL 34GA18S	

1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
2. VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.
3. ALL DIMENSIONS ARE IN MILLIMETER, U.N.O.

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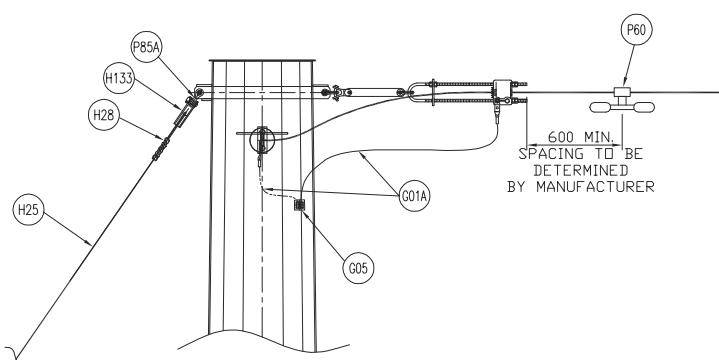
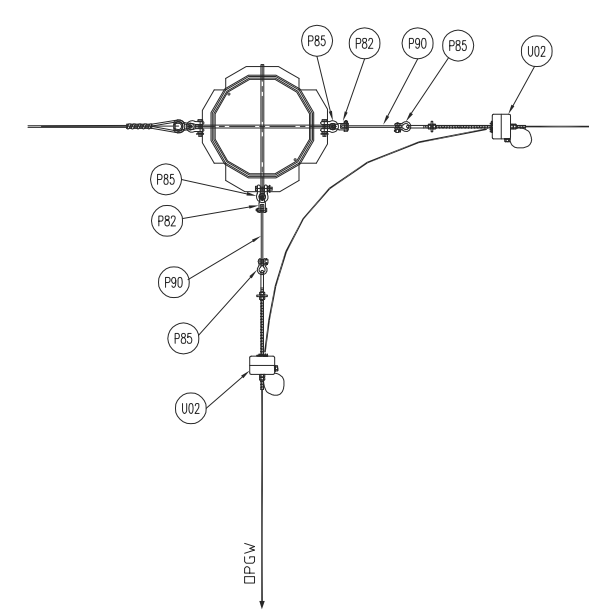
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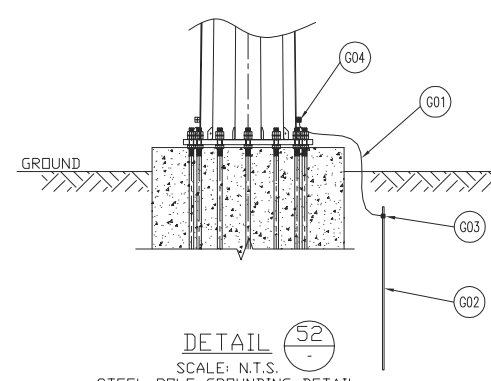
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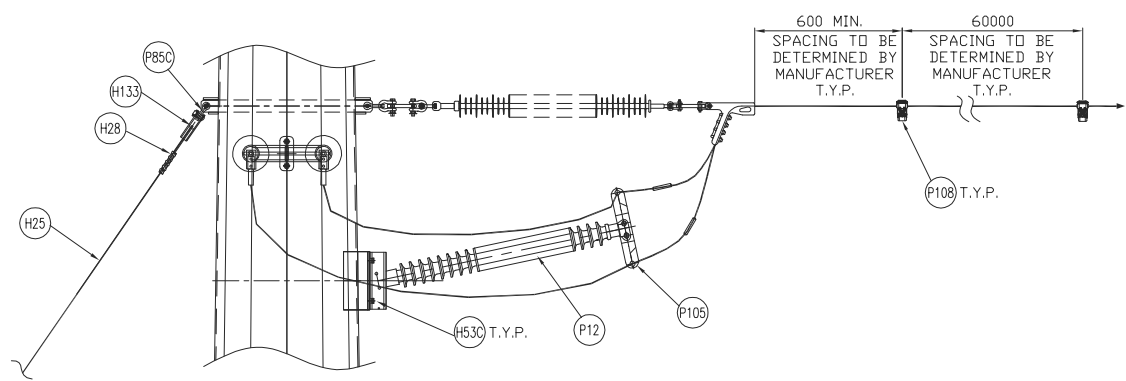
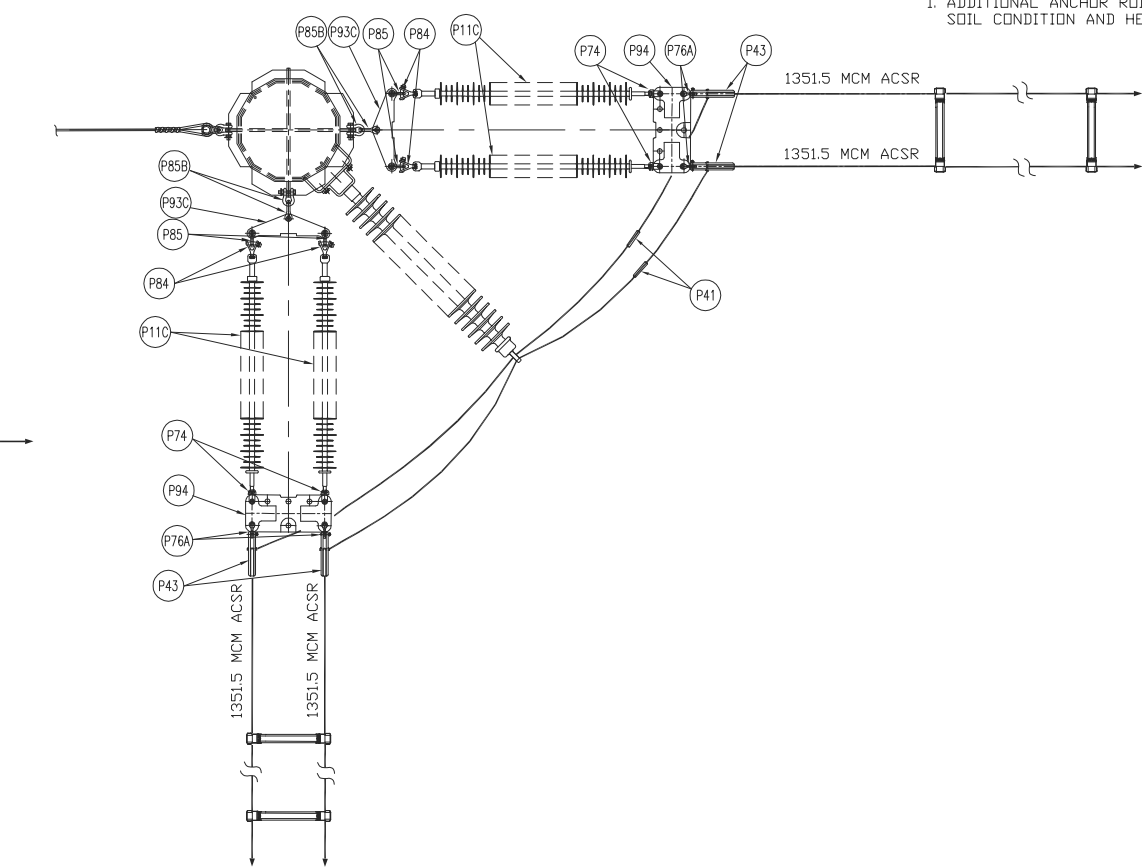
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DETAIL 13  
SCALE: N.T.S.  
STEEL POLE DPGW SUSPENSION ASSEMBLY  
(WITH SINGLE DOWN GUY)



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL

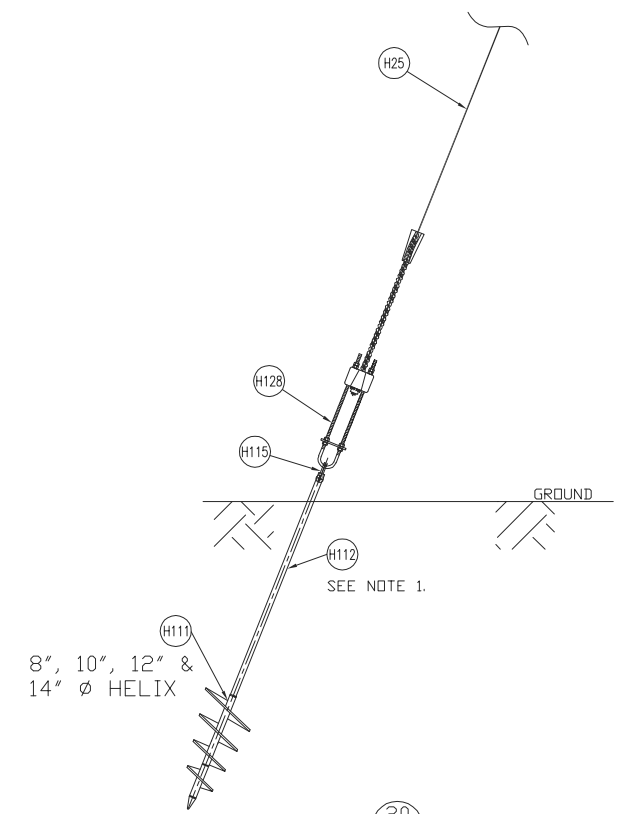


DETAIL 15  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL

NOTE:  
1. ADDITIONAL ANCHOR ROD EXTENSIONS MAY BE REQUIRED BASED ON  
SOIL CONDITION AND HELIX ANCHOR INSTALLATION DEPTH.

POWER INSTALLED SCREW ANCHORS

TYPE OF ANCHORS	SOIL CLASS				
	HARD SOIL CLASS 2 & 3	GOOD SOIL CLASS 4	AVERAGE SOIL CLASS 5	POOR SOIL CLASS 6	POOR SOIL CLASS 7
	HOLDING CAPACITY				
8", 10", 12" & 14" Ø QUADRUPLE HELIX	298 kN	258 kN	218 kN	178 kN	138 kN



DETAIL 20  
SCALE: N.T.S.  
SINGLE DOWN GUY AND POWER INSTALLED SCREW ANCHOR DETAIL

**NEXtera™**  
**ENERGY**  
CANADA

**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 500  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-3-P322-S02

REV.  
A

CADD FILE ADDRESS  
1235-3-P322-S01&S02-A

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
A	12/09/13	ISSUED FOR LEAVE TO CONSTRUCT APPLICATION	J.C.	M.H.						A	12/09/13	ISSUED FOR LEAVE TO CONSTRUCT APPLICATION			

STAMP/SEAL  
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APPROVED FOR CONSTRUCTION				AREA	
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.		NEXTERA 5-PACK TRANSMISSION LINE	
PROJECT NO.		ACTIVITY NO.	PACKAGE CODE	SUBJECT	
SCALE N.T.S. (11"x17")		BY DSN. E.KWONG DRN. J.CHEN	D/M/Y 12/09/13 12/09/13	1CCT 115KV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING DRAWING (WITH DOWN GUY)	

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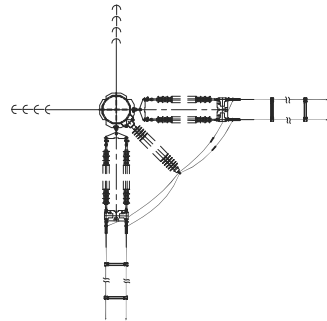
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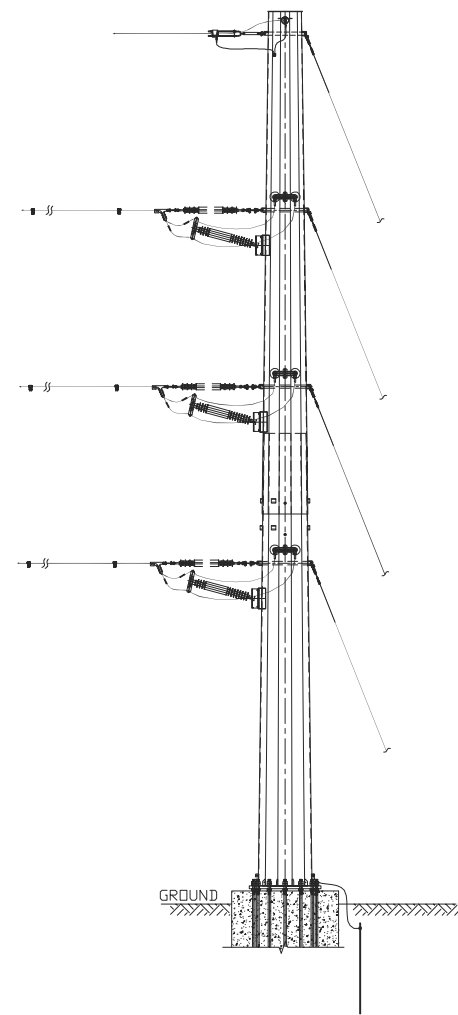
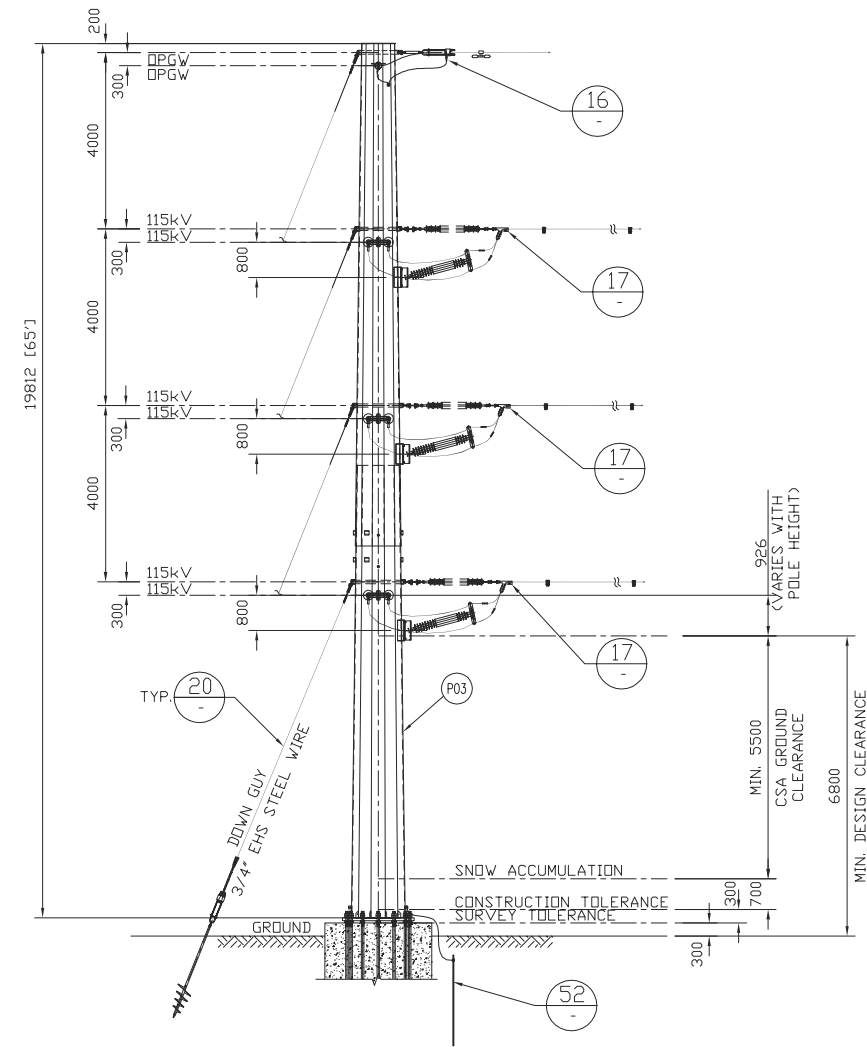
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PLAN VIEW



1CCT 115kV TRANSMISSION LINE  
HEAVY ANGLE (60 - 90°) FRAMING DRAWING  
(4M SEPARATION WITH DOWN GUY)

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	138/161kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L2-SN371-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53C	12	19mm(3/4")Øx57mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

ADDITIONAL PARTS FOR SINGLE DOWN GUY				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P85A	8	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
H25	LOT	GUY WIRE 3/4" EHS GALVANIZED STEEL		
H28	8	PREFORMED GUY DEADEND FOR 3/4" EHS GALVANIZED STEEL	PLP BG-2112	
H39	8	GUY GUARD (HALF-ROUND MARKER 2" DIA. x 8' LENGTH)	HUBBELL 96PBG-2Y	AS REQ'D
H133	8	DUCTILE DEADEND GUY THIMBLE CLEVIS (UTS 60,000LBS)	HUBBELL DDT12	
H111	8	LEAD SECTION OF HIGH-STRENGTH SS ANCHORS (GALV.), C/W 8", 10", 12" & 14" DIA. HELIX AND 1 1/2" DIA. ROD x 2 1/2" LENGTH. (UTS 70,000LBS)	HUBBELL T1100521	
H112	LOT	HIGH-STRENGTH ANCHOR ROD EXTENSION, 1 1/2" DIA. ROD x 7' LENGTH, GALV., (UTS 70,000LBS)	HUBBELL C1100389	AS REQ'D
H115	8	GALV. TRIPLEYE CHAIN SHACKLE, FOR 1 1/2" DIA. ROD (UTS 70,000LBS)	HUBBELL C1100574	
H128	8	ADJUST-A-GRIP DEADEND GRIPS FOR 3/4" EHS GALV. STEEL WIRE, C/W SERVING SLEEVE (UTS 58,000LBS)	HUBBELL 34GA18S	

- NOTES:
- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
  - VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.
  - ALL DIMENSIONS ARE IN MILLIMETER, U.N.O.

Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca


CLIENT DWG. NO.

DRAWING NO. 1235-3-P323-S01

REV. A

CADD FILE ADDRESS  
1235-3-P323-S01&S02-A

REVISION										REFERENCES		
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APPROVED FOR CONSTRUCTION										<div><div><b>Chimax Inc.</b> Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On. L3R 0A9 Email: chimax@chimax.ca</div></div>												
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					AREA		NEXTERA 5--PACK TRANSMISSION LINE															
PROJECT PHASE																						
PROJECT NO.										ACTIVITY NO.		PACKAGE CODE		SUBJECT			CLIENT DWG. NO.					
SCALE										DSN.		BY		D/M/Y		1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING DRAWING (4M SEPARATION WITH DOWN GUY)			DRAWING NO.		REV.	
N.T.S. (11"x17")										DRN.		E.KWONG J.CHEN		12/09/13 12/09/13					1235-3-P323-S01		A	
STAMP/SEAL  PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.																				CADD FILE ADDRESS 1235-3-P323-S01&S02-A		

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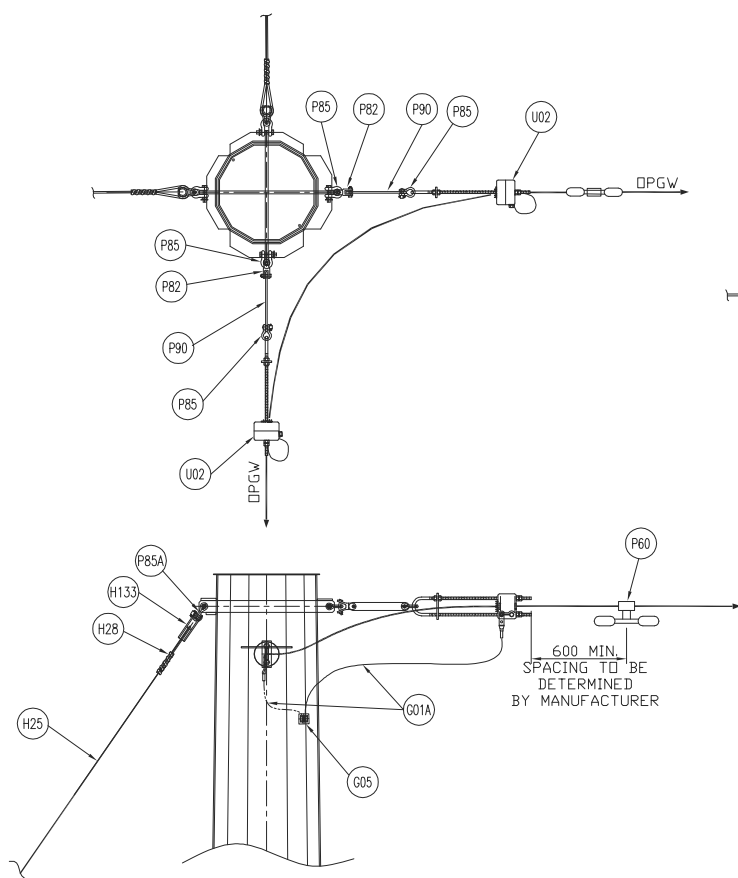
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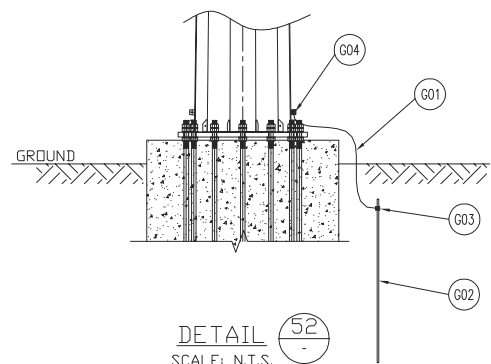
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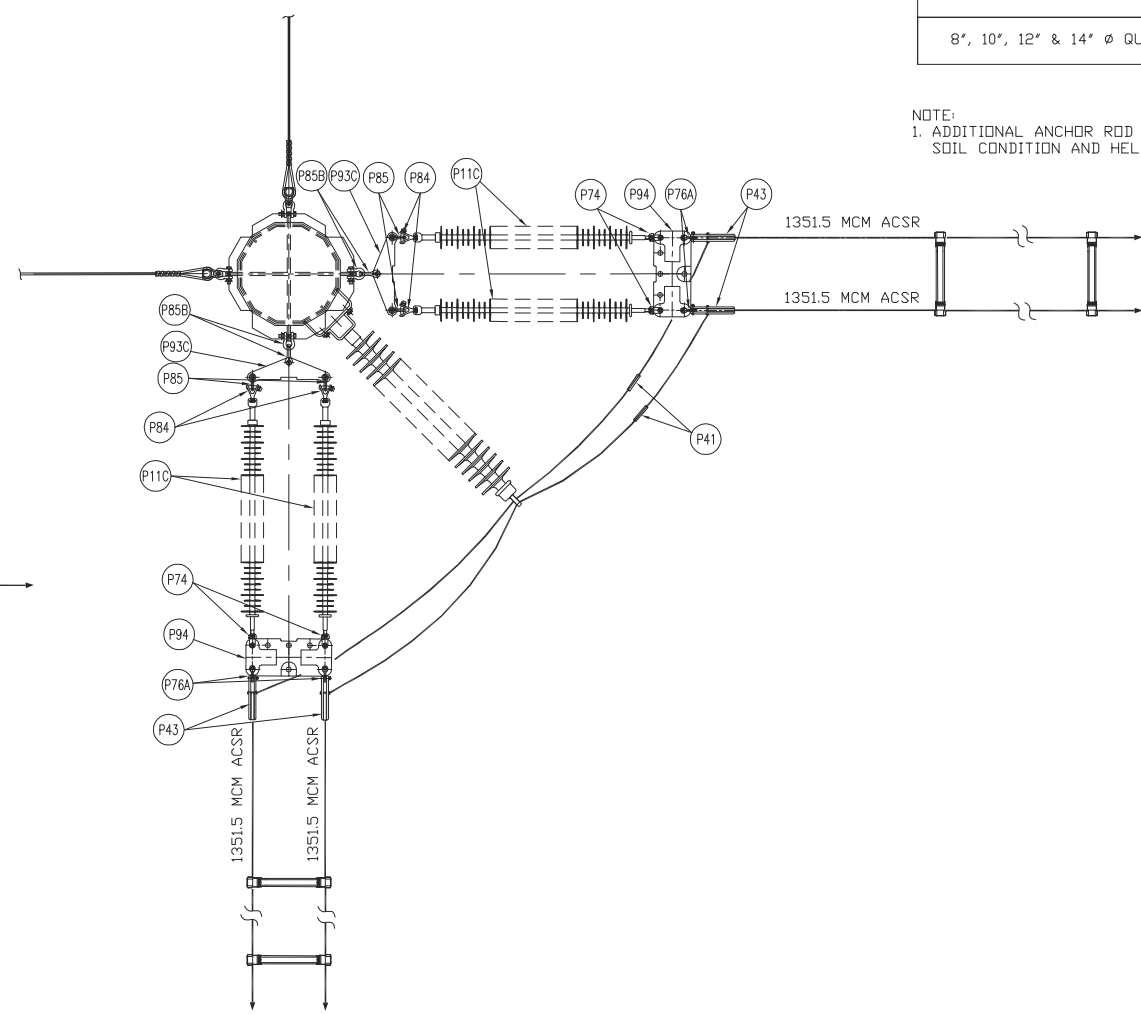
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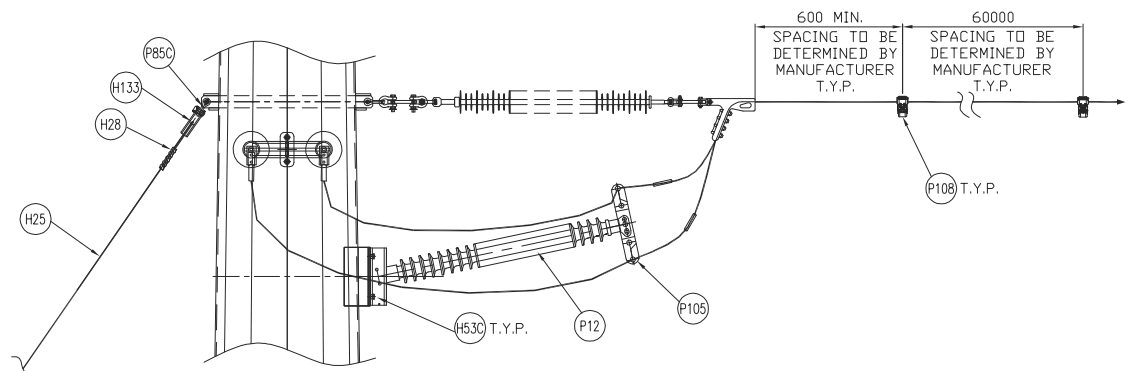
DETAIL 16  
SCALE: N.T.S.  
STEEL POLE OPGW SUSPENSION ASSEMBLY  
(WITH SINGLE DOWN GUY)



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL



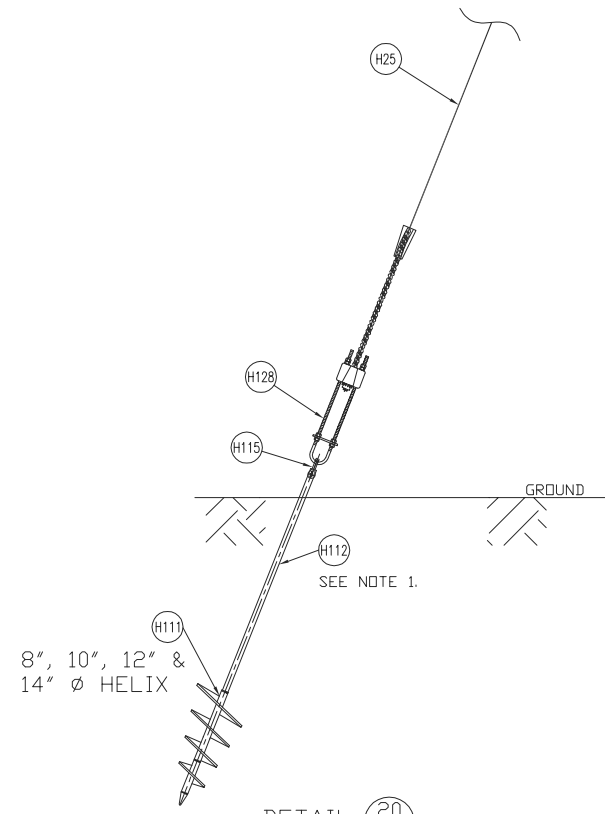
DETAIL 17  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



## POWER INSTALLED SCREW ANCHORS

TYPE OF ANCHORS	SOIL CLASS				
	HARD SOIL CLASS 2 & 3	GOOD SOIL CLASS 4	AVERAGE SOIL CLASS 5	POOR SOIL CLASS 6	POOR SOIL CLASS 7
	HOLDING CAPACITY				
8", 10", 12" & 14" Ø QUADRUPLE HELIX	298 kN	258 kN	218 kN	178 kN	138 kN

NOTE:  
1. ADDITIONAL ANCHOR ROD EXTENSIONS MAY BE REQUIRED BASED ON  
SOIL CONDITION AND HELIX ANCHOR INSTALLATION DEPTH.



DETAIL 20  
SCALE: N.T.S.  
SINGLE DOWN GUY AND POWER INSTALLED SCREW ANCHOR DETAIL

NEXtera<sup>TM</sup>  
ENERGY  
CANADA

Chimax Inc.  
Engineering Company  
3950 Fourteenth Ave. East, Suite 500  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-3-P323-S02

CADD FILE ADDRESS  
1235-3-P323-S01&S02-A

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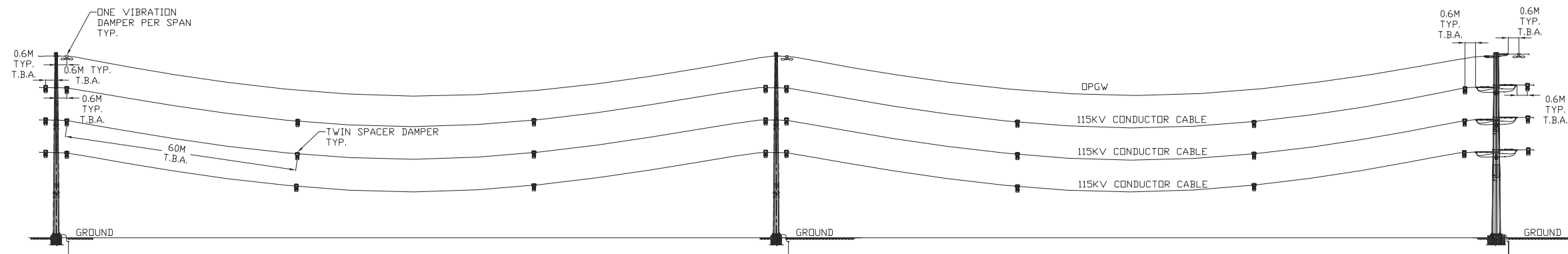
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TYPICAL TWIN SPACER DAMPER / VIBRATION DAMPER DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
C	01/03/13	ISSUED FOR TENDER								C	01/03/13	ISSUED FOR TENDER			
B	14/02/13	ISSUED FOR TENDER								B	14/02/13	ISSUED FOR TENDER			
A	18/01/13	ISSUED FOR REVIEW								A	18/01/13	ISSUED FOR REVIEW			

STAMP/SEAL  
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AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY  
WITHOUT THE PERMISSION OF CHIMAX INC.

APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	17/01/13

SUBJECT	
115kv TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION TYPICAL TWIN SPACER / VIBRATION DAMPER DETAIL	

  
**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-2-P130

REV.  
C

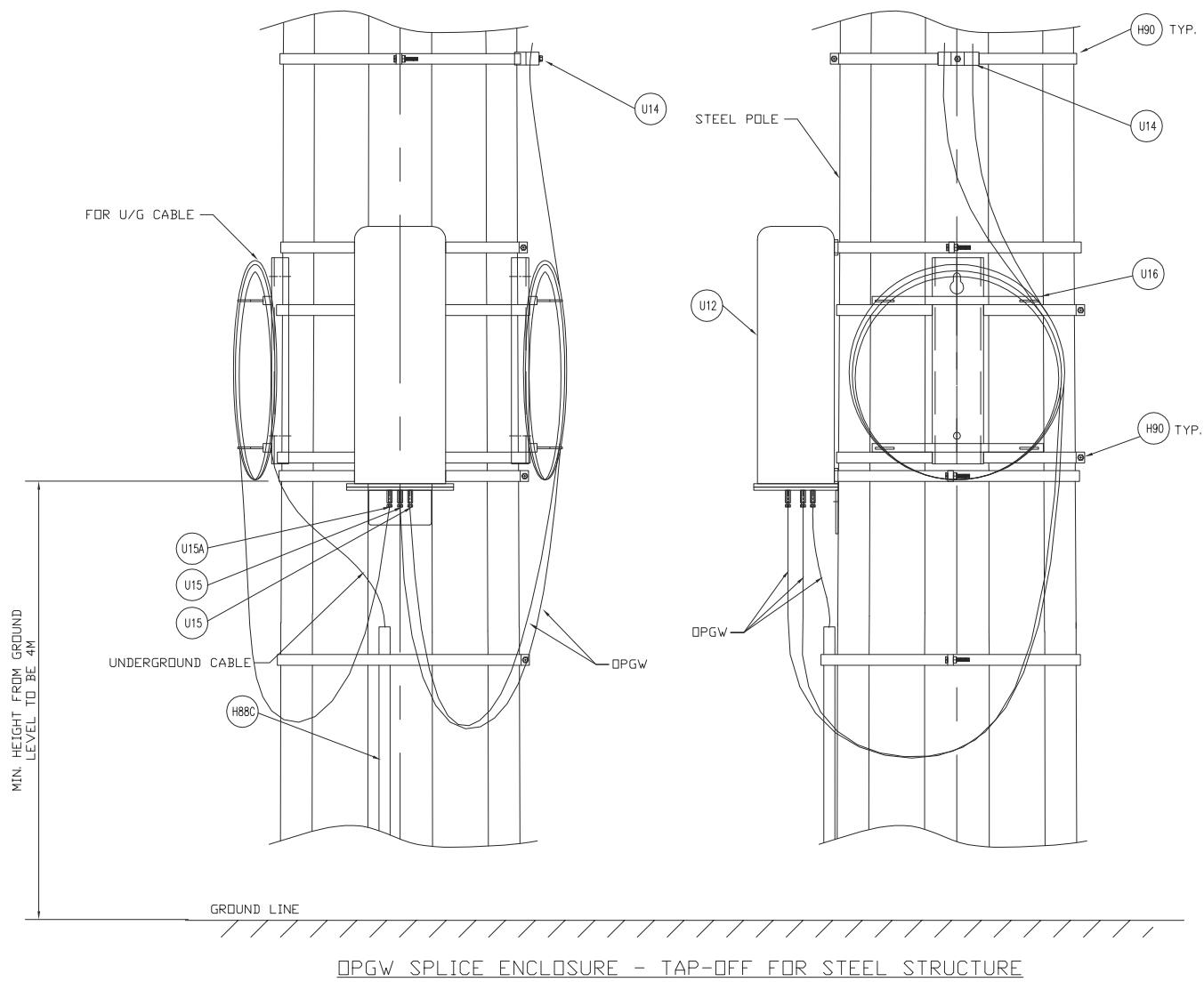
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1235-2-P130-C

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY.	DESCRIPTION	MANUFACTURER/NO. OR EQUIVALENT	REMARKS
	T.B.A.	OPGW OPTI-GUARD SPLICE ENCLOSURE FOR STEEL STRUCTURE		
H88C	1	CABLE GUARD	HUBBELL 6535	
H90	5	BAND FOR STEEL POLE		T.B.A.
U12	1	OPGW OPTI-GUARD SPLICE ENCLOSURE C/W BAND MOUNTING KIT	AFL OG03	T.B.A.
U14	LOT	OPGW DOWNLEAD CLAMP FOR STEEL POLE	AFL FDDAB5B5A	
U15	2	OPGW CONNECTOR KIT (FOR 48 FIBERS OPGW)		T.B.A.
U15A	1	OPGW CONNECTOR KIT (FOR U/G FIBER OPTICS CABLE)		T.B.A.
U16	2	EXTERNAL COIL BRACKET	AFL CB-44	



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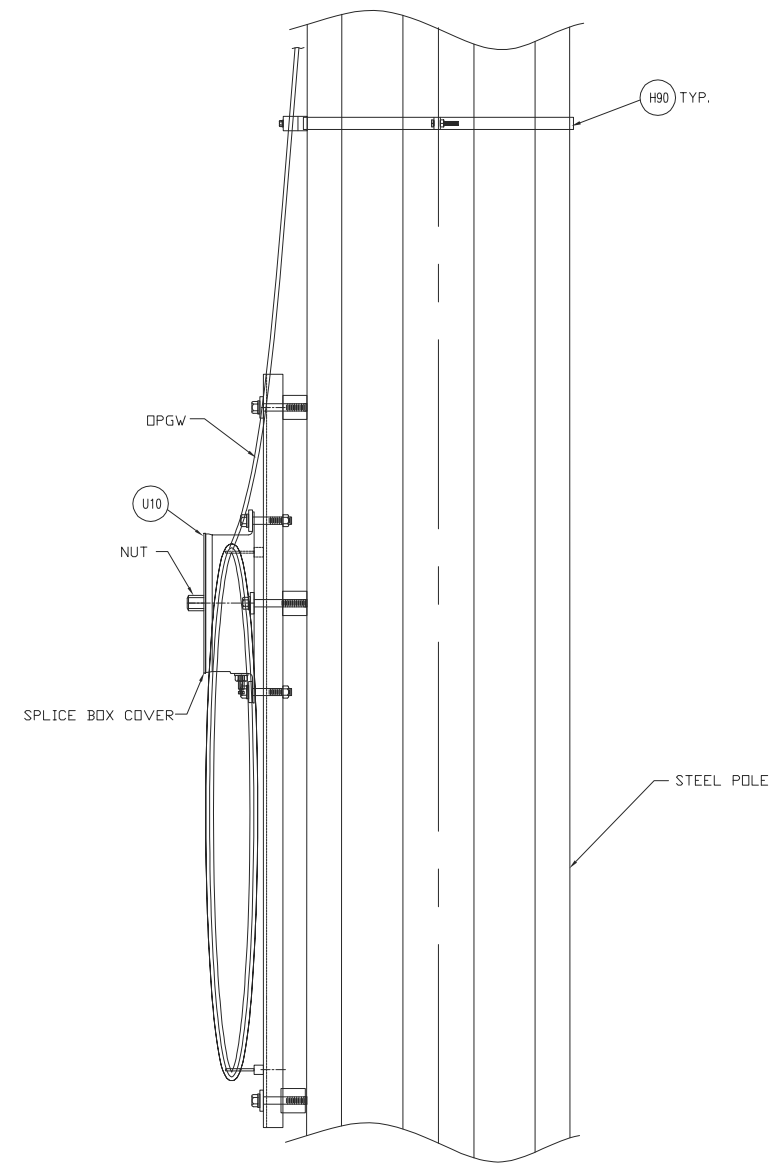
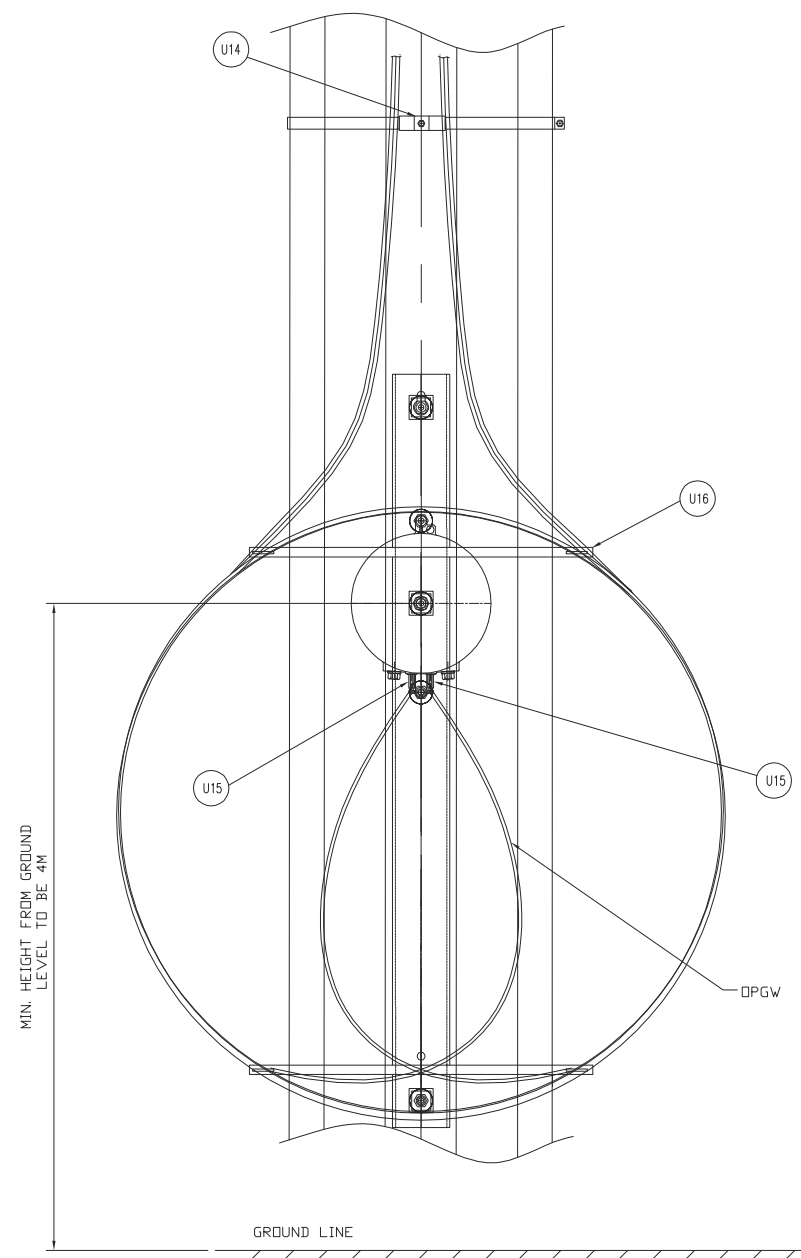
Engineering Company  
3950 Fourteenth Ave. East, Suite 506  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-2-P131

CADD FILE ADDRESS  
1235-2-P131-C

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY.	DESCRIPTION	MANUFACTURER/NO. OR EQUIVALENT	REMARKS
	T.B.A.	OPGW SPLICE BOX ENCLOSURE FOR STEEL STRUCTURE		
H90	LOT	BAND FOR STEEL POLE		T.B.A.
U10	1	OPGW SPLICE BOX ENCLOSURE C/W BANDING AND STEEL TOWER ADAPTERS	AFL SB-01	
U14	LOT	OPGW DOWNLEAD CLAMP FOR STEEL POLE	AFL FDOAB5B5A	
U15	2	OPGW CONNECTOR KIT (FOR 48 FIBERS OPGW)		T.B.A.
U16	1	EXTERNAL COIL BRACKET	AFL CB-44	

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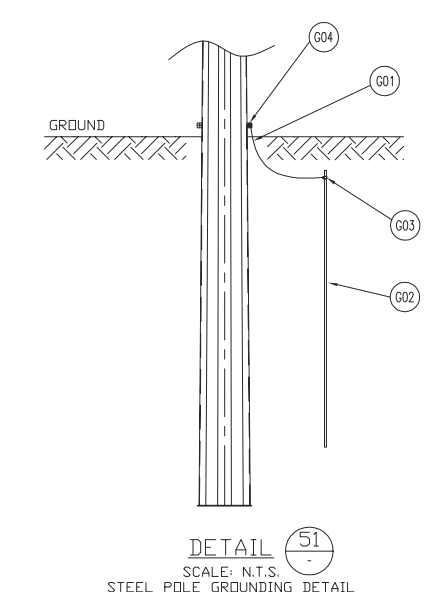
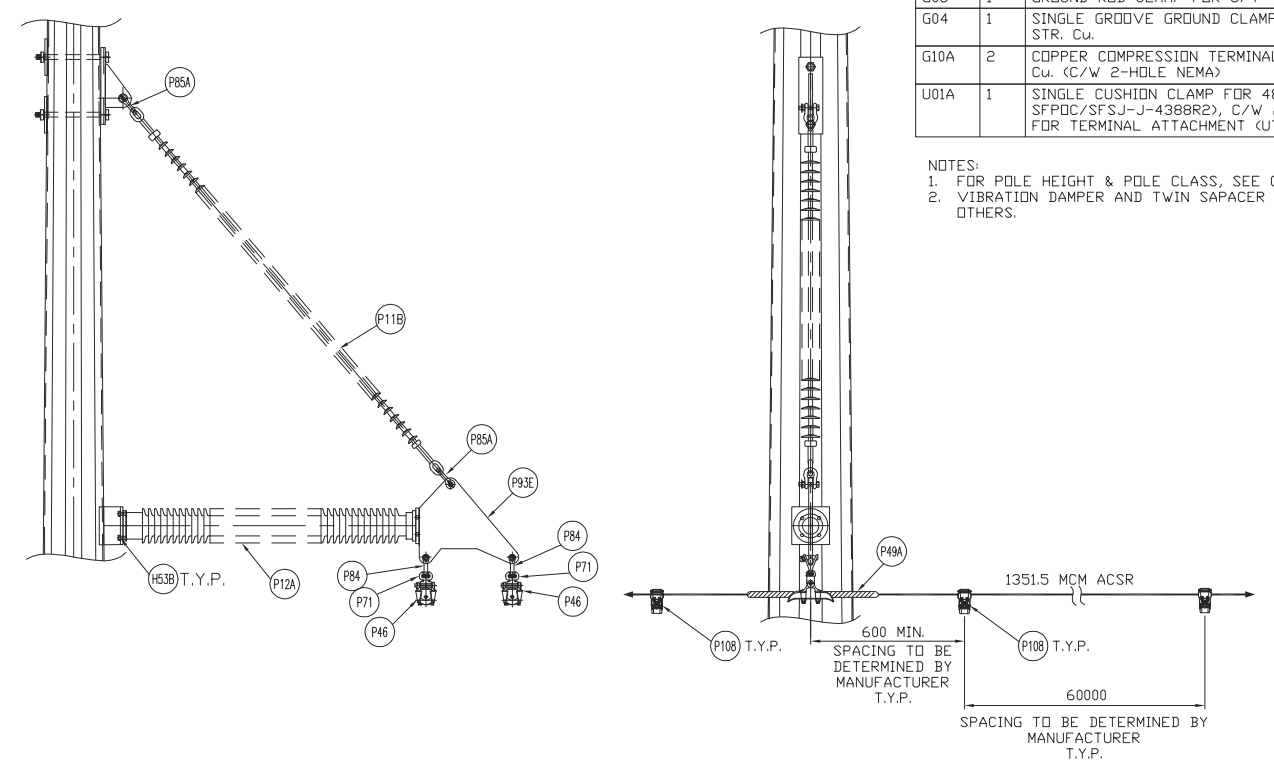
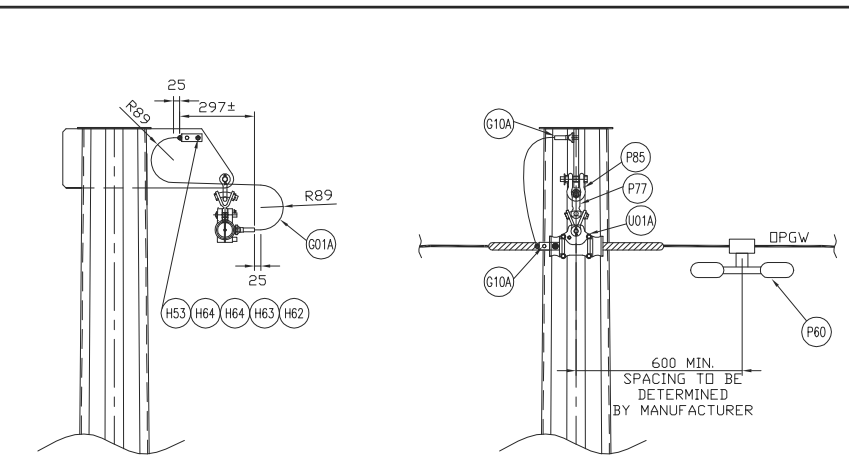
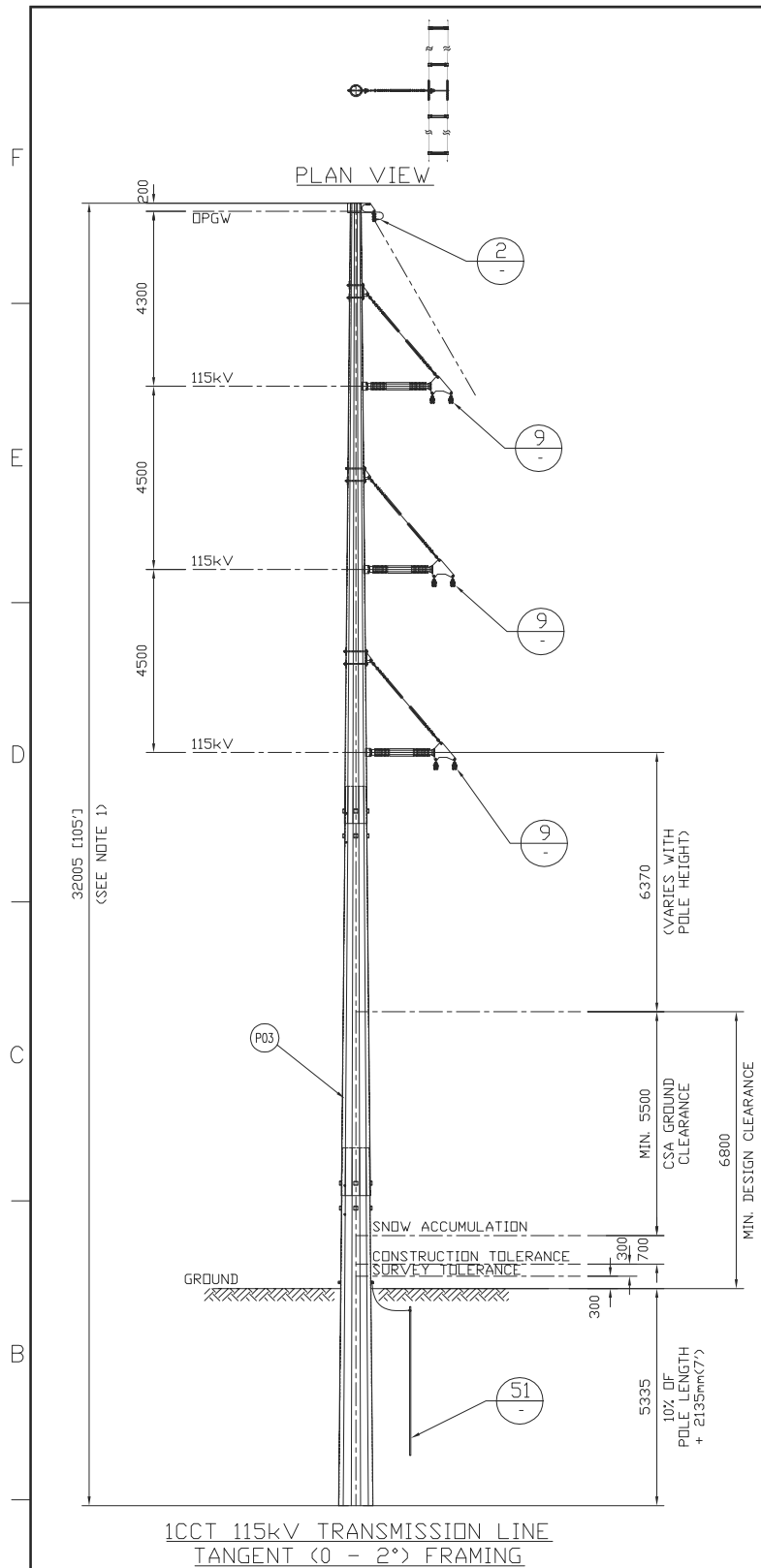
OPGW SPLICE ENCLOSURE - SPLICE THROUGH FOR STEEL STRUCTURE

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
C	01/03/13	ISSUED FOR TENDER								C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER								B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW								A	18/01/13	ISSUED FOR REVIEW				

STAMP/SEAL  
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APPROVED FOR CONSTRUCTION				AREA		SUBJECT		CLIENT DWG. NO.	
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.		NEXTERA 5-PACK TRANSMISSION LINE		115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION OPGW SPLICE ENCLOSURE-SPLICE THROUGH INSTALLATION & ASSEMBLY DETAIL		1235-2-P132	
PROJECT PHASE	PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	DSN.	E.KWONG	07/01/13	DRN.	J.CHEN	07/01/13
SCALE	N.T.S. (11"x17")	BY	D/M/Y	BY	E.KWONG	07/01/13	DRN.	J.CHEN	07/01/13
CADD FILE ADDRESS				1235-2-P132-C		REV. C			






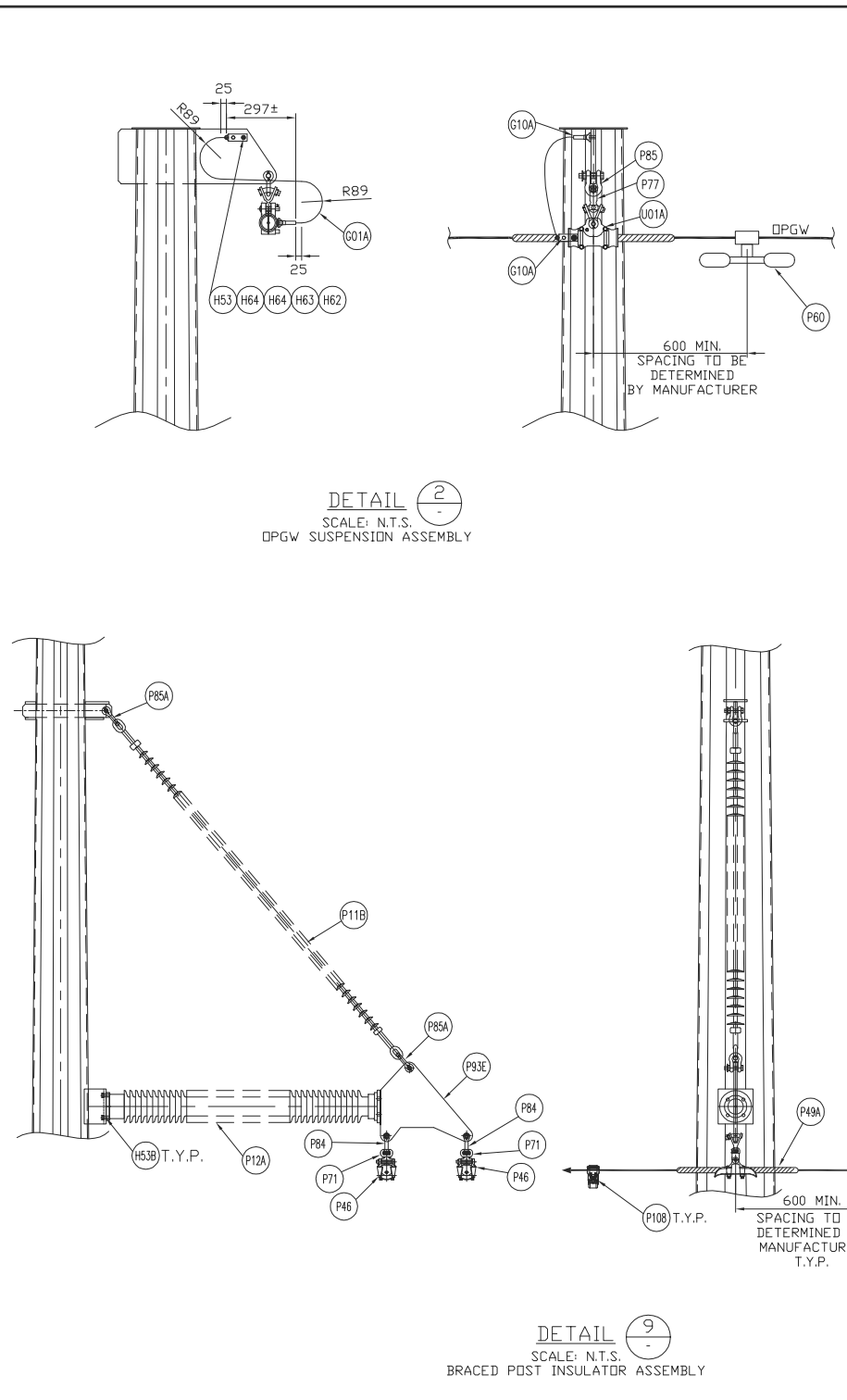
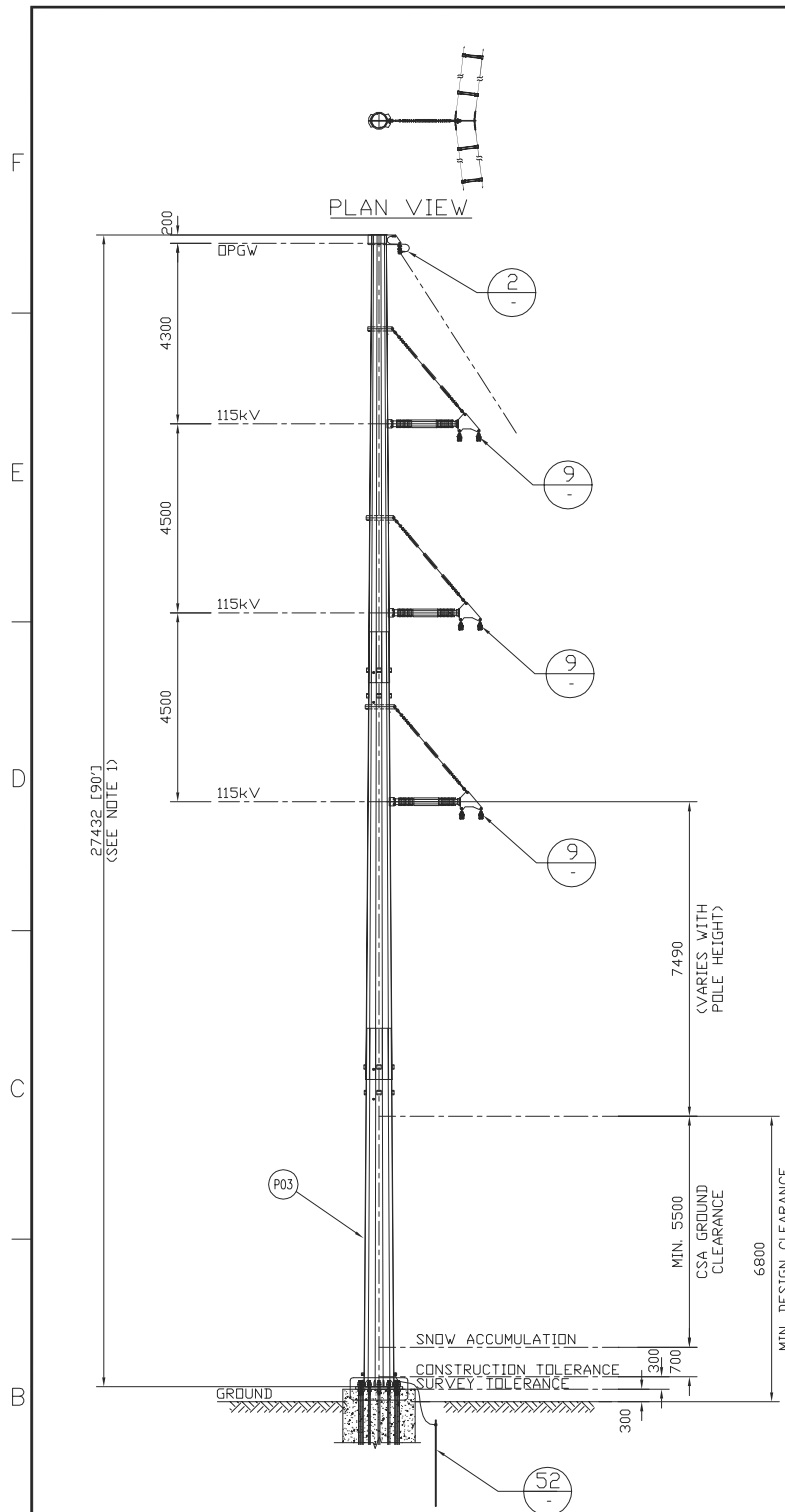
BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11B	3	230kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 50,000LBS EYE - EYE ENDS)	NGK-LOCKE PART #502-SC690-EE	
P12A	3	115/138kV TRANSMISSION LINE POST INSULATOR (FLANGE TOP - FLANGE BASE)	NGK-LOCKE PART #L4-SN321-55U	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P71	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P78	1	Y-CLEVIS EYE 90 DEG. CONNECTOR (UTS 25,000LBS)	HUBBELL YCS0690	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85A	6	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
P93E	3	CONDUCTOR YOKE PLATE FOR BRACED POST INSULATOR		DWG# 1235-2-F017
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53B	12	16mm(5/8")x32mm A325 BOLT + 2xFLAT WASHER (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90 DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:  
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.  
2. VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

REV	D/M/Y	REVISION	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					F	14/05/13	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	X.Z.	W.L.					E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.H.					C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.H.					B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.H.					A	17/08/12	ISSUED FOR REVIEW			

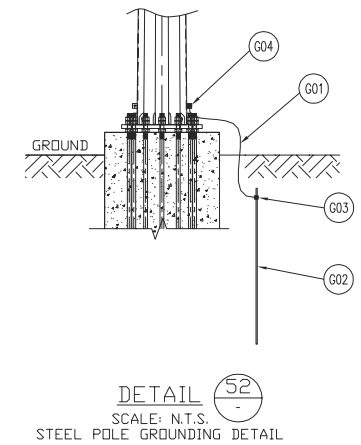
<div>STAMP/SEAL</div> <div>PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.</div>	APPROVED FOR CONSTRUCTION						<div><b>Chimax Inc.</b> Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On., L3R 0A9 Email: chimax@chimax.ca</div>
	CLIENT PROJECT MGR.   DEPARTMENT MGR.   PROJECT MGR.			AREA	NEXTERA 5-PACK TRANSMISSION LINE		
	PROJECT PHASE						
	PROJECT NO.	ACTIVITY NO.		PACKAGE CODE	SUBJECT  1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION TANGENT (0 - 2°) FRAMING		
SCALE  N.T.S. (11"x17")		BY DSN. E.KWONG DRN. X.ZHANG	D/M/Y 14/08/12 14/08/12	DRAWING NO.  1235-2-P310			REV.  F
CADD FILE ADDRESS 1235-2-P310-F							






BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11B	3	230kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 50,000LBS EYE - EYE ENDS)	NGK-LOCKE PART #502-SC690-EE	
P12A	3	115/138kV TRANSMISSION LINE POST INSULATOR (FLANGE TOP - FLANGE BASE)	NGK-LOCKE PART #L4-SN321-55U	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P71	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P77	1	Y-CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL YCS06	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85A	6	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50BNK	
P93E	3	CONDUCTOR YOKE PLATE FOR BRACED POST INSULATOR		DWG# 1235-2-F017
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53B	12	16mm(5/8")x32mm A325 BOLT + 2xFLAT WASHER (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90 DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

NOTES:  
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.  
2. VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

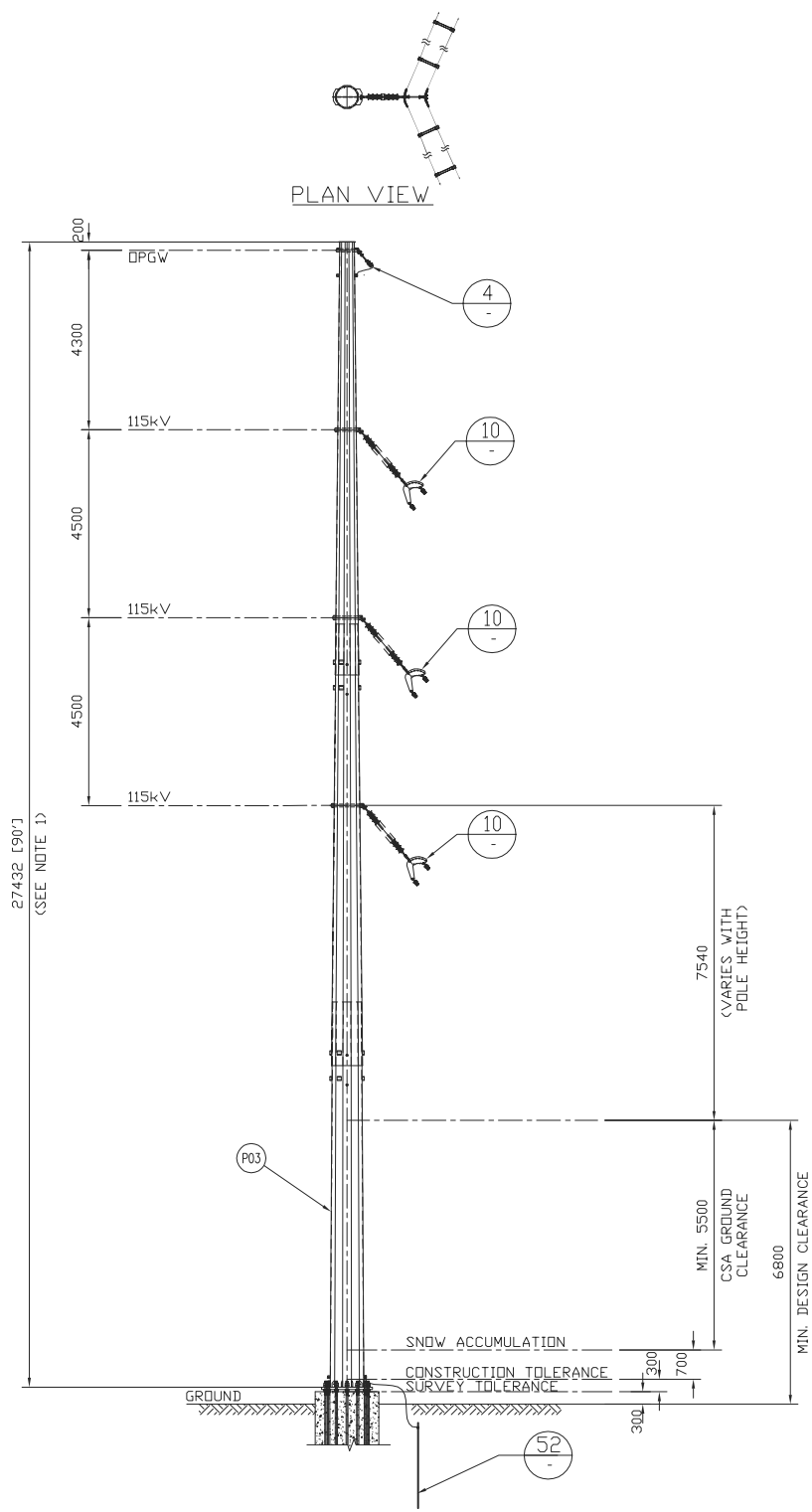


1CCT 115kV TRANSMISSION LINE LIGHT ANGLE (2 - 15°) FRAMING									
REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					F
E	01/03/13	ISSUED FOR TENDER	X.Z.	W.L.					E
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					D
C	18/01/13	ISSUED FOR TENDER	J.C.	M.R.					C
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.					B
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.R.					A
REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y

<div>STAMP/SEAL</div> <div>PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF CHIMAX INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF CHIMAX INC.</div>	APPROVED FOR CONSTRUCTION								<div><div><b>Chimax Inc.</b> Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On., L3R 0A9 Email: chimax@chimax.ca</div></div>					
	CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA B		NEXTERA 5-PACK TRANSMISSION LINE							
	PROJECT PHASE													
	PROJECT NO.		ACTIVITY NO.		PACKAGE CODE		SUBJECT				CLIENT DWG. NO.			
							1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION LIGHT ANGLE (2 - 15°) FRAMING							
	SCALE		BY		D/M/Y						DRAWING NO.		REV.	
	N.T.S. (11"x17")		DSN. E.KWONG		14/08/12						1235-2-P311		F	
			DRN. X.ZHANG		14/08/12									
											CADD FILE ADDRESS			
											1235-2-P311-F			



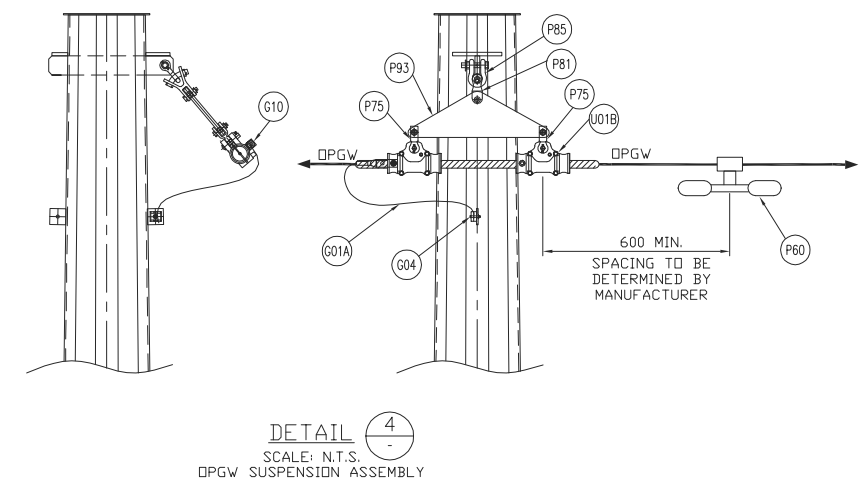
F  
E  
D  
C  
B  
A



1CCT 115kV TRANSMISSION LINE  
MEDIUM ANGLE (15 - 45°) FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11A	3	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS Y-CLEVIS - BALL ENDS)	NGK-LOCKE PART #301-SC390-YJ	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE(T.B.A.)
P71A	3	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA07	
P75	2	CLEVIS EYE CONNECTOR (UTS 25,000LBS)	HUBBELL CA06	
P76	6	CLEVIS EYE 90 DEG. CONNECTOR (UTS 50,000LBS)	HUBBELL CE05420	
P79	3	CLEVIS CLEVIS CONNECTOR (UTS 50,000LBS)	HUBBELL CCC309055	
P81	1	Y-CLEVIS CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YCC30	
P85	4	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P93	1	YDKE PLATE FOR DPGW (UTS 40,000LBS)	PLP YP-5909	
P93B	3	CONDUCTOR YDKE PLATE (UTS 50,000LBS)	HUBBELL YPC509378	
P108	1	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18' SPACING)	PFISTERER 182 952-195	
G01	1	GROUND WIRE (2/0 STR. Cu.)		
G01A	1	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	2	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10	1	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U01B	1	SINGLE CUSHION CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 40,000LBS)	PLP 4700205	

- NOTES:  
1. FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.  
2. VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.						F	14/05/12	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	D.W.	W.L.						E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.						D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.R.						C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.						B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.R.						A	17/08/12	ISSUED FOR REVIEW			

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12	
	DRN. J.CHEN	14/08/12	

SUBJECT  
1CCT 115kV TRANSMISSION LINE  
DOUBLE CONDUCTOR CONFIGURATION  
MEDIUM ANGLE (15 - 45°) FRAMING

Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

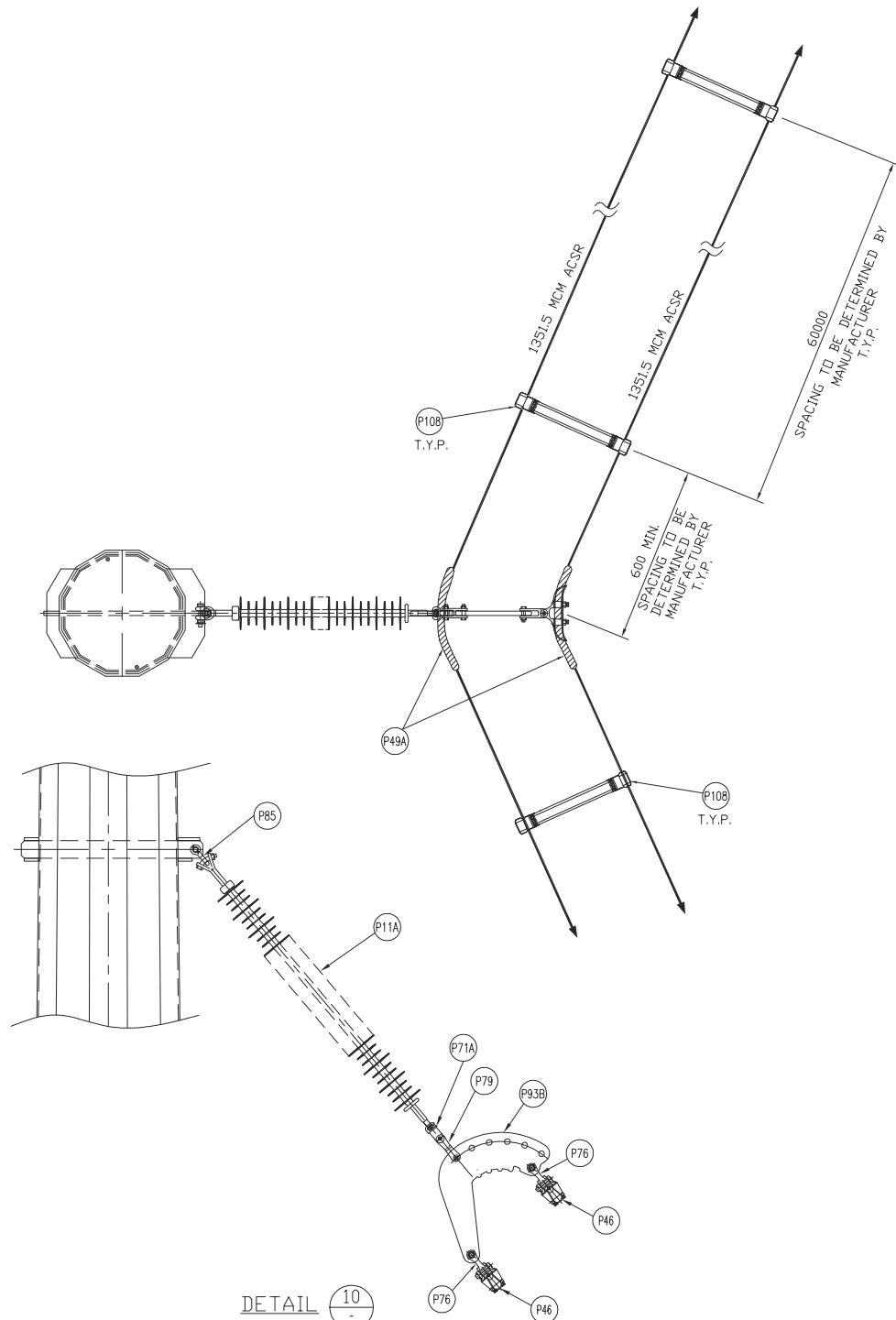
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1235-2-P313-S01

CADD FILE ADDRESS  
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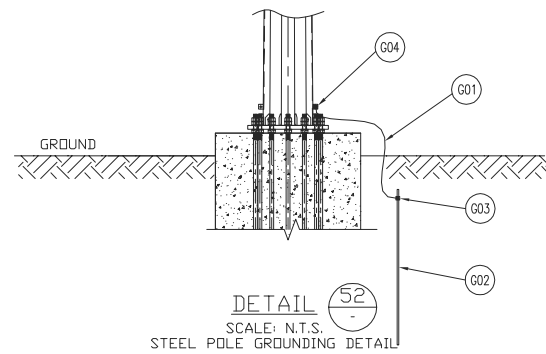
REV.  
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DETAIL 10  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					F	14/05/12	ISSUED FOR TENDER			
E	01/03/13	ISSUED FOR TENDER	D.W.	W.L.					E	01/03/13	ISSUED FOR TENDER			
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					D	14/02/13	ISSUED FOR TENDER			
C	18/01/13	ISSUED FOR TENDER	J.C.	M.H.					C	18/01/13	ISSUED FOR TENDER			
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.H.					B	11/01/13	ISSUED FOR REVIEW			
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.H.					A	17/08/12	ISSUED FOR REVIEW			

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION MEDIUM ANGLE (15 - 45°) FRAMING	

Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

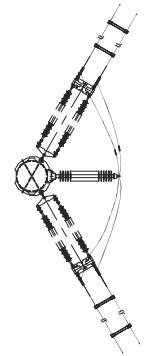
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CADD FILE ADDRESS  
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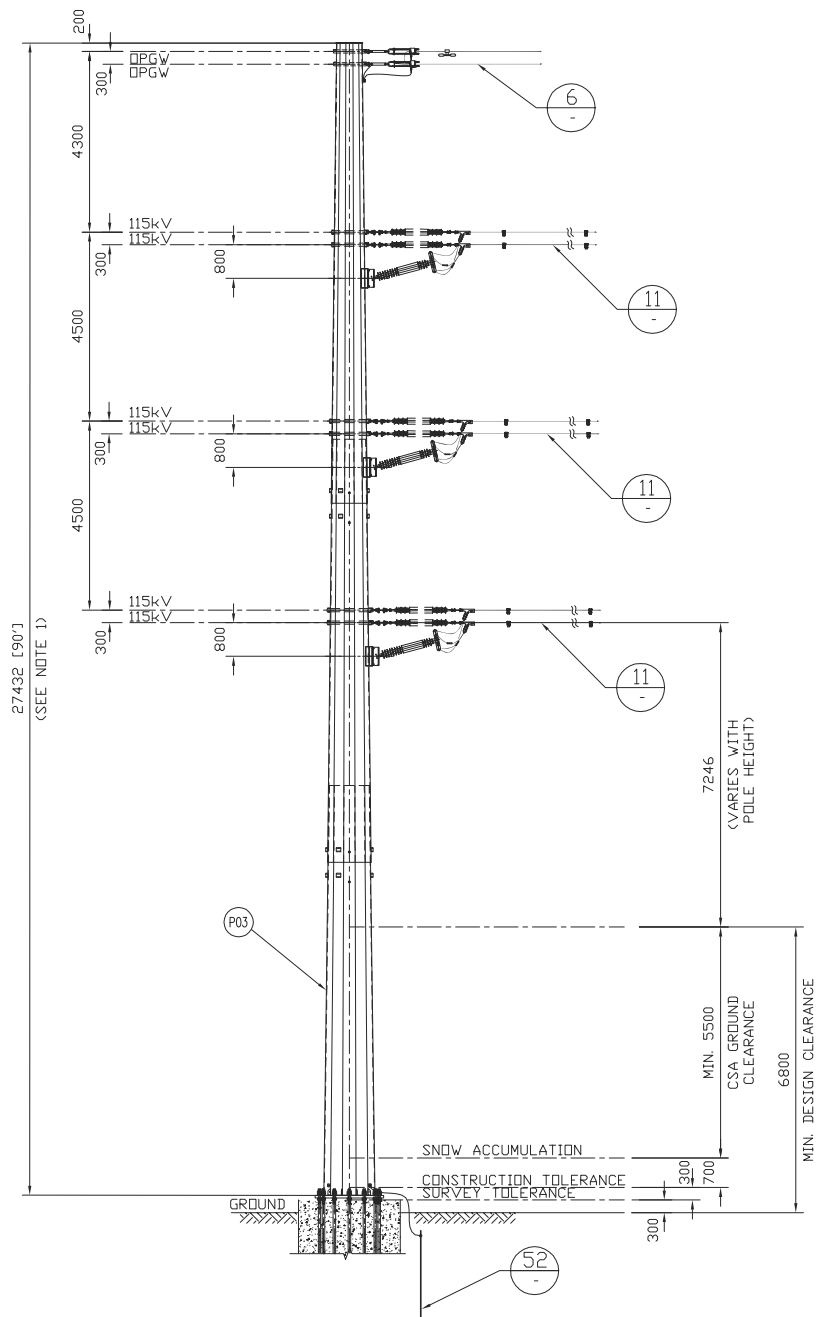
REV.  
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PLAN VIEW



1CCT 115kV TRANSMISSION LINE  
HEAVY ANGLE (45 - 60°) FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18' SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")Øx64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPOC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

- NOTES:
- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
  - VIBRATION DAMPER AND TWIN SAPACER DAMPER TO BE ADVISED BY OTHERS.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER	J.C.	W.L.						F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER	J.C.	W.L.						E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER	J.C.	W.L.						D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER	J.C.	M.A.						C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW	J.C.	M.A.						B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW	J.C.	M.A.						A	17/08/12	ISSUED FOR REVIEW				

STAMP/SEAL  
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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12	
	DRN. J.CHEN	14/08/12	

SUBJECT  
1CCT 115kV TRANSMISSION LINE  
DOUBLE CONDUCTOR CONFIGURATION  
HEAVY ANGLE (45 - 60°) FRAMING



**Chimax Inc.**  
Engineering Company  
3850 Fourteenth Ave. East, Suite 506  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-2-P314-S01

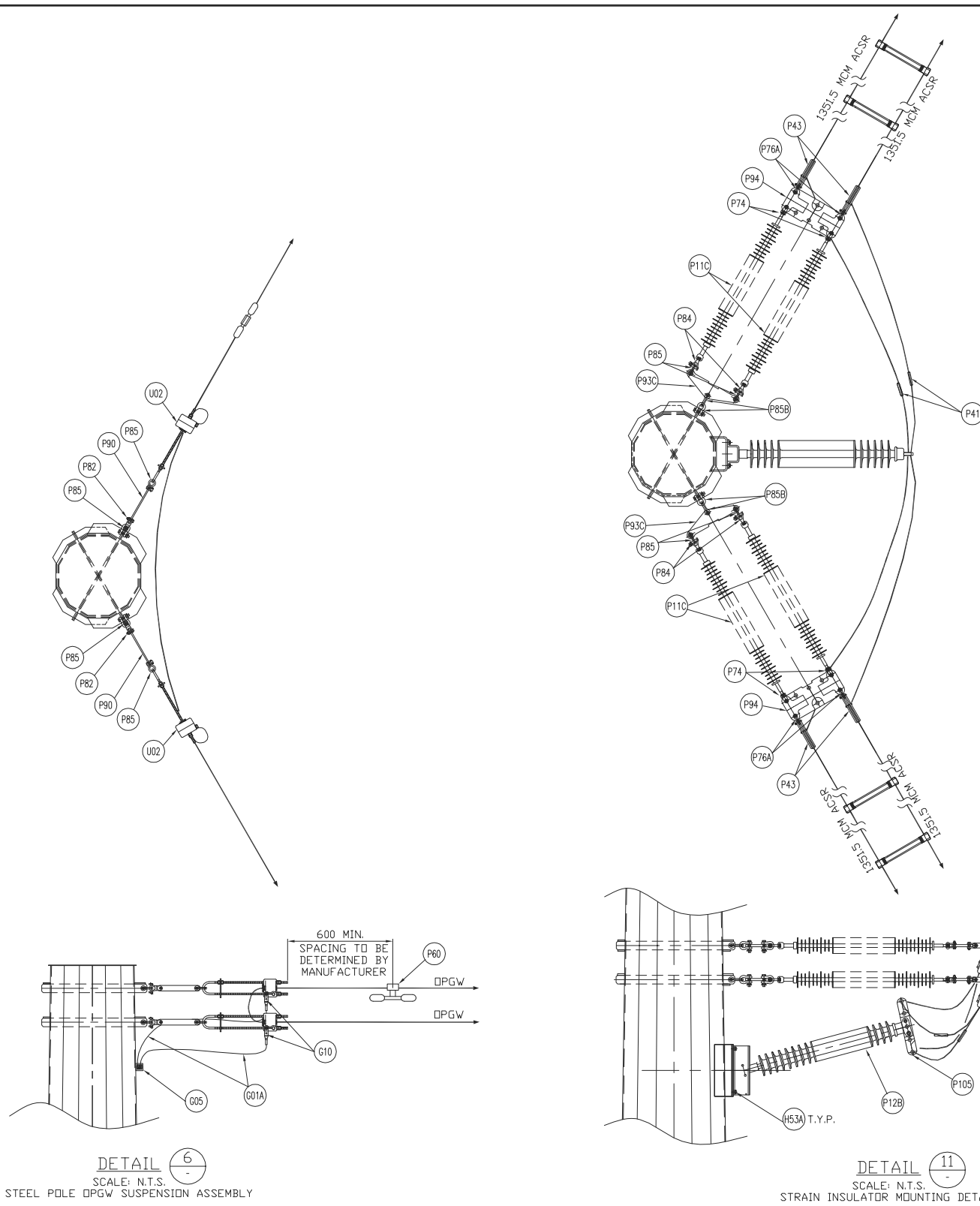
CADD FILE ADDRESS  
1235-2-P314-S01&S02-F

REV.

F

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REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER		J.C.	W.L.					F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER		J.C.	W.L.					E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER		J.C.	W.L.					D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER		J.C.	M.J.A.					C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW		J.C.	M.J.A.					B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW		J.C.	M.J.A.					A	17/08/12	ISSUED FOR REVIEW				

STAMP/SEAL

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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	14/08/12

AREA

NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT

1CCT 115kV TRANSMISSION LINE  
DOUBLE CONDUCTOR CONFIGURATION  
HEAVY ANGLE (45 - 60°) FRAMING

CLIENT DWG. NO.

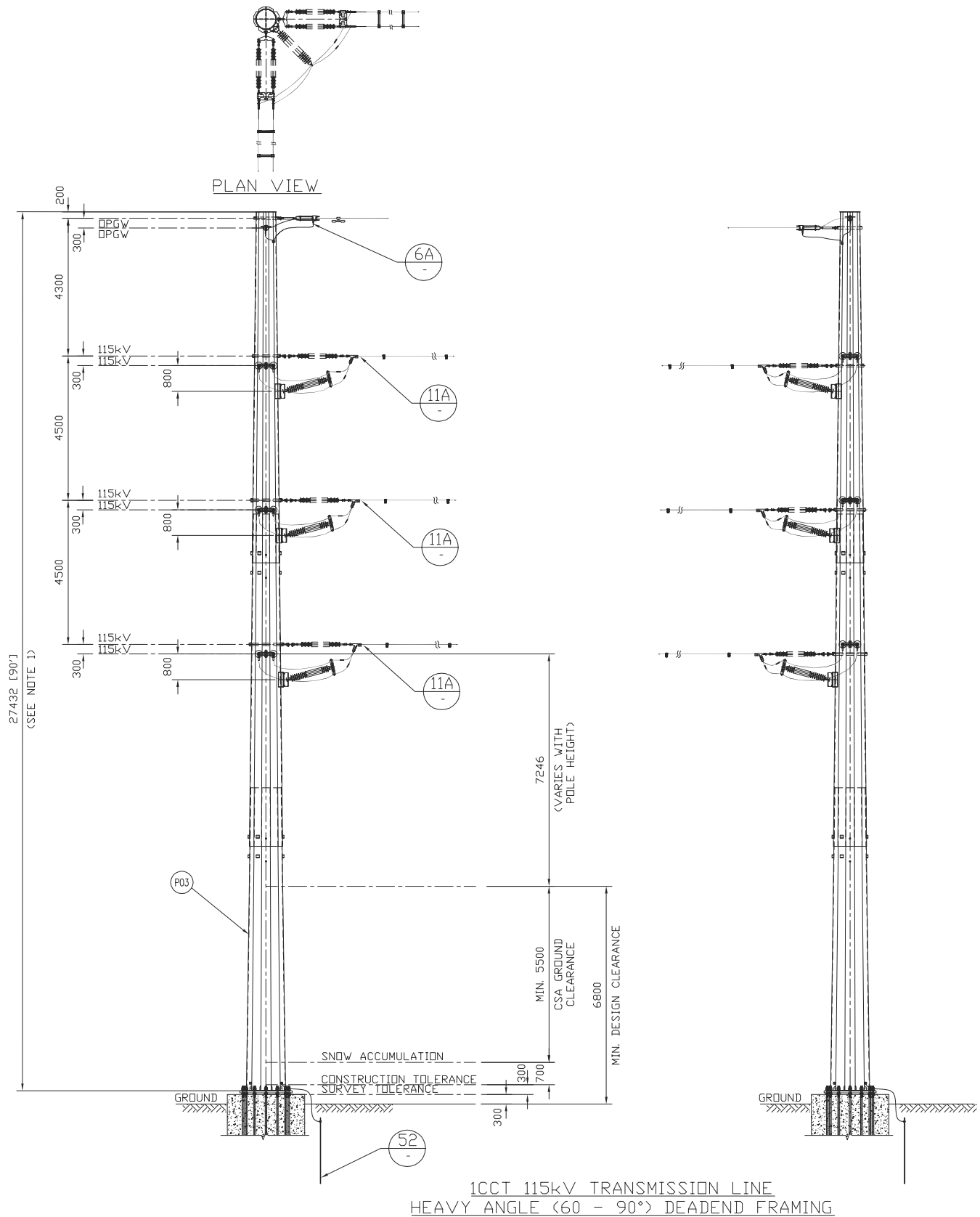
DRAWING NO.  
1235-2-P314-S02

REV.  
F

CADD FILE ADDRESS  
1235-2-P314-S01&S02-F







1CCT 115kV TRANSMISSION LINE  
HEAVY ANGLE (60 - 90°) DEADEND FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LDT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")Øx64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LDT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LDT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

NOTES:

- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
- VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

DRAWING NO.  
1235-2-P315-S01

REV.  
F

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REFERENCES
F	14/05/13	ISSUED FOR TENDER							J.C.	W.L.	F	14/05/13	ISSUED FOR TENDER
E	01/03/13	ISSUED FOR TENDER							J.C.	W.L.	E	01/03/13	ISSUED FOR TENDER
D	14/02/13	ISSUED FOR TENDER							J.C.	W.L.	D	14/02/13	ISSUED FOR TENDER
C	18/01/13	ISSUED FOR TENDER							J.C.	M.H.	C	18/01/13	ISSUED FOR TENDER
B	11/01/13	ISSUED FOR REVIEW							J.C.	M.H.	B	11/01/13	ISSUED FOR REVIEW
A	17/08/12	ISSUED FOR REVIEW							J.C.	M.H.	A	17/08/12	ISSUED FOR REVIEW

APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE  
N.T.S. (11"x17")

BY  
DSN. E.KWONG  
DRN. J.CHEN

D/M/Y  
14/08/12  
14/08/12

AREA  
NEXTERA 5-PACK TRANSMISSION LINE

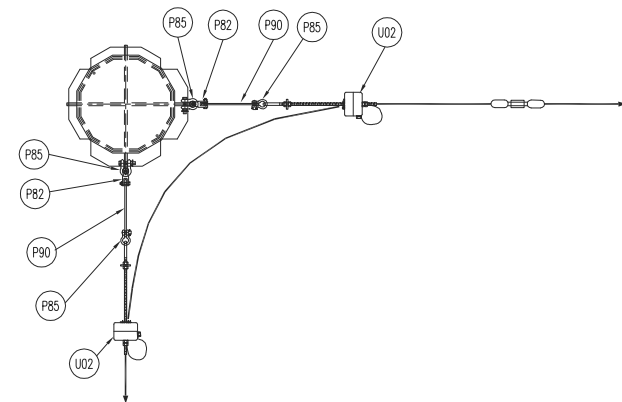
SUBJECT  
1CCT 115kV TRANSMISSION LINE  
DOUBLE CONDUCTOR CONFIGURATION  
HEAVY ANGLE (60 - 90°) FRAMING

STAMP/SEAL

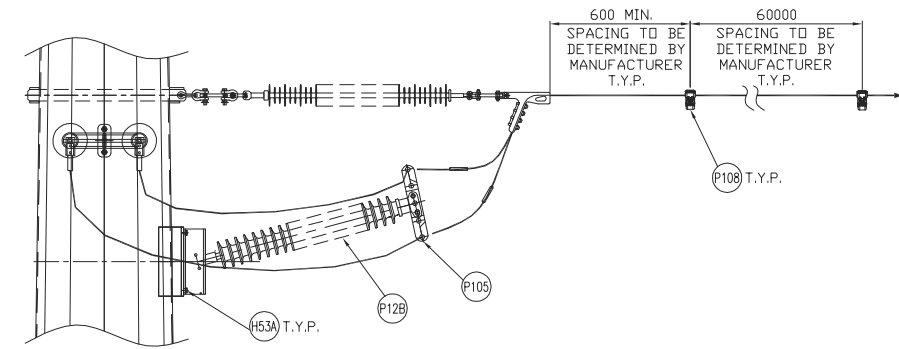
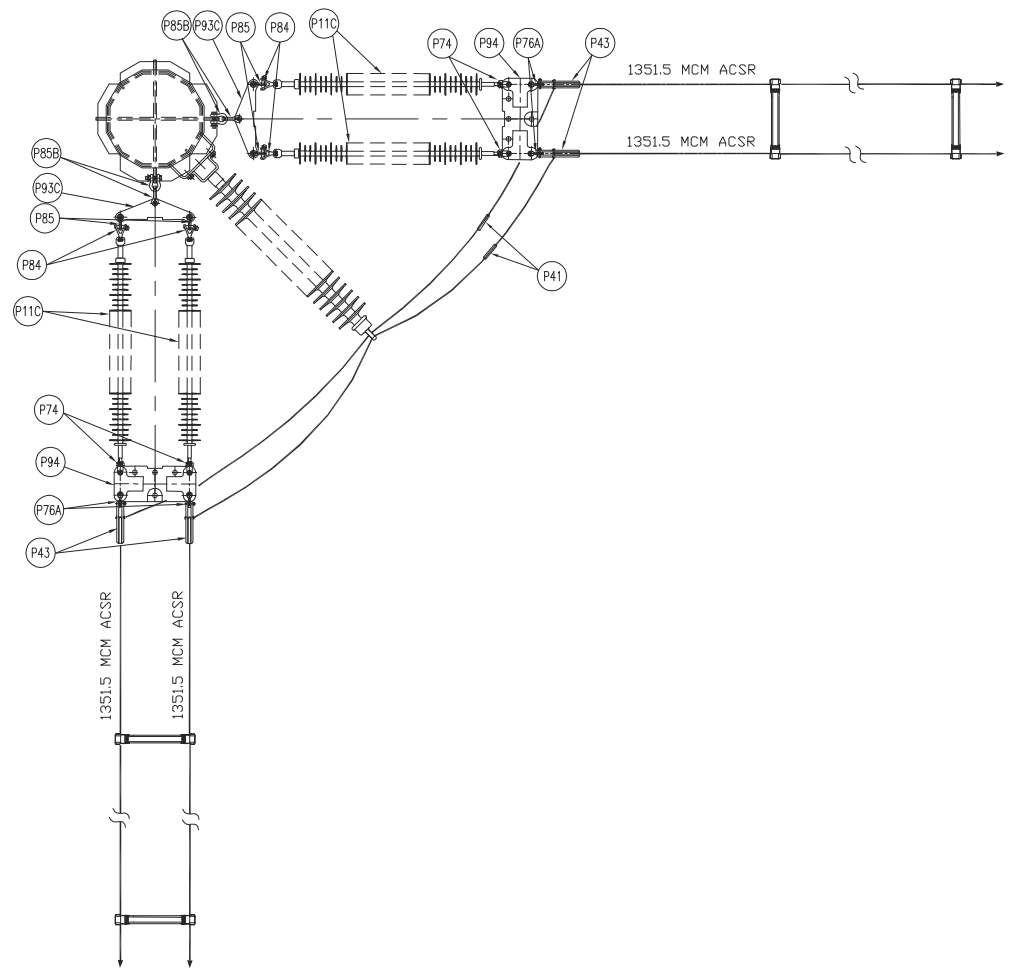
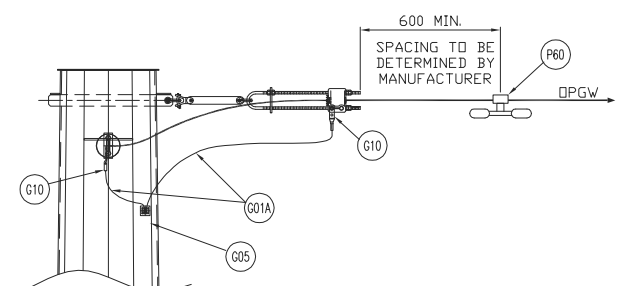
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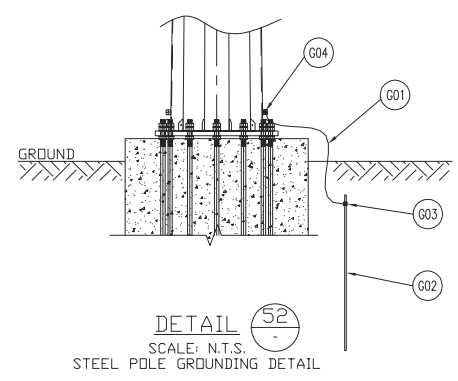
F  
E  
D  
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DETAIL 6A  
SCALE: N.T.S.  
STEEL POLE DPGW SUSPENSION ASSEMBLY



DETAIL 11A  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
F	14/05/13	ISSUED FOR TENDER		J.C.	W.L.				F	14/05/13	ISSUED FOR TENDER				
E	01/03/13	ISSUED FOR TENDER		J.C.	W.L.				E	01/03/13	ISSUED FOR TENDER				
D	14/02/13	ISSUED FOR TENDER		J.C.	W.L.				D	14/02/13	ISSUED FOR TENDER				
C	18/01/13	ISSUED FOR TENDER		J.C.	M.R.				C	18/01/13	ISSUED FOR TENDER				
B	11/01/13	ISSUED FOR REVIEW		J.C.	M.R.				B	11/01/13	ISSUED FOR REVIEW				
A	17/08/12	ISSUED FOR REVIEW		J.C.	M.R.				A	17/08/12	ISSUED FOR REVIEW				

STAMP/SEAL  
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APPROVED FOR CONSTRUCTION		
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE
SCALE	BY	D/M/Y
N.T.S. (11"x17")	DSN. E.KWONG	14/08/12
	DRN. J.CHEN	14/08/12

AREA	
NEXTERA 5-PACK TRANSMISSION LINE	
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING	

Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.	REV.
DRAWING NO. 1235-2-P315-S02	F
CADD FILE ADDRESS 1235-2-P315-S01&S02-F	

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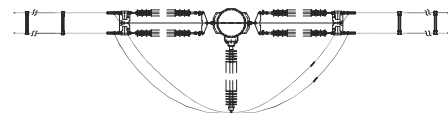
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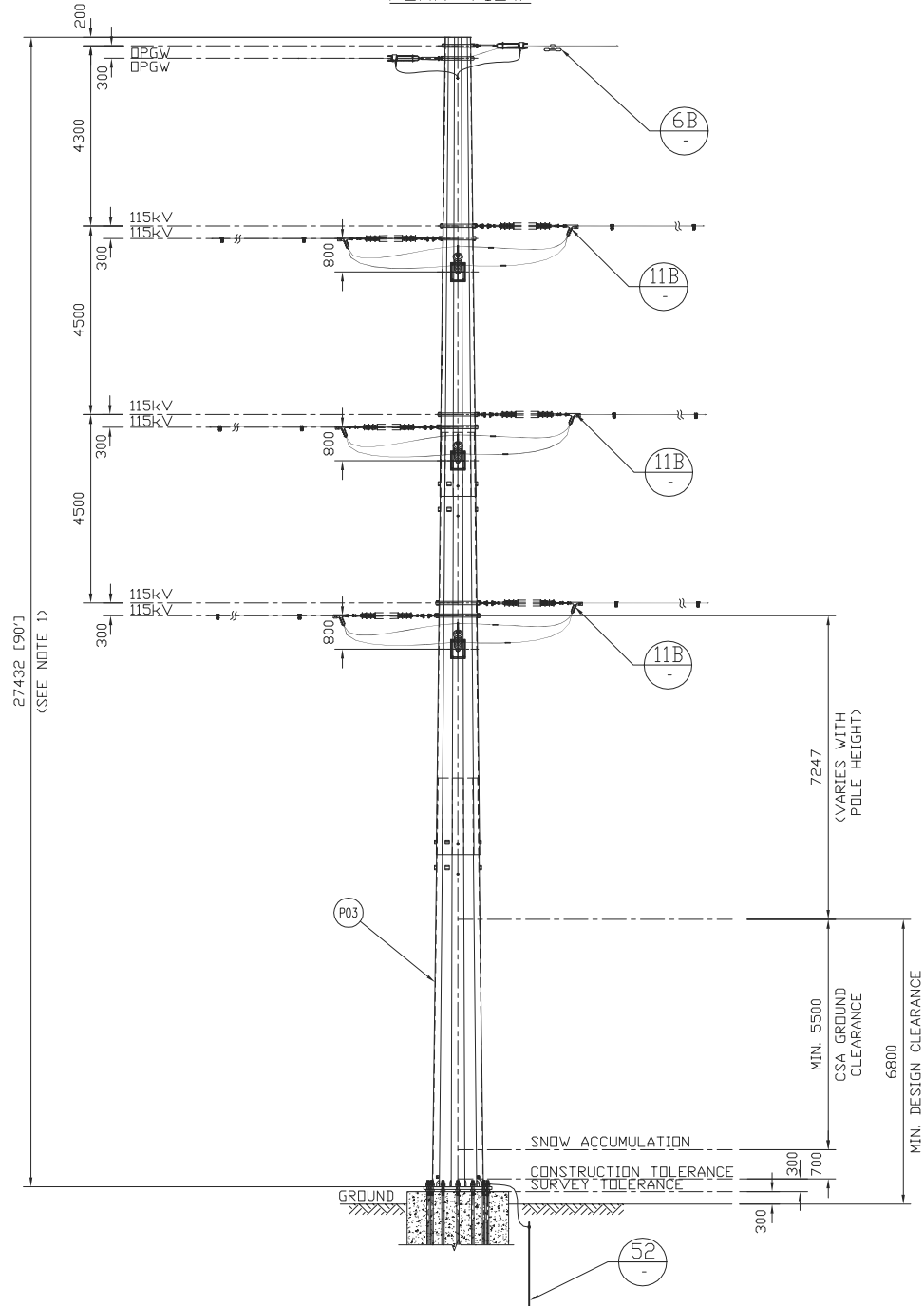
C

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PLAN VIEW



1CCT 115kV TRANSMISSION LINE  
DOUBLE DEADEND FRAMING

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)

ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")Øx64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

NOTES:

- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
- VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

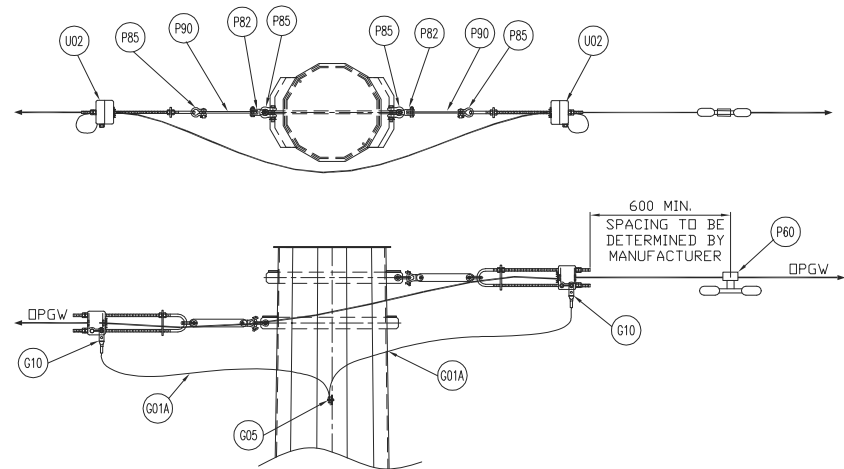


CLIENT DWG. NO.	
DRAWING NO. 1235-2-P316-S01	REV. E
CADD FILE ADDRESS 1235-2-P316-S01&S02-E	

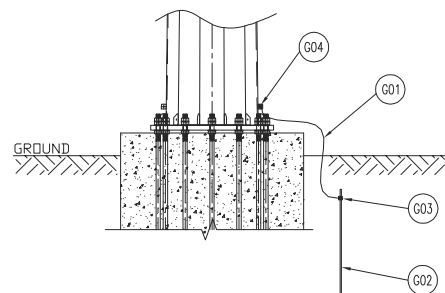
REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	14/05/13	ISSUED FOR TENDER							J.C.	W.L.			E	14/05/13	ISSUED FOR TENDER
D	01/03/13	ISSUED FOR TENDER							J.C.	W.L.			D	01/03/13	ISSUED FOR TENDER
C	14/02/13	ISSUED FOR TENDER							J.C.	W.L.			C	14/02/13	ISSUED FOR TENDER
B	18/01/13	ISSUED FOR TENDER							J.C.	M.H.			B	18/01/13	ISSUED FOR TENDER
A	11/01/13	ISSUED FOR REVIEW							J.C.	M.H.			A	11/01/13	ISSUED FOR REVIEW

STAMP/SEAL  
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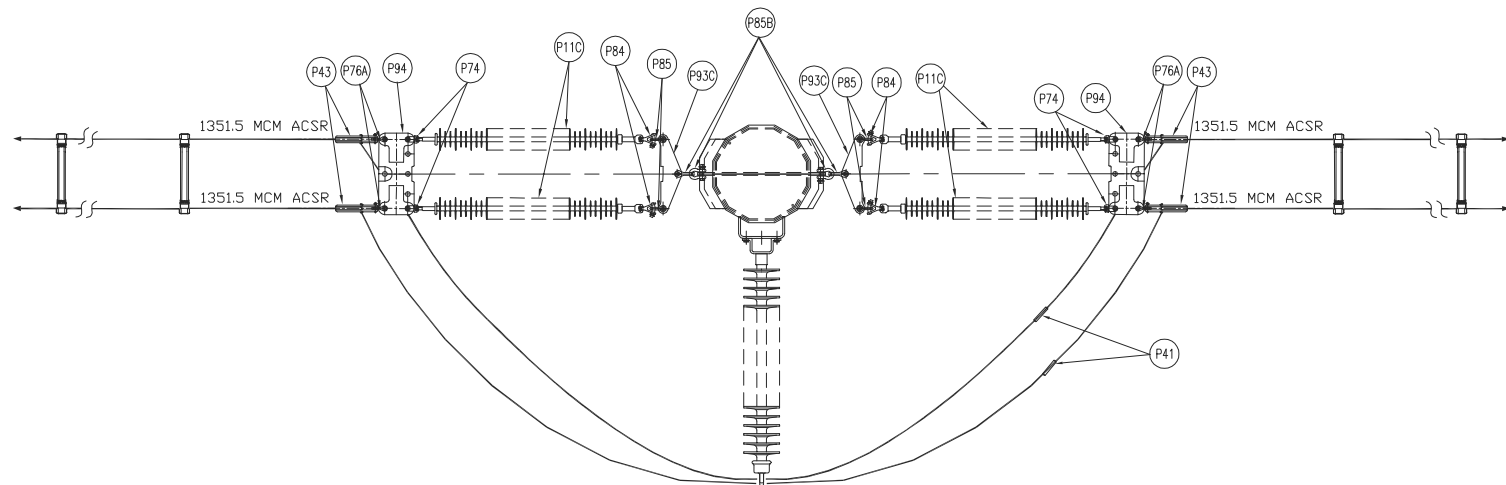
APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.		DEPARTMENT MGR.	PROJECT MGR.
PROJECT PHASE		AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	SUBJECT
SCALE N.T.S. (11"x17")	BY DSN. E.KWONG DRN. J.CHEN	D/M/Y 08/01/13 08/01/13	1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION DOUBLE DEADEND FRAMING



DETAIL 6B  
SCALE: N.T.S.  
STEEL POLE DPGW SUSPENSION ASSEMBLY



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL



DETAIL 11B  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE
E	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					E	14/05/13	ISSUED FOR TENDER			
D	01/03/13	ISSUED FOR TENDER	J.C.	W.L.					D	01/03/13	ISSUED FOR TENDER			
C	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					C	14/02/13	ISSUED FOR TENDER			
B	18/01/13	ISSUED FOR TENDER	J.C.	M.R.					B	18/01/13	ISSUED FOR TENDER			
A	11/01/13	ISSUED FOR REVIEW	J.C.	M.R.					A	11/01/13	ISSUED FOR REVIEW			

STAMP/SEAL  
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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.		DEPARTMENT MGR.	
PROJECT MGR.		PROJECT MGR.	
PROJECT PHASE			
PROJECT NO.		ACTIVITY NO.	
PACKAGE CODE		D/M/Y	
SCALE		BY	
N.T.S. (11"x17")		DSN. E.KWONG	
		DRN. J.CHEN	

AREA	NEXTERA 5-PACK TRANSMISSION LINE
SUBJECT	
1CCT 115kV TRANSMISSION LINE	
DOUBLE CONDUCTOR CONFIGURATION	
DOUBLE DEADEND FRAMING	

**NEXTERA ENERGY**  
CANADA

**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

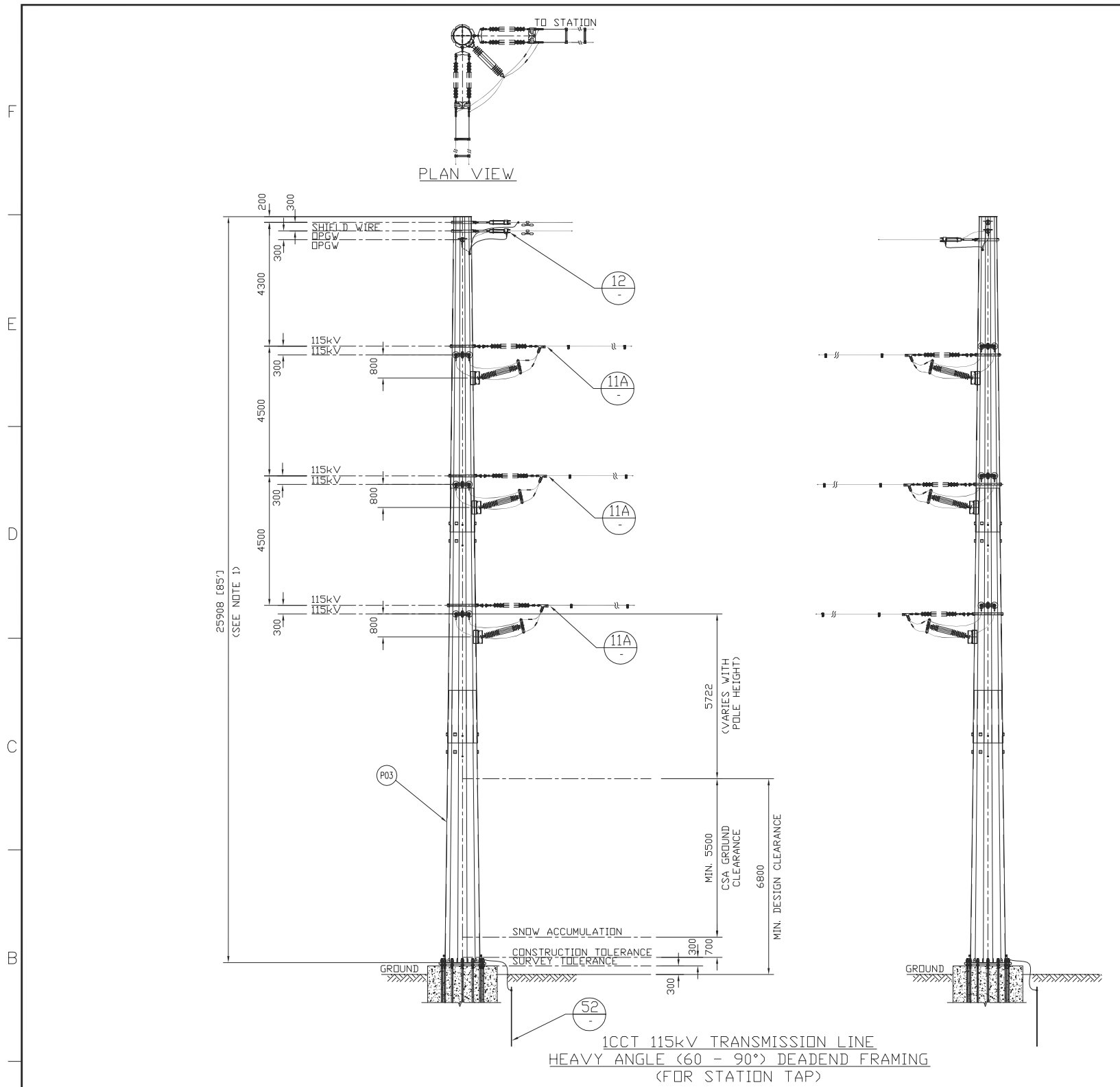
CLIENT DWG. NO.

DRAWING NO.  
1235-2-P316-S02

REV.  
E

CADD FILE ADDRESS  
1235-2-P316-S01&S02-E

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BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11C	12	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P12B	3	115/138kV TRANSMISSION LINE POST INSULATOR (DROP TONGUE - FLAT BASE)	NGK-LOCKE PART #L4-SN321-18	
P41	6	COMPRESSION SPLICE FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL A151561	
P43	12	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P60	1	VIBRATION DAMPER FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P74	12	SOCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	12	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	12	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	16	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P93C	6	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	6	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P105	3	JUMPER ASSY. FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	HUBBELL 2717243001	
P108	LOT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18' SPACING)	PFISTERER 182 952-195	
H53A	12	22mm(7/8")x64mm A325 BOLT + 2xFLAT WASHER + NUT (GALV.)		
G01	LOT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LOT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G05	1	DOUBLE GROOVE GROUND CLAMP FOR #2 7STR. Cu. & #2 7STR. Cu.	HUBBELL GC143G1	
G10	2	COPPER COMPRESSION TERMINAL FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018B	
U02	2	DEADEND CLAMP FOR 48 FIBERS DPGW (REF: SFPDC/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

ADDITIONAL PARTS FOR SHIELD WIRE TAP TO STATION				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P60B	1	VIBRATION DAMPER FOR 7#5 ALUMOWELD SHIELD WIRE	HUBBELL 607051011	
P82	1	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P85	2	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P90	1	EXTENSION STRAP (12' LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
G01B	LOT	4/0 STR. Cu. GROUND WIRE		
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	

- NOTES:
- FOR POLE HEIGHT & POLE CLASS, SEE CONSTRUCTION STAKING TABLE.
  - VIBRATION DAMPER AND TWIN SPACER DAMPER TO BE ADVISED BY OTHERS.

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	14/05/13	ISSUED FOR TENDER		J.C.	W.L.				D	14/05/13	ISSUED FOR TENDER				
C	01/03/13	ISSUED FOR TENDER		J.C.	W.L.				C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER		J.C.	W.L.				B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW		J.C.	M.A.				A	18/01/13	ISSUED FOR REVIEW				

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APPROVED FOR CONSTRUCTION

CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.

PROJECT PHASE

PROJECT NO. ACTIVITY NO. PACKAGE CODE

SCALE  
N.T.S. (11"x17")

BY  
DSN. E.KWONG  
DRN. J.CHEN

D/M/Y  
18/01/13  
18/01/13

AREA  
NEXTERA 5-PACK TRANSMISSION LINE

SUBJECT  
1CCT 115kV TRANSMISSION LINE  
DOUBLE CONDUCTOR CONFIGURATION  
HEAVY ANGLE (60 - 90°) FRAMING  
(FOR STATION TAP)

**NEXtera**  
ENERGY  
CANADA

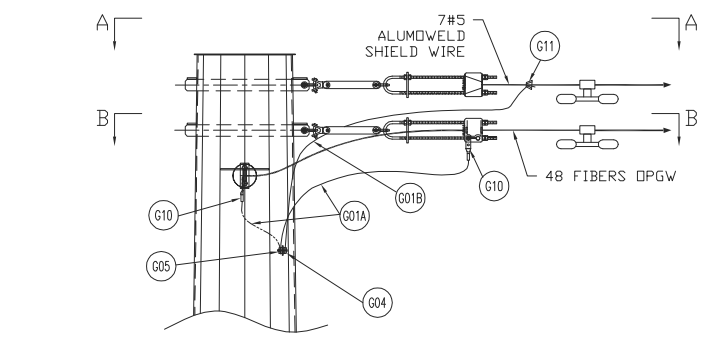
**Chimax Inc.**  
Engineering Company  
3850 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

CLIENT DWG. NO.

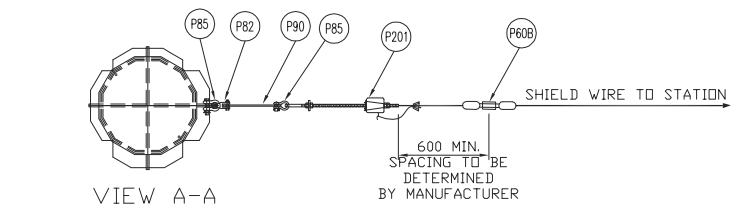
DRAWING NO.  
1235-2-P317-S01

REV.  
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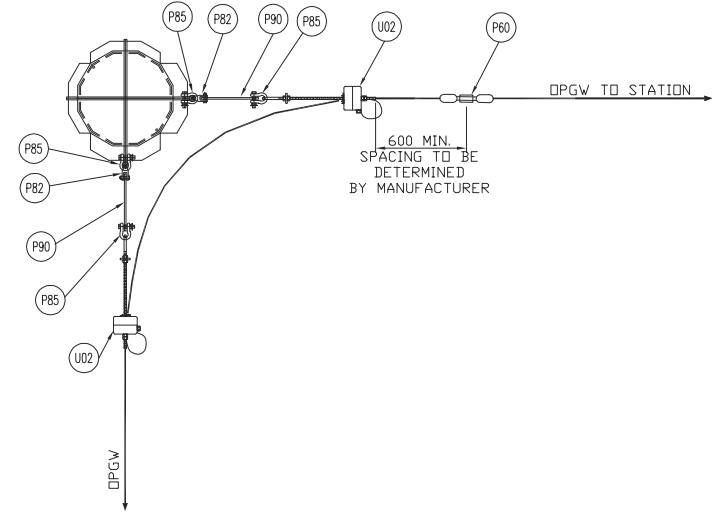
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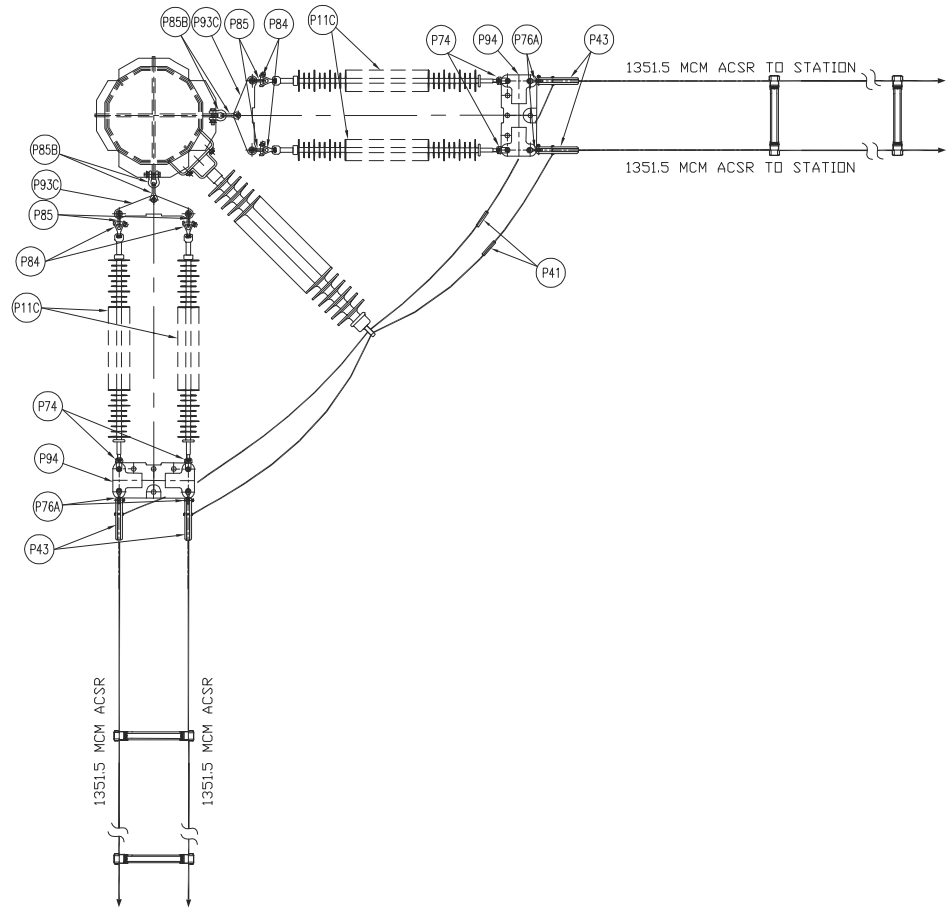
DETAIL 12  
SCALE: N.T.S.  
STEEL POLE SHIELD WIRE & OPGW SUSPENSION ASSEMBLY



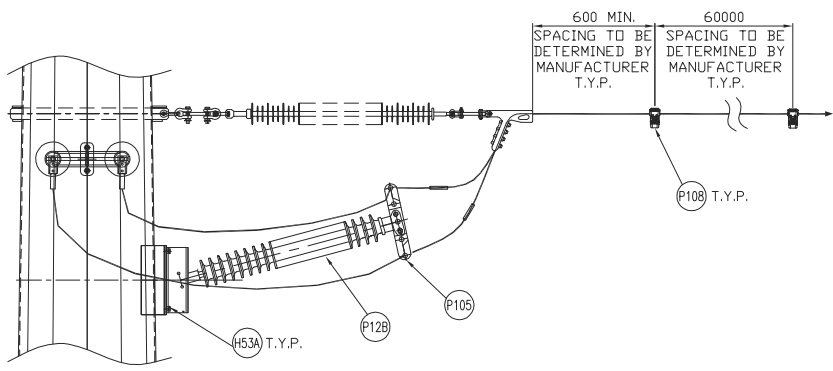
VIEW A-A  
SHIELD WIRE SUSPENSION ASSEMBLY



VIEW B-B  
OPGW SUSPENSION ASSEMBLY



DETAIL 11A  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL



DETAIL 52  
SCALE: N.T.S.  
STEEL POLE GROUNDING DETAIL

REV	D/M/Y	REVISION	DR	CHK	APP	APP	APP	ISS	D/M/Y	APP	ISSUED FOR	REF	NUMBER	TITLE	REFERENCES
D	14/05/13	ISSUED FOR TENDER	J.C.	W.L.					D	14/05/13	ISSUED FOR TENDER				
C	01/03/13	ISSUED FOR TENDER	J.C.	W.L.					C	01/03/13	ISSUED FOR TENDER				
B	14/02/13	ISSUED FOR TENDER	J.C.	W.L.					B	14/02/13	ISSUED FOR TENDER				
A	18/01/13	ISSUED FOR REVIEW	J.C.	M.R.					A	18/01/13	ISSUED FOR REVIEW				

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CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	
PROJECT PHASE		AREA	
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	
SCALE	BY	D/M/Y	
N.T.S. (11"x17")	DSN. E.KWONG	18/01/13	
	DRN. J.CHEN	18/01/13	

AREA	NEXTERA 5-PACK TRANSMISSION LINE
SUBJECT	
1CCT 115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION HEAVY ANGLE (60 - 90°) FRAMING (FOR STATION TAP)	

**NEXTERA ENERGY**  
CANADA

**Chimax Inc.**  
Engineering Company  
3850 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

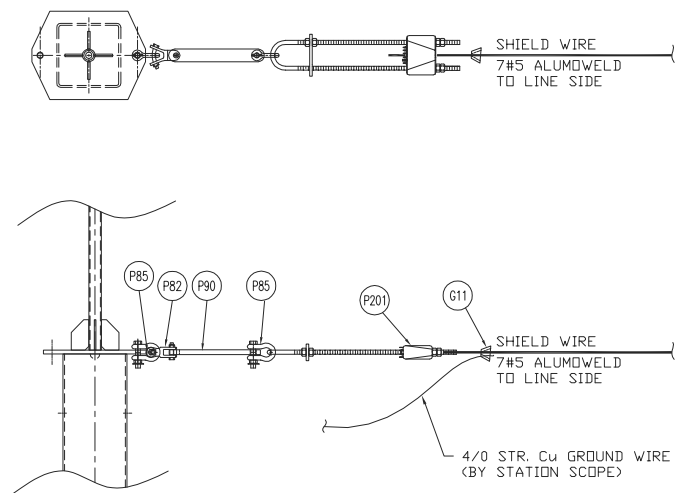
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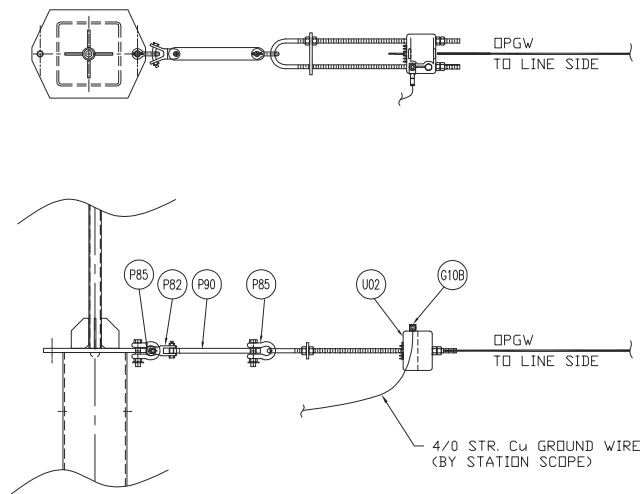
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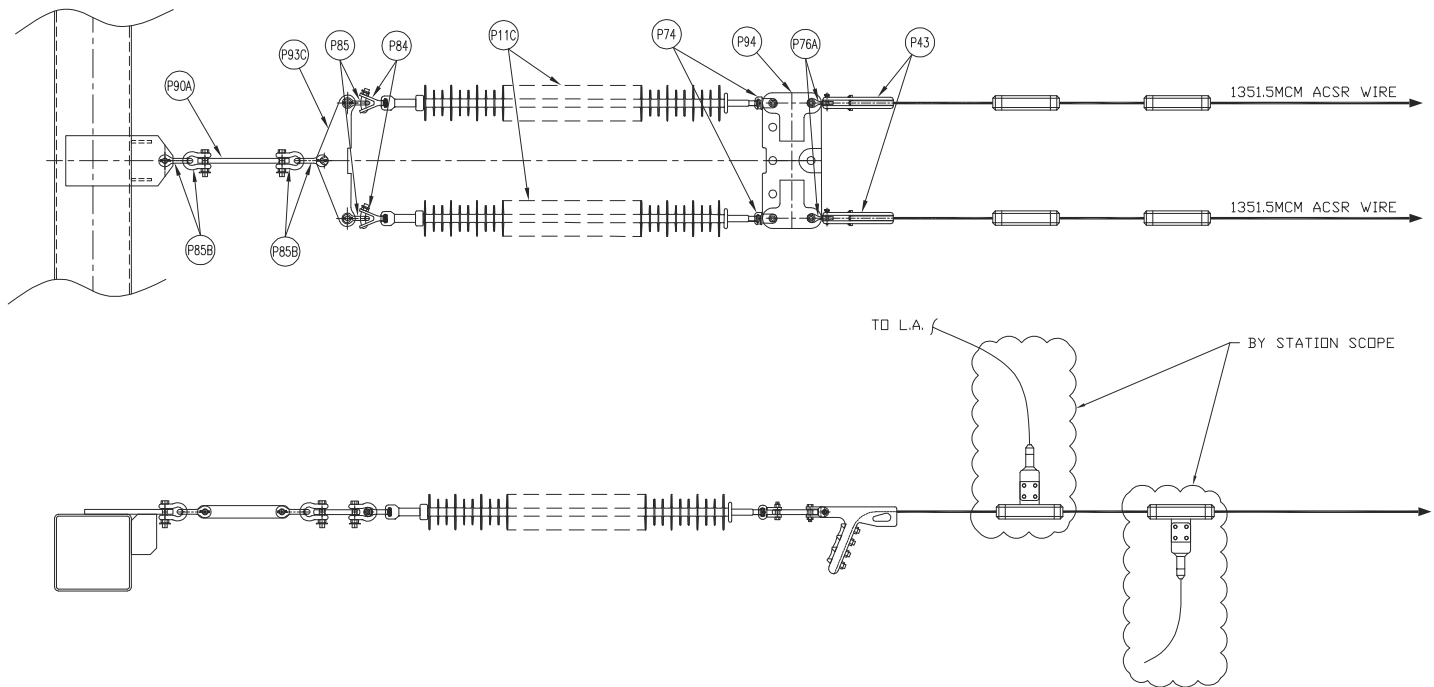
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SHIELD WIRE FOR STATION TOWER FRAMING DETAIL  
SCALE: N.T.S.  
SHIELD WIRE DEADEND ASSEMBLY



OPGW FOR STATION TOWER FRAMING DETAIL  
SCALE: N.T.S.  
OPGW DEADEND ASSEMBLY



CONDUCTOR FOR STATION TOWER FRAMING DETAIL  
SCALE: N.T.S.  
STRAIN INSULATOR MOUNTING DETAIL  
PER PHASE (3 PHASE REQUIRED)

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P11C	6	138kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 30,000LBS SOCKET - BALL ENDS)	NGK-LOCKE PART #301-SC390-SJ	
P43	6	AL. QUADRANT STRAIN CLAMP FOR AL CONDUCTOR 1351.5MCM ACSR (DIPPER) (UTS 35,000LBS)	HUBBELL SD155N	
P74	6	SDCKET CLEVIS CONNECTOR (30,000LBS UTS)	HUBBELL SC301	
P76A	6	CLEVIS EYE CONNECTOR (UTS 30,000LBS)	HUBBELL CE054125	
P82	2	Y-CLEVIS CLEVIS 90 DEG. CONNECTOR (UTS 30,000LBS)	HUBBELL YCC3090	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	10	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85B	12	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL AS50WBNK	
P90	2	EXTENSION STRAP (12" LENGTH, UTS 30,000LBS)	HUBBELL ES30781912	
P90A	3	EXTENSION STRAP (12" LENGTH, UTS 60,000LBS)	HUBBELL ES60781912	
P93C	3	CONDUCTOR YOKE PLATE (UTS 60,000LBS)	HUBBELL YPD60183771	
P94	3	CONDUCTOR YOKE PLATE (UTS 30,000LBS)	HUBBELL YPR30187221	
P201	1	DEADEND CLAMP FOR 7#5 ALUMOWELD SHIELD WIRE (UTS 25,000LBS)	PLP VG-18-3000	
G10B	1	COPPER COMPRESSION TERMINAL FOR 4/0 STR. Cu. (C/W 1-HOLE NEMA)	HUBBELL VHCL4012	
G11	1	IMPACT CONNECTOR FOR 7#5 ALUMOWELD TO 4/0 STR. Cu.	AMP 600466	
U02	1	DEADEND CLAMP FOR .48 FIBERS OPGW (REF: SFP0C/SFSJ-J-4388R2), C/W HARDWARE FOR TERMINAL ATTACHMENT (UTS 25,000LBS)	PLP 2801309	

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REV	D/M/Y	ISSUED FOR TENDER	REVISION	J.C.	W.L.	DR	CHK	APP	APP	APP	APP	ISS	D/M/Y	ISSUED FOR TENDER	REF	NUMBER	TITLE
A	14/05/13	ISSUED FOR TENDER											14/05/13	ISSUED FOR TENDER			
9													7				
8																	
7																	
6																	
5																	
4																	
3																	
2																	
1																	

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APPROVED FOR CONSTRUCTION			
CLIENT PROJECT MGR.	DEPARTMENT MGR.	PROJECT MGR.	AREA
PROJECT PHASE			JERICO WIND PROJECT
PROJECT NO.	ACTIVITY NO.	PACKAGE CODE	SUBJECT
SCALE	BY	D/M/Y	115kV TRANSMISSION LINE DOUBLE CONDUCTOR CONFIGURATION FOR BORNISH STATION & JERICO STATION ATTACHMENT DETAILS
N.T.S. (11"x17")	DSN. E.KWONG DRN. J.CHEN	13/05/13 13/05/13	

**NEXtera**  
ENERGY  
CANADA

**Chimax Inc.**  
Engineering Company  
3850 Fourteenth Ave. East, Suite 508  
Markham, On., L3R 0A9  
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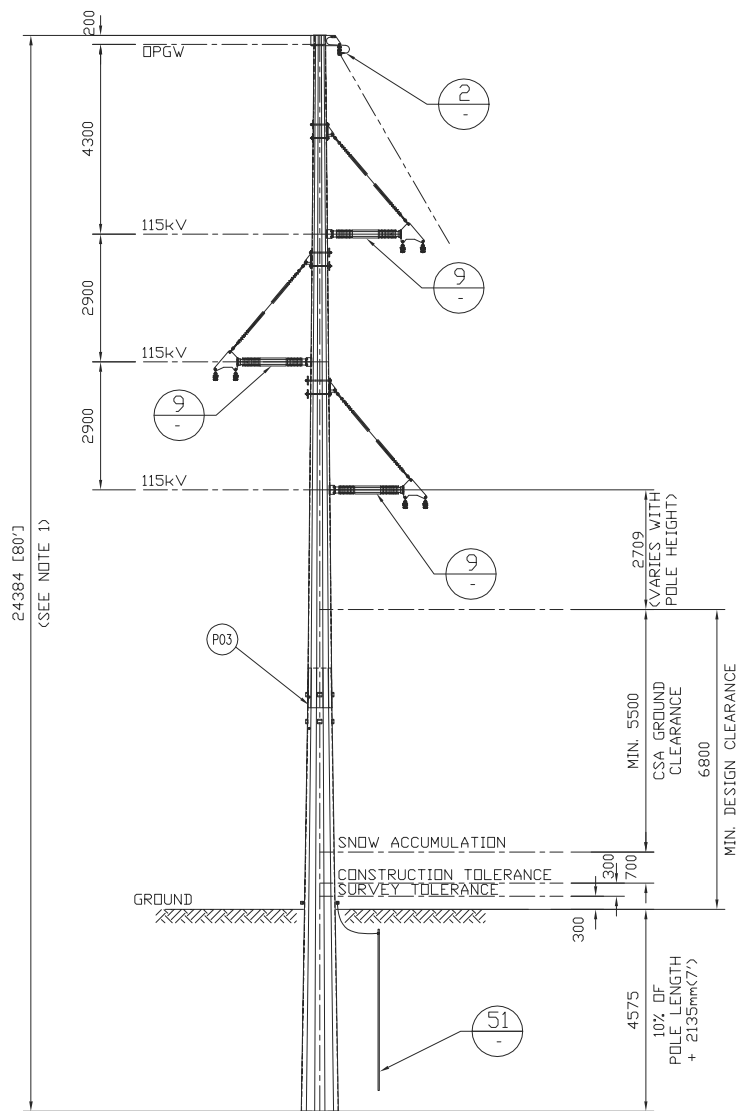
CLIENT DWG. NO.

DRAWING NO.  
1235-3-P133

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CADD FILE ADDRESS  
1235-3-P133-A

1235-3-P133-A



G04	1	SINGLE GROOVE GROUND CLAMP FOR STR. Cu.
G10A	2	COPPER COMPRESSION TERM. CL. (C/W 2-HOLE NEMA)
U01A	1	SINGLE CUSHION CLAMP FOR SFPOC/SFSJ-J-4388R2), C/W FOR TERMINAL ATTACHMENT

NOTES:  
 1. FOR POLE HEIGHT & POLE CLASS, SEE OTHER SHEETS.  
 2. VIBRATION DAMPER AND TWIN SAPAC DAMPERS.

BILL OF MATERIAL (QUANTITIES SHOWN FOR 1 ASSEMBLY)				
ITEM	QTY	DESCRIPTION	MANUFACTURER/NO OR EQUIVALENT	REMARKS
P03	1	STEEL POLE (FOR POLE LENGTH & CLASS, SEE CONSTRUCTION STAKING TABLE)		
P11B	3	230kV TRANSMISSION LINE SUSPENSION INSULATOR (SML 50,000LBS EYE - EYE ENDS)	NGK-LOCKE PART #502-SC690-EE	
P12A	3	115/138kV TRANSMISSION LINE POST INSULATOR (FLANGE TOP - FLANGE BASE)	NGK-LOCKE PART #L4-SN321-55U	
P46	6	AL. SUSPENSION CLAMP FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) WITH ARMOR RODS (UTS 30,000LBS)	HUBBELL HAS252N	
P49A	6	AL. ARMOR RODS FOR AL. CONDUCTOR 1351.5MCM ACSR (DIPPER)	PLP AR-0146	
P60	1	VIBRATION DAMPER FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2)		STOCKBRIDGE TYPE OR SPIRAL TYPE (T.B.A.)
P71	6	SOCKET EYE CONNECTOR (30,000LBS UTS)	HUBBELL SA22	
P78	1	Y-CLEVIS EYE 90 DEG. CONNECTOR (UTS 25,000LBS)	HUBBELL YCS0690	
P84	6	BALL Y-CLEVIS CONNECTOR (UTS 30,000LBS)	HUBBELL YBC30	
P85	1	ANCHOR SHACKLE (UTS 40,000LBS)	HUBBELL AS35BNK	
P85A	6	ANCHOR SHACKLE (UTS 60,000LBS)	HUBBELL ASS0BNK	
P93E	3	CONDUCTOR YOKE PLATE FOR BRACED POST INSULATOR		DWG#: 1235-2-F017
P108	LDT	TWIN SPACER VIBRATION DAMPER FOR TWO AL. CONDUCTOR 1351.5MCM ACSR (DIPPER) (18" SPACING)	PFISTERER 182 952-195	
H53	1	1/2" HEX HEAD BOLT (STAINLESS STEEL)	HUBBELL HBS150	
H53B	12	16mm(5/8")x32mm A325 BOLT + 2xFLAT WASHER (GALV.)		
H62	1	HEX NUTS FOR 1/2" BOLTS (STAINLESS STEEL)	HUBBELL HNS500	
H63	1	BELLEVILLE WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL BW500	
H64	2	ROUND WASHER FOR 1/2" BOLT (STAINLESS STEEL)	HUBBELL HFS500	
G01	LDT	GROUND WIRE (2/0 STR. Cu.)		
G01A	LDT	GROUND WIRE (#2 7STR. Cu.)		
G02	1	COPPER CLAD GROUND ROD, 3/4" DIA. 10' LENGTH		T.B.A.
G03	1	GROUND ROD CLAMP FOR 3/4" DIA. TO 2/0 STR. Cu.	HUBBELL C2030345	
G04	1	SINGLE GROOVE GROUND CLAMP FOR #4 SOL TO 4/0 STR. Cu.	HUBBELL GC141AG2	
G10A	2	COPPER COMPRESSION TERMINAL 90 DEG. FOR #2 7STR. Cu. (C/W 2-HOLE NEMA)	HUBBELL BCL018BY90	
U01A	1	SINGLE CUSHION CLAMP FOR 48 FIBERS OPGW (REF: SFPDC/SFSJ-J-4388R2), C/W ARMOR ROD AND HARDWARE FOR TERMINAL ATTACHMENT (UTS 20,000LBS)	PLP 4700105	

**NEXtera™**  
**ENERGY**   
**CANADA**

CLIENT DWG. NO.	
DRAWING NO. 1235-3-P318	REV. A
CADD FILE ADDRESS 1235-3-P318-A	

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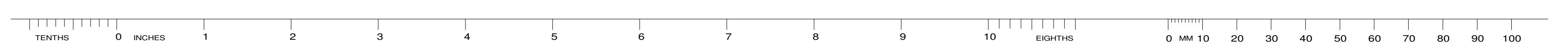
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APPROVED FOR CONSTRUCTION					
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					
PROJECT PHASE				AREA	NEXTERA 5-PACK TRANSMISSION LINE
PROJECT NO.		ACTIVITY NO.		PACKAGE CODE	
				SUBJECT	
				1CCT 115kV TRANSMISSION LINE	
				DOUBLE CONDUCTOR CONFIGURATION	
				TANGENT (0 - 2') TRIANGULAR FRAMING	
SCALE		BY		D/W/Y	
N.T.S. (11"x17")		DRN. E.KWONG		14/05/13	
		DRN. J.CHEN		14/05/13	

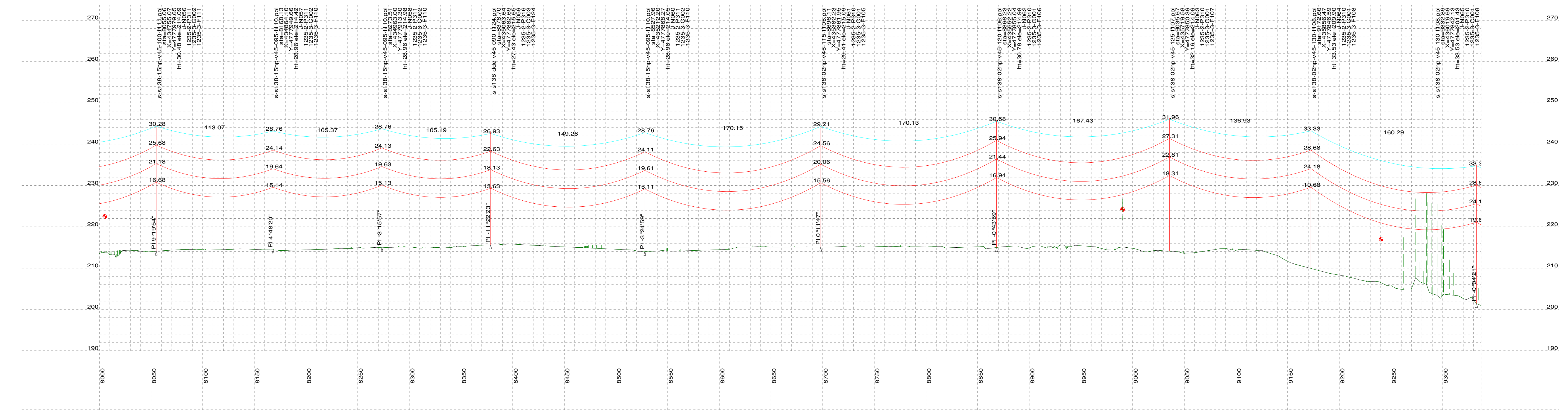
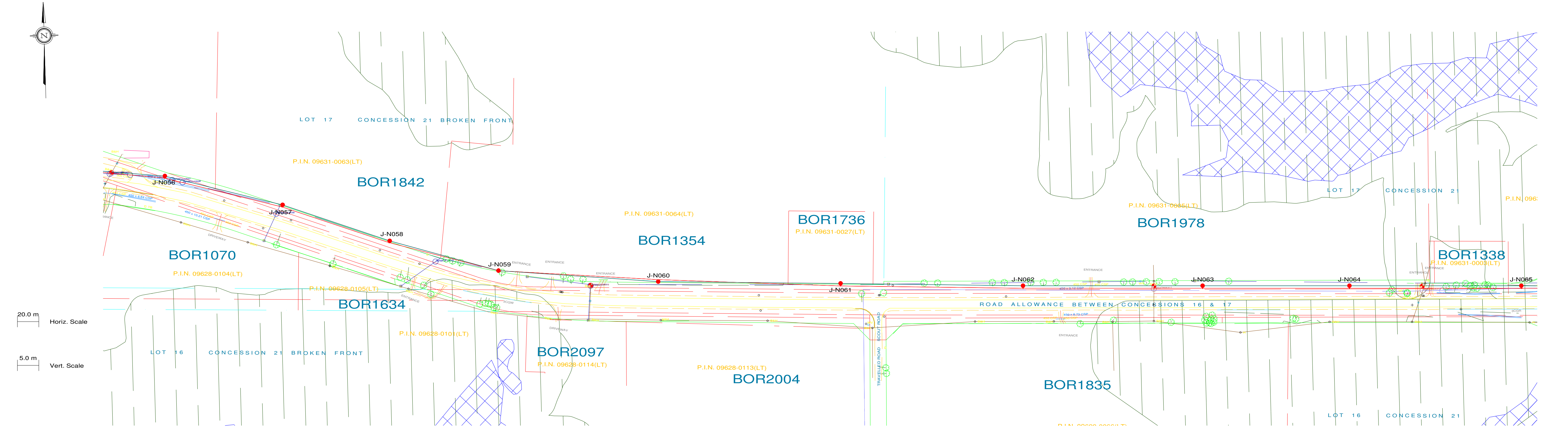








PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

s-s138-15hp-v45-090-f109.pol  
sta  
X  
Y  
ht  
ele  
J-N002  
1235-2-P311  
1235-3-C002  
1235-3-F109

NOTES:

PLS-POLE FILE IDENTIFICATION  
STATION CHAINAGE  
UTM EASTING  
UTM NORTHING  
STRUCTURE HEIGHT ABOVE GROUND (M)  
GROUND ELEVATION (M)  
STRUCTURE NO.  
FRAMING DRAWING NO.  
FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)  
ENGINEERING DRAWING NO.

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.



**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 506  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

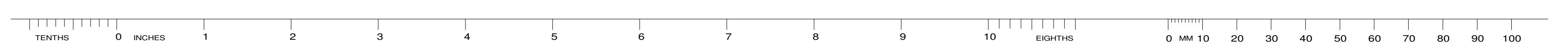
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H	25/09/13	ISSUED FOR REVIEW								H	25/09/13	ISSUED FOR REVIEW			
G	12/09/13	ISSUED FOR REVIEW								G	12/09/13	ISSUED FOR REVIEW			
F	24/06/13	INCORPORATED CLIENT'S COMMENTS								F	24/06/13	ISSUED FOR REVIEW			
E	04/06/13	ISSUED FOR TENDER								E	04/06/13	ISSUED FOR TENDER			
D	14/05/13	ISSUED FOR TENDER								D	14/05/13	ISSUED FOR TENDER			
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN								C	07/11/12	ISSUED FOR REVIEW			
B	26/09/12	PRELIMINARY DESIGN								B	26/09/12	ISSUED FOR REVIEW			
A	24/08/12	PRELIMINARY DESIGN								A	24/08/12	ISSUED FOR REVIEW			

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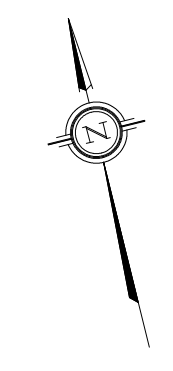
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				JERICO WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
SCALE N.T.S.	PACKAGE CODE	DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 8 OF 14	
		DRN M.HUANG	21/08/12		
		CHK			
		APP			

CLIENT DWG. NO.	
DRAWING NO.	
1235-3-P012-S8	
REV.	L

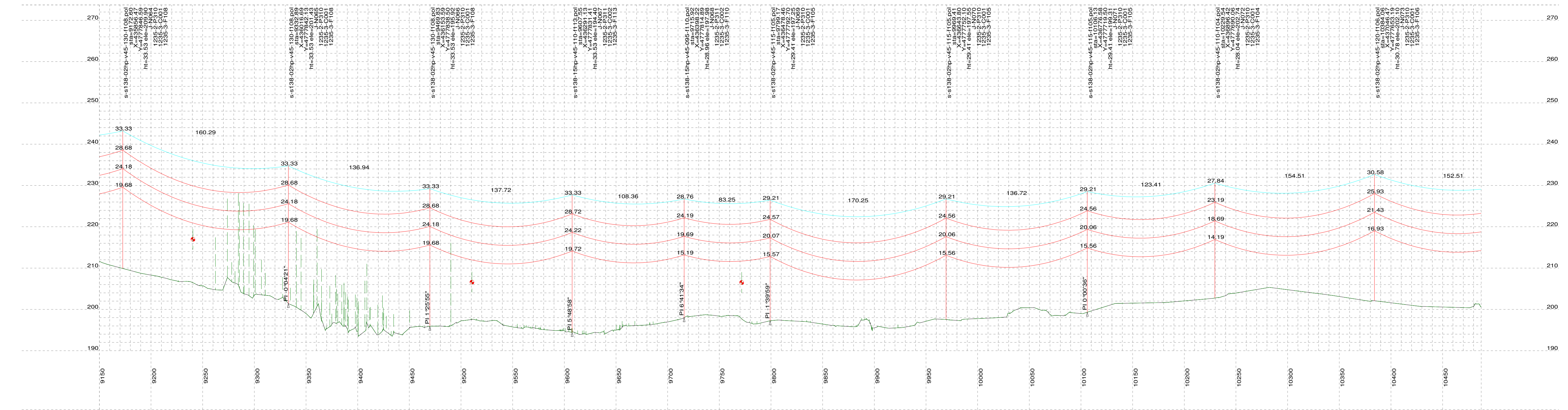
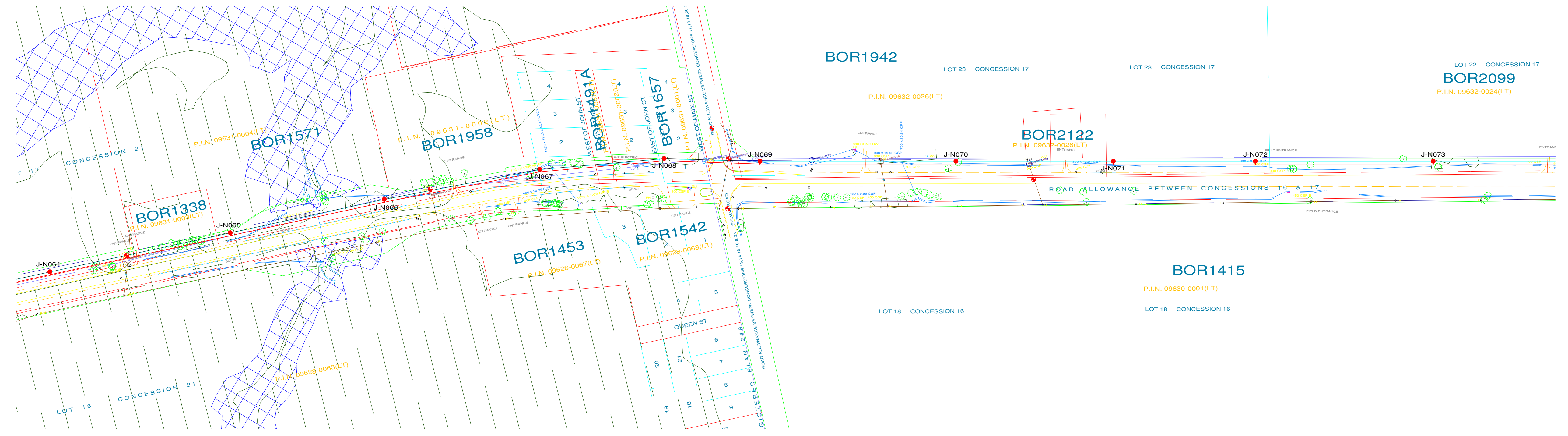




PLS-CADD Drawing



20.0 m  
Horiz. Scale  
5.0 m  
Vert. Scale



**PLAN & PROFILE LEGEND:**  
— 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)  
— OPGW  
— SHIELD WIRE  
— GROUND CLEARANCE LINE  
— HYDRO WIRE  
— WOOD LAND HABITAT (WOD)  
— WETLAND HABITAT (WET)

**STRUCTURE DESCRIPTION LEGEND:**  
s-s138-15hp-v45-090-f109.pol  
sta  
X  
Y  
ht  
ele  
J-N002  
1235-2-P311  
1235-3-C002  
1235-3-F109

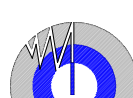
**NOTES:**  
1. GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).  
2. CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.  
3. OPGW & SHIELD WIRE SAG AT 40°C.  
4. ALL DIMENSIONS ARE IN METERS U.N.O.



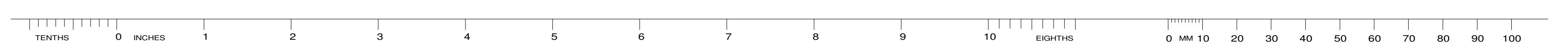
**Chimax Inc.**  
Engineering Company  
3950 Fourteenth Ave. East, Suite 506  
Markham, On., L3R 0A9  
Email: chimax@chimax.ca

REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE
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H	25/09/13	ISSUED FOR REVIEW								H	25/09/13	ISSUED FOR REVIEW			
G	12/09/13	ISSUED FOR REVIEW								G	12/09/13	ISSUED FOR REVIEW			
F	24/06/13	INCORPORATED CLIENT'S COMMENTS								F	24/06/13	ISSUED FOR TENDER			
E	04/06/13	ISSUED FOR TENDER								E	04/06/13	ISSUED FOR TENDER			
D	14/05/13	ISSUED FOR TENDER								D	14/05/13	ISSUED FOR TENDER			
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN								C	07/11/12	ISSUED FOR REVIEW			
B	26/09/12	PRELIMINARY DESIGN								B	26/09/12	ISSUED FOR REVIEW			
A	24/08/12	PRELIMINARY DESIGN								A	24/08/12	ISSUED FOR REVIEW			

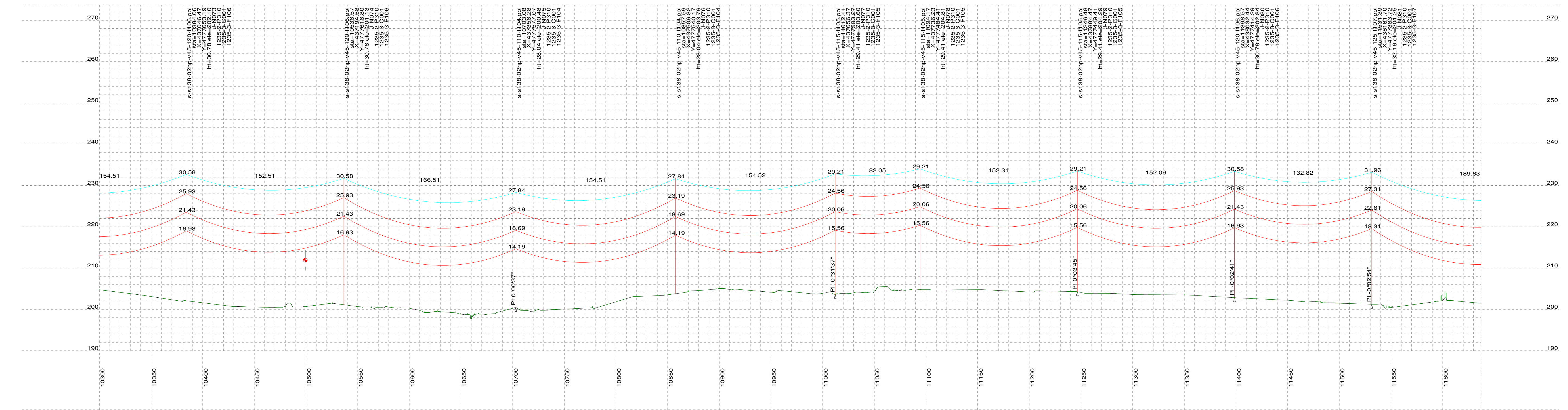
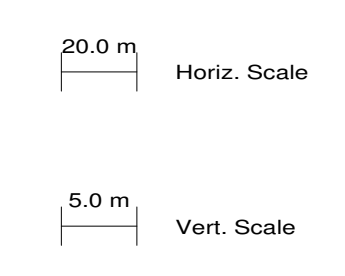
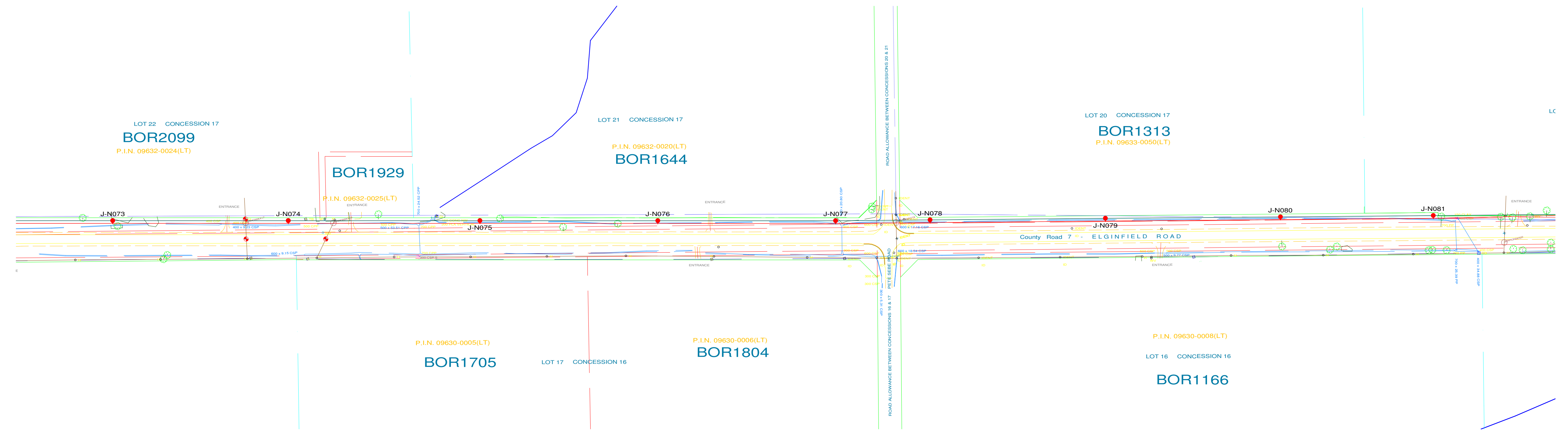
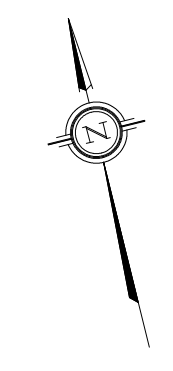
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						<div><div>Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On., L3R 0A9 Email: chimax@chimax.ca</div></div>	
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.							
PROJECT PHASE				AREA		JERICHO WIND PROJECT 1CCT 115kV TRANSMISSION LINE	
PROJECT NO.		ACTIVITY NO.		SUBJECT		CLIENT DWG. NO.	
		BY		DDMMYY			
		DSN E.KWONG		21/08/12			
		DRN M.HUANG		21/08/12			
SCALE		PACKAGE CODE		STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 9 OF 14		DRAWING NO.	
N.T.S.						1235-3-P012-S9	
		CHK				REV.	
		APP				L	





PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

s-s138-15hp-v45-090-f109.pol  
sta  
X  
Y  
ht  
ele  
J-N002  
1235-2-P311  
1235-3-C002  
1235-3-F109

NOTES:

1. GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
2. CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
3. OPGW & SHIELD WIRE SAG AT 40°C.
4. ALL DIMENSIONS ARE IN METERS U.N.O.

PLS-POLE FILE IDENTIFICATION  
STATION CHAINAGE  
UTM EASTING  
UTM NORTHING  
STRUCTURE HEIGHT ABOVE GROUND (M)  
GROUND ELEVATION (M)  
STRUCTURE NO.  
FRAMING DRAWING NO.  
FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)  
ENGINEERING DRAWING NO.



**Chimax Inc.**  
Engineering Company  
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Email: chimax@chimax.ca

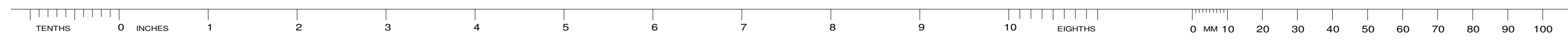
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H	25/09/13	ISSUED FOR REVIEW								H	25/09/13	ISSUED FOR REVIEW			
G	12/09/13	ISSUED FOR REVIEW								G	12/09/13	ISSUED FOR REVIEW			
F	24/06/13	INCORPORATED CLIENT'S COMMENTS								F	24/06/13	ISSUED FOR TENDER			
E	04/06/13	ISSUED FOR TENDER								E	04/06/13	ISSUED FOR TENDER			
D	14/05/13	ISSUED FOR TENDER								D	14/05/13	ISSUED FOR TENDER			
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN								C	07/11/12	ISSUED FOR REVIEW			
B	26/09/12	PRELIMINARY DESIGN								B	26/09/12	ISSUED FOR REVIEW			
A	24/08/12	PRELIMINARY DESIGN								A	24/08/12	ISSUED FOR REVIEW			

STAMP/SEAL  
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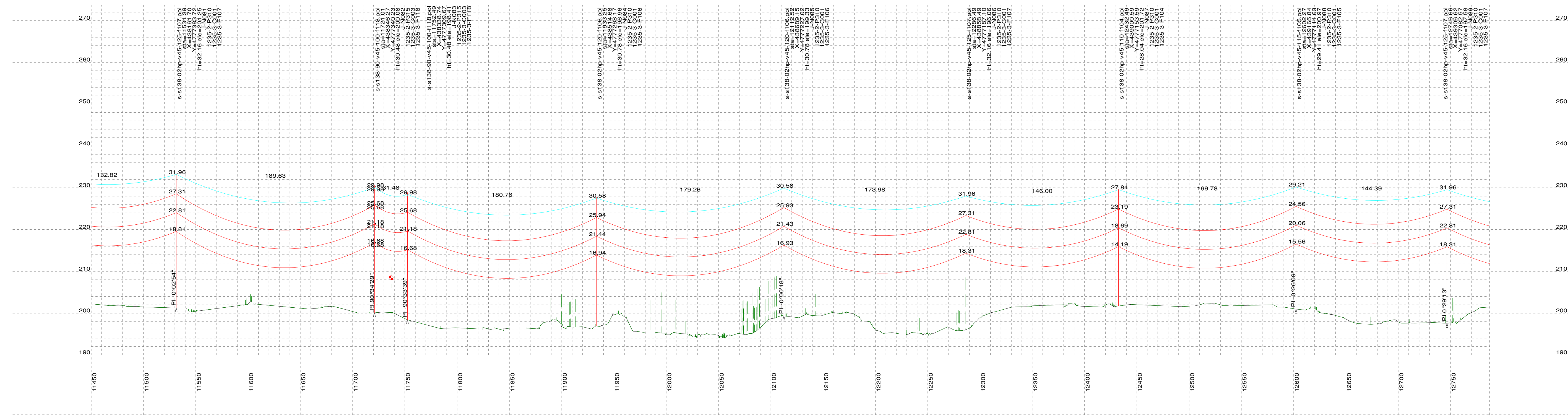
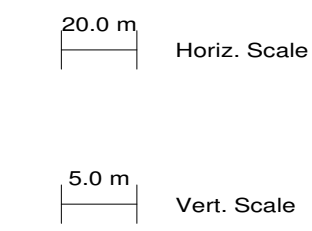
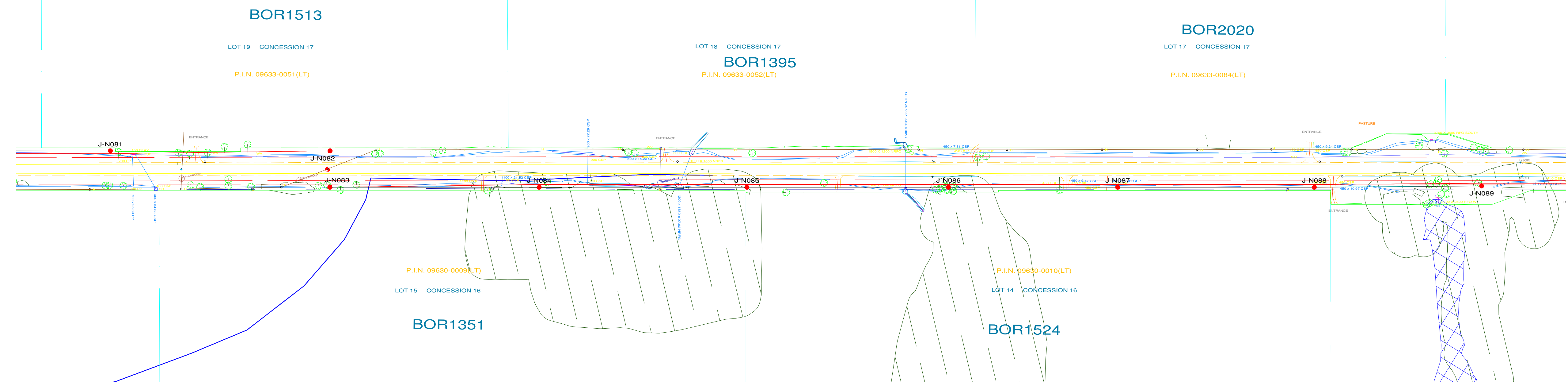
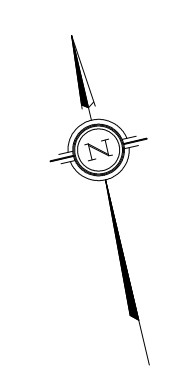
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				JERICO WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 10 OF 14	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK	APP	CLIENT DWG. NO.	
N.T.S.				DRAWING NO. 1235-3-P012-S10	
				REV. L	

CAD FILE PLS-Cadd 1235-3-P012-N





PLS-CADD Drawing



**PLAN & PROFILE LEGEND:**

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

**STRUCTURE DESCRIPTION LEGEND:**

s-s138-15hp-v45-090-f109.pol  
sta  
X  
Y  
ht  
ele  
J-N002  
1235-2-P311  
1235-3-C0002  
1235-3-F109

**PLS-POLE FILE IDENTIFICATION**  
STATION CHAINAGE  
UTM EASTING  
UTM NORTHING  
STRUCTURE HEIGHT ABOVE GROUND (M)  
GROUND ELEVATION (M)  
STRUCTURE NO.  
FRAMING DRAWING NO.  
FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)  
ENGINEERING DRAWING NO.

**NOTES:**

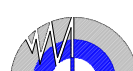
- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
- CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.



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Markham, On., L3R 0A9  
Email: chimax@chimax.ca

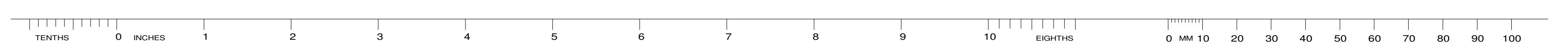
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H	25/09/13	ISSUED FOR REVIEW								H	25/09/13	ISSUED FOR REVIEW				
G	12/09/13	ISSUED FOR REVIEW								G	12/09/13	ISSUED FOR REVIEW				
F	24/06/13	INCORPORATED CLIENT'S COMMENTS								F	24/06/13	ISSUED FOR TENDER				
E	04/06/13	ISSUED FOR TENDER								E	04/06/13	ISSUED FOR TENDER				
D	14/05/13	ISSUED FOR TENDER								D	14/05/13	ISSUED FOR TENDER				
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN								C	07/11/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN								B	26/09/12	ISSUED FOR REVIEW				
A	24/08/12	PRELIMINARY DESIGN								A	24/08/12	ISSUED FOR REVIEW				

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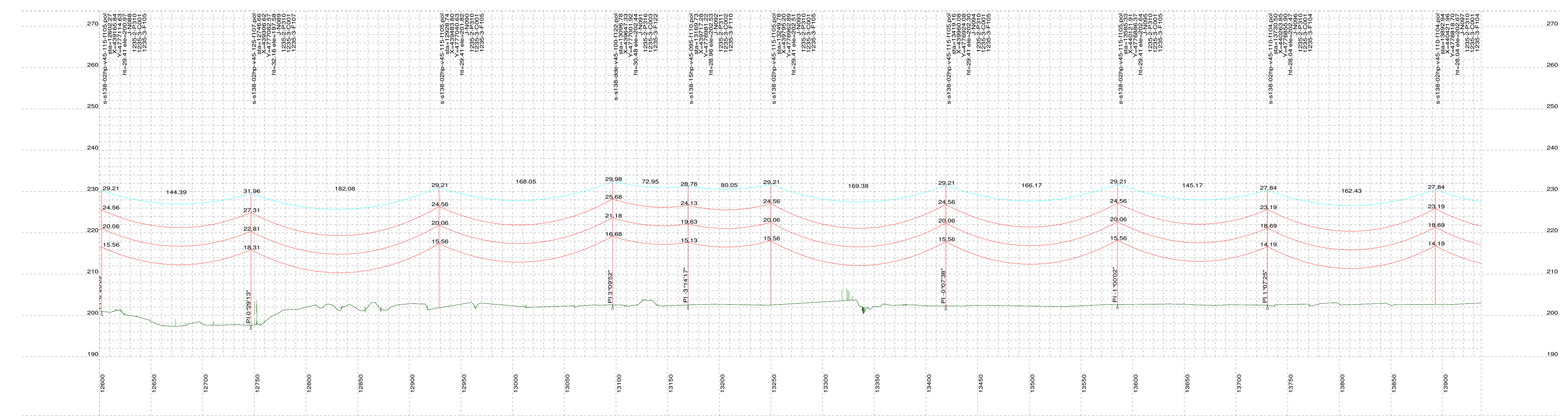
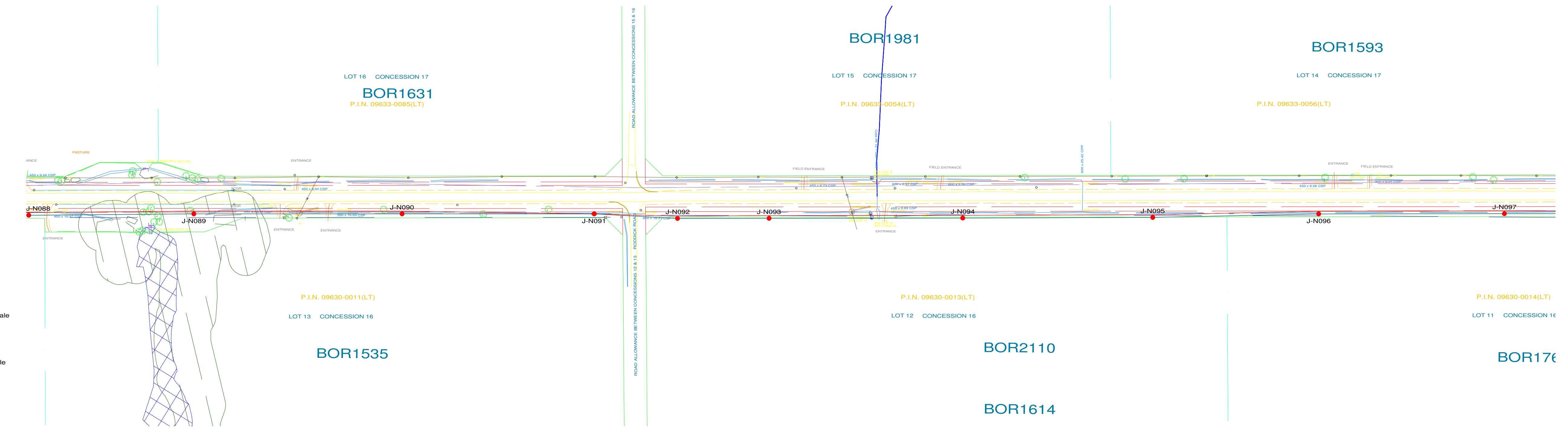
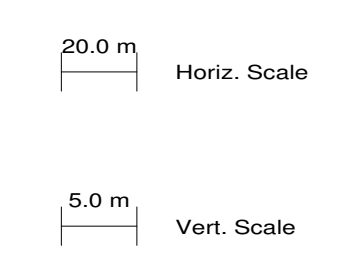
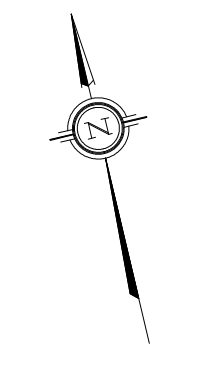
<div>CLIENT PROJECT MGR.      DEPARTMENT MGR.      PROJECT MGR.</div> <div>PROJECT PHASE</div>					<div>AREA</div> <div>JERICO WIND PROJECT 1CCT 115KV TRANSMISSION LINE</div>		<div>Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Mankato, Mn, 56001 Email: chimax@chimax.ca</div>	
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT	CLIENT DWG. NO.		
SCALE  N.T.S.	PACKAGE CODE	DSN	E.KWONG	21/08/12				
		DRN	M.HUANG	21/08/12				
		CHK						
		APP						
STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 11 OF 14					DRAWING NO.  1235-3-P012-S11	REV.  L		

CAD FILE PLS-Cadd 1235-3-P012-N





PLS-CADD Drawing



- PLAN & PROFILE LEGEND:
- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
  - OPGW
  - SHIELD WIRE
  - GROUND CLEARANCE LINE
  - HYDRO WIRE
  - WOOD LAND HABITAT (WOD)
  - WETLAND HABITAT (WET)

- STRUCTURE DESCRIPTION LEGEND:
- s-s138-15hp-v45-090-f109.pol
  - sta
  - X
  - Y
  - ht
  - ele
  - J-N002
  - 1235-2-P311
  - 1235-3-C002
  - 1235-3-F109
- PLS-POLE FILE IDENTIFICATION
- STATION CHAINAGE
  - UTM EASTING
  - UTM NORTHING
  - STRUCTURE HEIGHT ABOVE GROUND (M)
  - GROUND ELEVATION (M)
  - STRUCTURE NO.
  - FRAMING DRAWING NO.
  - FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)
  - ENGINEERING DRAWING NO.

- NOTES:
- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
  - CONDUCTOR (1351.5MCM ACSR DIPPER) SAG AT 100°C.
  - OPGW & SHIELD WIRE SAG AT 40°C.
  - ALL DIMENSIONS ARE IN METERS U.N.O.



**Chimax Inc.**  
Engineering Company  
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Markham, On., L3R 0A9  
Email: chimax@chimax.ca

REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE
L	05/11/13	ISSUED FOR REVIEW							L	05/11/13		ISSUED FOR REVIEW			
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G	12/09/13	ISSUED FOR REVIEW							G	12/09/13		ISSUED FOR REVIEW			
F	24/06/13	INCORPORATED CLIENT'S COMMENTS							F	24/06/13		ISSUED FOR TENDER			
E	04/06/13	ISSUED FOR TENDER							E	04/06/13		ISSUED FOR TENDER			
D	14/05/13	ISSUED FOR TENDER							D	14/05/13		ISSUED FOR TENDER			
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN							C	07/11/12		ISSUED FOR REVIEW			
B	26/09/12	PRELIMINARY DESIGN							B	26/09/12		ISSUED FOR REVIEW			
A	24/08/12	PRELIMINARY DESIGN							A	24/08/12		ISSUED FOR REVIEW			

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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.					
PROJECT PHASE				AREA	JERIKO WIND PROJECT 1CCT 115KV TRANSMISSION LINE
PROJECT NO.	ACTIVITY NO.		BY	DDMMYY	SUBJECT
		DSN	E.KWONG	21/08/12	
		DRN	M.HUANG	21/08/12	
		CHK			
		APP			
SCALE	PACKAGE CODE				STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 12 OF 14
N.T.S.					

1

2

3

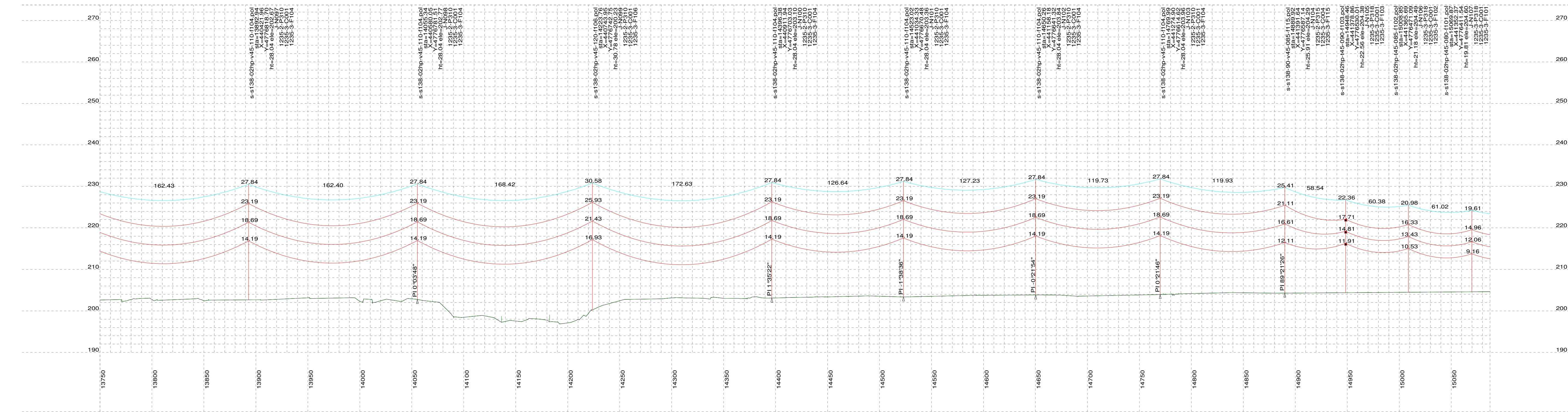
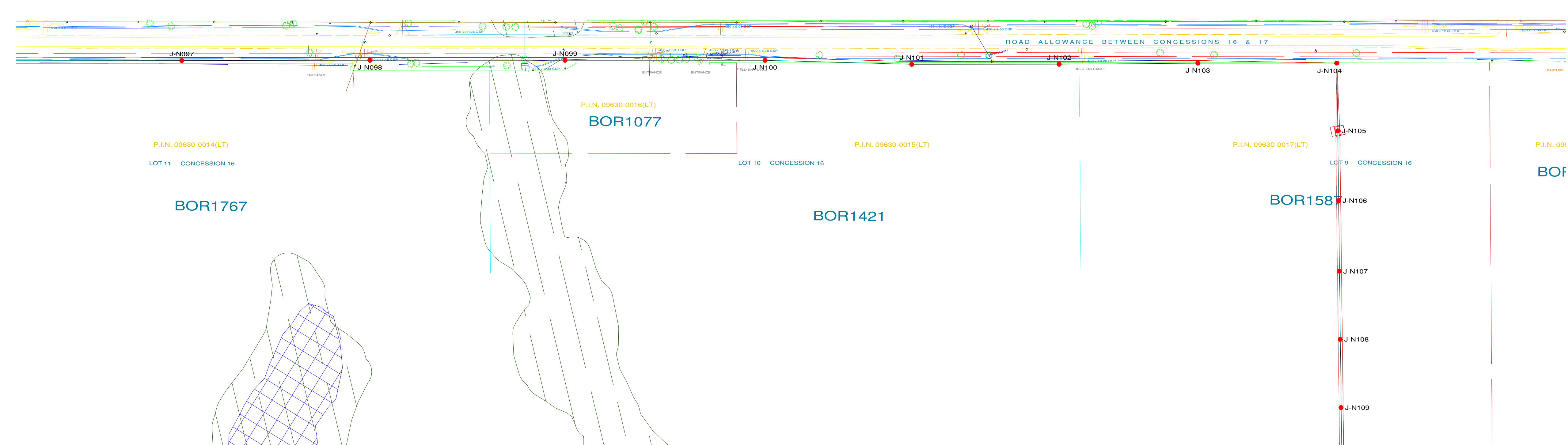
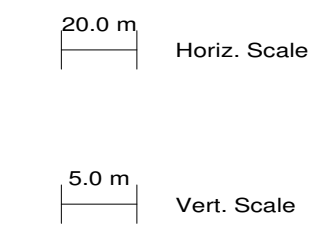
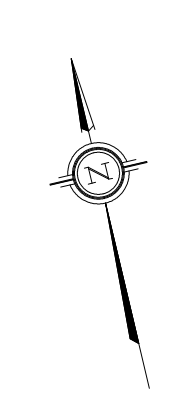
CAD FILE

CLIENT DWG. NO.	
DRAWING NO. 1235-3-P012-S12	
REV. L	





PLS-CADD Drawing



**PLAN & PROFILE LEGEND:**

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

**STRUCTURE DESCRIPTION LEGEND:**

s-s138-15hp-v45-090-f109.pol  
sta  
X  
Y  
ht  
ele  
J-N002  
1235-2-P311  
1235-3-C002  
1235-3-F109

**PLS-POLE FILE IDENTIFICATION**  
STATION CHAINAGE  
UTM EASTING  
STRUCTURE HEIGHT ABOVE GROUND (M)  
GROUND ELEVATION (M)  
STRUCTURE NO.  
FRAMING DRAWING NO.  
FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)  
ENGINEERING DRAWING NO.

**NOTES:**

- GROUND CLEARANCE LINE SHOWN AT 6.8M (FOR VEHICULAR TRAFFIC).
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- OPGW & SHIELD WIRE SAG AT 40°C.
- ALL DIMENSIONS ARE IN METERS U.N.O.



**Chimax Inc.**  
Engineering Company  
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Email: chimax@chimax.ca

REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE
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H	25/09/13	ISSUED FOR REVIEW							H	25/09/13	ISSUED FOR REVIEW				
G	12/09/13	ISSUED FOR REVIEW							G	12/09/13	ISSUED FOR REVIEW				
F	24/06/13	INCORPORATED CLIENT'S COMMENTS							F	24/06/13	ISSUED FOR TENDER				
E	04/06/13	ISSUED FOR TENDER							E	04/06/13	ISSUED FOR TENDER				
D	14/05/13	ISSUED FOR TENDER							D	14/05/13	ISSUED FOR TENDER				
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN							C	07/11/12	ISSUED FOR REVIEW				
B	26/09/12	PRELIMINARY DESIGN							B	26/09/12	ISSUED FOR REVIEW				
A	24/08/12	PRELIMINARY DESIGN							A	24/08/12	ISSUED FOR REVIEW				

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CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA	
PROJECT PHASE				JERICHO WIND PROJECT 1CCT 115KV TRANSMISSION LINE	
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT	
		DSN E.KWONG	21/08/12	STEEL POLE DESIGN PLAN & PROFILE DRAWINGS SHEET 13 OF 14	
		DRN M.HUANG	21/08/12		
		CHK			
SCALE	PACKAGE CODE	CHK	APP		
N.T.S.					

CLIENT DWG. NO.	
DRAWING NO. 1235-3-P012-S13	
REV. L	



F

E

D

C

B

A

F

E

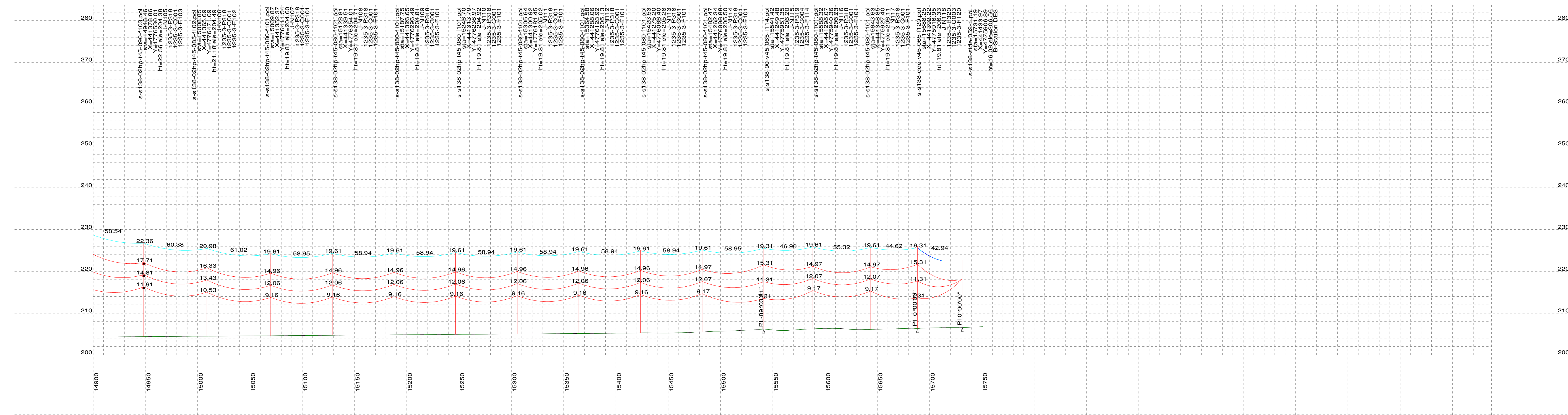
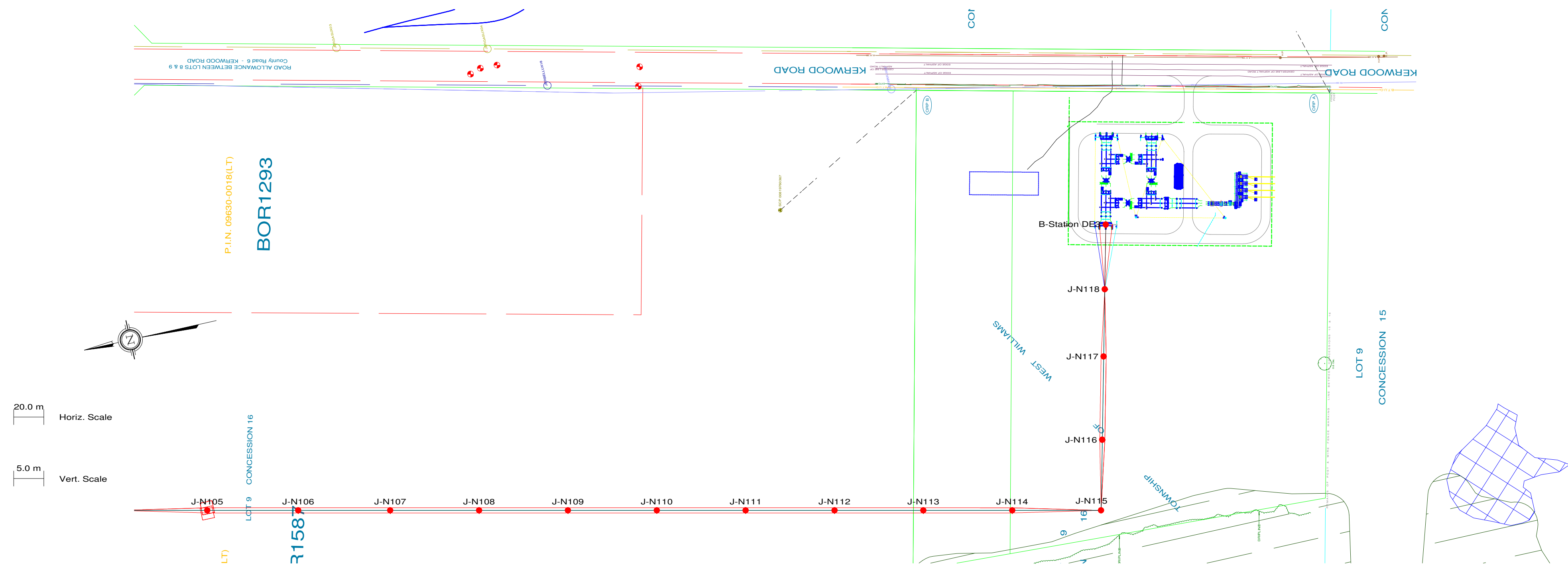
D

C

B

A

PLS-CADD Drawing



PLAN & PROFILE LEGEND:

- 2 x 115kV TRANSMISSION LINE CONDUCTOR (1351.5MCM ACSR DIPPER)
- OPGW
- SHIELD WIRE
- GROUND CLEARANCE LINE
- HYDRO WIRE
- WOOD LAND HABITAT (WOD)
- WETLAND HABITAT (WET)

STRUCTURE DESCRIPTION LEGEND:

- s-s138-15hp-v45-090-f109.pol
- sta
- X
- Y
- ht
- ele
- J-N002
- 1235-2-F311
- 1235-3-C002
- 1235-3-F109

PLS-POLE FILE IDENTIFICATION

- STATION CHAINAGE
- UTM EASTING
- UTM NORTHING
- STRUCTURE HEIGHT ABOVE GROUND (M)
- GROUND ELEVATION (M)
- STRUCTURE NO.
- FRAMING DRAWING NO.
- FOUNDATION DRAWING NO. (TYPICAL FOR TENDER PRICING)
- ENGINEERING DRAWING NO.

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Email: chimax@chimax.ca

REV	DDMMYY	REVISION	DR	CHK	APP	APP	APP	APP	ISS	DDMMYY	APP	ISSUED FOR	REF	NUMBER	TITLE
L	05/11/13	ISSUED FOR REVIEW							M.H.	E.K.	L	05/11/13	ISSUED FOR REVIEW		
H	25/09/13	ISSUED FOR REVIEW							M.H.	E.K.	H	25/09/13	ISSUED FOR REVIEW		
G	12/09/13	ISSUED FOR REVIEW							M.H.	E.K.	G	12/09/13	ISSUED FOR REVIEW		
F	24/06/13	INCORPORATED CLIENT'S COMMENTS							M.H.	E.K.	F	24/06/13	ISSUED FOR TENDER		
E	04/06/13	ISSUED FOR TENDER							M.H.	E.K.	E	04/06/13	ISSUED FOR TENDER		
D	14/05/13	ISSUED FOR TENDER							M.H.	E.K.	D	14/05/13	ISSUED FOR TENDER		
C	07/11/12	PRELIMINARY CONCRETE & STEEL POLE DESIGN							M.H.	E.K.	C	07/11/12	ISSUED FOR REVIEW		
B	26/09/12	PRELIMINARY DESIGN							M.H.	E.K.	B	26/09/12	ISSUED FOR REVIEW		
A	24/08/12	PRELIMINARY DESIGN							J.C.	E.K.	A	24/08/12	ISSUED FOR REVIEW		

STAMP/SEAL  
PROPRIETARY INFORMATION:  
THIS DRAWING IS THE PROPERTY OF CHIMAX INC.  
AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY  
WITHOUT THE PERMISSION OF CHIMAX INC.

						<div><div>Chimax Inc. Engineering Company 3950 Fourteenth Ave. East, Suite 506 Markham, On, L3R 0A9 Email: chimax@chimax.ca</div></div>	
CLIENT PROJECT MGR. DEPARTMENT MGR. PROJECT MGR.				AREA			
PROJECT PHASE				JERICO WIND PROJECT 1CCT 115kV TRANSMISSION LINE			
PROJECT NO.	ACTIVITY NO.	BY	DDMMYY	SUBJECT  			

CAD FILE PLS-Cadd 1235-3-P012-N





JERICHO TRANSMISSION LINE KEYPLAN  
NOT TO SCALE



LEGEND FOR SHEETS CZS-1 TO CZS-7

- RIGHT OF WAY
- EXISTING 3 CABLE GUIDE RAIL
- PROPOSED 3 CABLE GUIDE RAIL
- PROPOSED 3 CABLE GUIDE RAIL  
END TREATMENT (OPSD 913.130)
- EXISTING STEEL BEAM GUIDE RAIL
- PROPOSED STEEL BEAM GUIDE RAIL
- PROPOSED STEEL BEAM GUIDE RAIL  
END TREATMENT (OPSD 922.530)
- PROPOSED GRADING

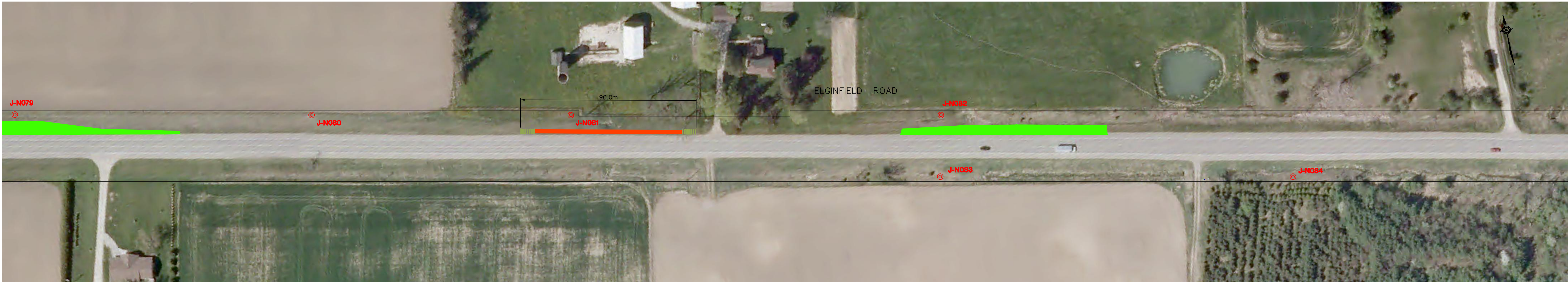
EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE 1:1000 <div>1000000 1000000 2000000</div>	TITLE JERICHO WIND ENERGY CENTRE MUNICIPALITY OF N. MIDDLESEX, COUNTY OF MIDDLESEX	PROJECT No. 34938
					DESIGN BY RWC	1	MC ROAD USERS AGREEMENT	2013-11-05		<div>IBI GROUP</div> <div>203 - 350 Oxford Street West London ON N6H 1T3 Canada</div> <div>tel 519 472 7328 fax 519 472 9354</div>	<div>NEXT ERA ENERGY</div>	<div>JERICHO TRANSMISSION LINE</div>	SHEET No. CZS-1	
				DRAWN BY MWB										
				CHECKED RWC										
				APPROVED RWC										
				DATE 2013-08-29										
					JTLsite G&G MC								PLAN FILE No.	





EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	TITLE	PROJECT No.
					DESIGN RWC	1	MC ROAD USERS AGREEMENT	2013-11-05		 <b>IBI Group</b> 203 - 350 Oxford Street West London ON N6H 1T3 Canada  tel 519 472 7328 fax 519 472 9354	 SCALE 1:1000	JERICO WIND ENERGY CENTRE MUNICIPALITY OF N. MIDDLESEX, COUNTY OF MIDDLESEX	34938
					DRAWN BY MWR							SHEET No.	
					CHECKED RWC							CZS-2	
					APPROVED RWC							PLAN FILE No.	
					DATE 2013-08-29								
					JTLsite G&G MCdwg								





EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
					DESIGN RWC	1	MC ROAD USERS AGREEMENT	2013-11-05		<div><div>IBI GROUP</div><div>IBI Group 203 - 350 Oxford Street West London ON N6H 1T3 Canada  tel 519 472 7328 fax 519 472 9354</div></div>		1:1000 <div><div>10</div><div>0</div><div>20m</div></div>	JERICO WIND ENERGY CENTRE MUNICIPALITY OF N. MIDDLESEX, COUNTY OF MIDDLESEX	34938
				DRAWN BY RWC					JERICO TRANSMISSION LINE				CZS-3	
				CHECKED RWC					J-N068 TO J-N084				PLAN FILE No.	
				APPROVED RWC										
				DATE 2013-08-29										
					JTLsite G&G MC.dwg									

J:\34938-Jericho-Trans\5.9 Drawings\G&G\Current\JTLsite G&G MC.dwg






EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
					DESIGN RWC	1	MC ROAD USERS AGREEMENT	2013-11-05		<div></div> <div><b>IBI Group</b> 203 - 350 Oxford Street West London ON N6H 1T3 Canada  tel 519 472 7328 fax 519 472 9354</div>	<div></div>	JERICHO WIND ENERGY CENTRE MUNICIPALITY OF N. MIDDLESEX, COUNTY OF MIDDLESEX	34938	
				DRAWN BY MWB								SHEET No.		
				CHECKED RWC										
				APPROVED RWC										
				DATE 2013-08-29										
					JTLsite G&G MCdwg							JERICHO TRANSMISSION LINE J-N085 TO J-N100	CZS-4	
														PLAN FILE No.

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EXISTING SERVICES	DRAWING #, SOURCE	DATE	AS CONSTRUCTED SERVICES	COMPLETION	DETAILS	No.	REVISIONS	DATE	CONSULTANT	CONSULTANT OR DIVISION	ENGINEER'S STAMP	SCALE	TITLE	PROJECT No.
					DESIGN RWC	1	MC ROAD USERS AGREEMENT	2013-11-05		<div><div><div>IBI Group</div><div>203 - 350 Oxford Street West</div><div>London ON N6H 1T3 Canada</div><div>tel 519 472 7328</div><div>fax 519 472 9354</div></div></div>	<div>1:1000</div> <div><div>10</div><div>0</div><div>20m</div></div>	JERICO WIND ENERGY CENTRE	34938	
				DRAWN BY MWB					MUNICIPALITY OF N. MIDDLESEX, COUNTY OF MIDDLESEX			SHEET No.		
				CHECKED RWC					JERICO TRANSMISSION LINE			CZS-5		
				APPROVED RWC					J-N101 TO J-N104			PLAN FILE No.		
				DATE 2013-08-29										
					JTLsite G&G MC.dwg									

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**SCHEDULE “C”**

Appropriate Emergency Service Providers

## *Schedule “C”*

### **Appropriate Emergency Service Providers**

#### **Contact Information:**

#### **Ambulance Station**

Middlesex-London Emergency Medical Services Authority at 519-679-5466

#### **Fire Stations**

##### **Kerwood Fire Department**

###### ***Kerwood Fire Station***

27817 Kerwood Road  
Kerwood, ON N0M 2B0

Fire Chief: Arend Noordhof      kerwoodfiredept@bellnet.ca

##### **Ailsa Craig and Parkhill Fire Departments**

###### ***Ailsa Craig Fire Station***

159 William Street, Ailsa Craig, ON N0M 1A0

###### ***Parkhill Fire Station***

194 Main Street, Parkhill, ON N0M 2K0

Contact Scott Jones: 519-494-6001

**SCHEDULE “D”**

Permits and Fees

**[See attached]**



## *Schedule "D"*

### Permits and Fees

*\* All references to legislation, by-laws and fees in this Schedule shall be interpreted as references to those by-laws and fees as they may be amended, superseded or replaced from time to time*

<u>By-Law Reference</u>	<u>Permit Required with Appropriate Application</u>	<u>Cost</u>
<b>By-law #5783:</b> Use, Construction or Alteration; <b>By-law #6410:</b> User Fees	Access/Entrance Permit (authorizing access, via entrance application)	\$400 fee + refundable deposit determined by County Engineer
<b>By-law #5783:</b> Use, Construction or Alteration; <b>By-law #6410:</b> User Fees	Work Permit (authorizing work and/or services, via work application)	\$400 fee + refundable deposit determined by County Engineer
<b>Highway Traffic Act</b> , R.S.O. 1990, Chapter 198; <b>By-law #6410:</b> User Fees	Moving Oversize Load/Weight Vehicles on County Roads Permit (via application with utility company and emergency services sign-offs)	Variable fee between \$50 and \$500 depending on dimensions and weight of load + \$500 refundable deposit (\$2M liability insurance required)

## **SCHEDULE “E”**

### Rights and Remedies Accorded to Secured Parties

1. The County will from time to time execute and deliver such consents and acknowledgements reasonably requested by the Secured Party.
2. The County agrees that, upon the Secured Party giving the County written notice of any security granted by Jericho in the Agreement, the Secured Party will, without any further action being required, have the benefit of the following provisions until such time as the Secured Party advises the County in writing that its security is no longer in effect (and, if the Secured Party so requests, the County will (i) acknowledge in writing that the Secured Party so benefits from these provisions, or (ii) enter into a written agreement with the Secured Party substantially in accordance with these provisions):
  - (a) the County will give prompt written notice to the Secured Party of any breach or default by Jericho of its obligations under the Agreement in respect of which the County proposes to exercise any of its remedies;
  - (b) the County will give the Secured Party the right to cure any breach or default by Jericho under the Agreement, within a period of 90 days commencing on the later of (i) the expiry of the cure period afforded Jericho under the Agreement, and (ii) the date on which the County gives the Secured Party notice of such breach or default pursuant to Section 2(a), or such longer period of time as the Secured Party may reasonably require to cure such breach or default; and no exercise by the County of any of its rights or remedies against Jericho will be effective against Jericho or the Secured Party unless the County has provided the Secured Party such notice and opportunity to cure.
  - (c) the County will, at any time and from time to time, upon not less than ten (10) days' prior request by Jericho or the Secured Party or proposed the Secured Party, execute any agreements, certificates or acknowledgements that Jericho or the Secured Party may reasonably request with respect to this Agreement; and
  - (d) all notices to the Secured Party from the County will be in writing and will be sent by personal delivery, registered mail, email or by fax to the address, email address or facsimile number of the Secured Party set out in any notice that the Secured Party delivers to the County.
3. The provisions of Section 2 will enure to the benefit of the Secured Party and its successors and assigns, and any rights conferred on the Secured Party by the terms of this Agreement or limiting its liability under the Agreement will benefit each receiver or receiver-manager appointed by the Secured Party or by a court of competent jurisdiction.
5. The County hereby acknowledges that Jericho may grant security to a trustee or collateral agent acting on behalf of one or more lenders (a “**Collateral Agent**”), and the County hereby acknowledges and agrees that upon its receipt of notice that such security was granted, the

Collateral Agent will be entitled to all of the rights of the Secured Party set forth in this and such notice will constitute notice of the existence of the Collateral Agent as the Secured Party.